

REPORT

Town of Halton Hills

Mill Street
Neighbourhood Study
Preferred Design



JANUARY 2020



GLOBAL PERSPECTIVE.
LOCAL FOCUS.

FOTENN

SGL
Planning & Design Inc.

CONFIDENTIALITY AND © COPYRIGHT

This document is for the sole use of the addressee and Associated Engineering (Ont.) Ltd. The document contains proprietary and confidential information that shall not be reproduced in any manner or disclosed to or discussed with any other parties without the express written permission of Associated Engineering (Ont.) Ltd. Information in this document is to be considered the intellectual property of Associated Engineering (Ont.) Ltd. in accordance with Canadian copyright law.

This report was prepared by Associated Engineering (Ont.) Ltd. for the account of Town of Halton Hills. The material in it reflects Associated Engineering (Ont.) Ltd.'s best judgement, in the light of the information available to it, 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. Associated Engineering (Ont.) Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.



TABLE OF CONTENTS

SECTION	PAGE NO.
Table of Contents	i
List of Tables	ii
List of Figures	iii
1 Introduction	1
1.1 Background	2
1.2 Purpose of This Report	3
1.3 Public Consultation	3
1.4 Stakeholder Consultation	6
1.5 Opportunity Evaluation	7
2 Preferred Design	8
2.1 Cross Sections	9
2.2 Infrastructure	14
2.3 Intersections	20
2.4 Public Realm Spaces	23
3 Summary of Recommended Improvements	26
Certification Page	27
Appendix A – DESIGN COST ESTIMATE	A-1
Appendix B – FINAL PREFERRED INTERSECTIONS DESIGN	B-1

LIST OF TABLES

PAGE NO.

Table 3-1 Recommended Improvements and Implementation Schedule

27

LIST OF FIGURES

	PAGE NO.
Figure 1-1 Study Area	1
Figure 1-2 Condition of Sidewalk on Mill Street	2
Figure 1-3 Walking Tour – September 2018	4
Figure 1-4 Visioning Workshop – January 2019	5
Figure 1-5 Ideas Workshop – May 2019	6
Figure 2-1 Mill Street Cross Section (Perspective View)	10
Figure 2-2 Mill Street Cross Section (Plan View)	10
Figure 2-3 McNabb Street Cross Section (Perspective View)	11
Figure 2-4 McNabb Street Cross Section (Plan View)	12
Figure 2-5 Collector Road Cross Section (Perspective View)	13
Figure 2-6 Collector Road Cross Section (Plan View)	13
Figure 2-7 Sharrow Pavement Marking	14
Figure 2-8 Bicycle Route Sign	14
Figure 2-9 Shared Use Roads within Mill Street Neighbourhood (Sharrows and Bicycle Route Signs)	15
Figure 2-10 McNabb Street Underpass Structure	17
Figure 2-11 Existing Sidewalk and Trail Network	18
Figure 2-12 Proposed Additions/Improvements to the Sidewalk and Trail Network	19
Figure 2-13 Mill Street and McNabb Street	21
Figure 2-14 Queen Street and King Street	22
Figure 2-15 Typical Curb Extension	23
Figure 2-16 Proposed Public Realm Elements	24
Figure 2-17 Future Location of East Side Park	25
Figure 2-18 Future Location of West Side Park	26

1 INTRODUCTION

Associated Engineering (Ont.) Ltd., in partnership with SGL Planning and Design/Fotenn, was retained by the Town of Halton Hills to complete the Mill Street Neighbourhood Study. The following report represents the final deliverable for this study and documents our selection of the preferred improvements and designs from the multiple alternatives evaluated in this study.

The Mill Street Neighbourhood study area is shown in Figure 1-1. The neighbourhood is bounded by the CN railway and John Street to the north, Mountainview Road to the east, Maple Avenue and Guelph Street to the south and Main Street to the west.

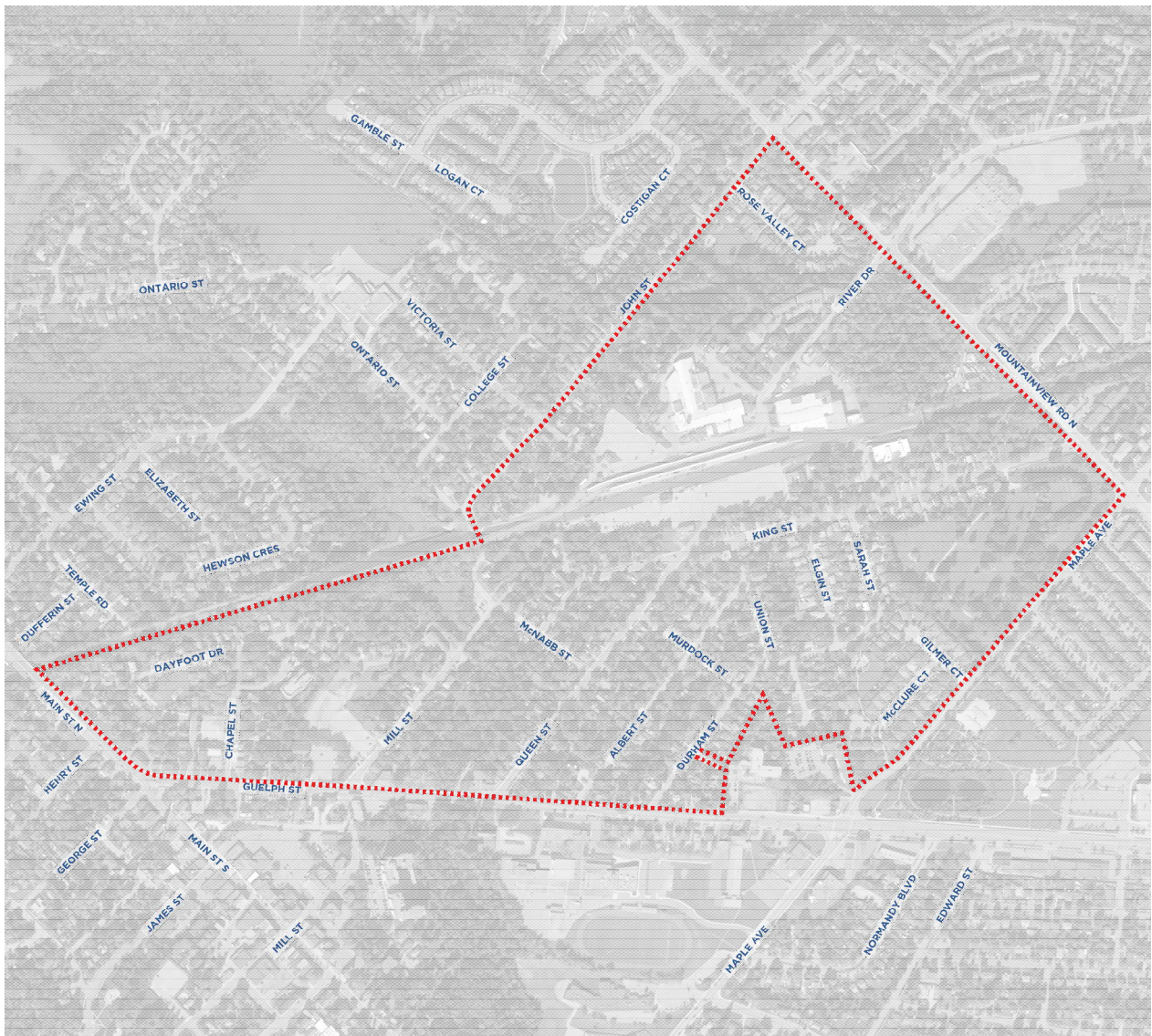


Figure 1-1
Study Area

1.1 Background

This study was commissioned due to several challenges and opportunities that were identified within the neighbourhood, as follows.

First, residents living within the neighbourhood have raised numerous concerns over the design and condition of infrastructure, noting the following:

- Condition of and lack of sidewalks (as shown in Figure 1-2);
- Need for cycling facilities;
- Unsafe intersections;
- Vacant lots that have an opportunity for enhancement;
- Opportunities and constraints with the underpass structure on McNabb Street;
- Wayfinding and gateway features; and
- Lack of parkland, park amenities and off-road trails.

Second, there is an opportunity to provide enhanced pedestrian and cyclist access to a major tributary (Silver Creek) within the study area that would need to be balanced against Credit Valley Conservation and Ministry of Natural Resources (MNR) environmental concerns.

Third, Town of Halton Hills Parks and Trails Planning staff would like to provide better connections and linkages within the study area and the areas beyond (to the north and the south). Existing trail connections, park space and future opportunities to provide better linkages are to be explored.



Figure 1-2
Condition of Sidewalk on Mill Street

1.2 Purpose of This Report

The purpose of this report is to document the preferred improvements and designs carried forward based on the review conducted by the consultant team in addition to feedback received from members of the public and Town staff. The final preferred improvements and design fulfil the original fundamental goals and objectives of this study which include the following:

- To address existing transportation infrastructure deficiencies in the Mill Street Precinct Area;
- To develop specific plans for the streetscape and public realm in the Mill Street Corridor Precinct area which reflect the role of this area as a gateway to the Georgetown GO Station;
- To identify the feasibility of expanding/improving the Town's trail and park/open space network through the study area, and potential connections and access to greenspace from Mill Street, as it relates to current conditions or future opportunities;
- To incorporate the recommendations of the Halton Hills Cycling Master Plan in a pedestrian/cycling plan for the study area which will ensure that there is a well-connected system that ensures pedestrian and cyclist safety both for the existing and future development of the area; and
- To recognize the potential for the redevelopment of the Memorial Arena site and adjacent lands for high density residential, community facility and related uses, while recognizing the remaining portions of the Mill Street Neighbourhood as a stable residential area, where only modest changes in keeping with the existing character of the area will be permitted.

1.3 Public Consultation

The following public consultation events were held over the course of this project:

- Walking Tour (September 2018);
- Web Site Survey and Feedback (August 2018 to January 2019);
- Visioning Workshop (January 2019); and
- Ideas Workshop (May 2019).

Each of these are described below.

1.3.1 Walking Tour

A walking tour was organized for the neighbourhood on September 17th, 2018 shown in Figure 1-3. The purpose of the walking tour was to identify the various needs of area residents by listening to and documenting their input and recommendations for the study area. The walking tour was attended by approximately 30 residents and provided the project team with a better understanding of residents' concerns in the study area.



Figure 1-3
Walking Tour – September 2018

Based on the input received from residents during the walking tour, the following key needs and opportunities were identified:

- Narrow curb-face sidewalks, sidewalks in poor condition and a lack of connectivity;
- Lack of cycling facilities;
- Configuration of some intersections;
- Vacant lots that have an opportunity for enhancement;
- An underpass structure on McNabb Street that has visibility issues, is single-lane only and is not appropriate for heavy vehicles;
- Neighbourhood infrastructure needs to be upgraded as development and intensification occurs; and
- Lack of park land, park amenities and off-road trails.

1.3.2 Web Site Survey and Feedback

A survey on the Town's 'Let's Talk Halton Hills' public engagement platform was open to all members of the public from August 2018 until January 2019. The purpose of the survey was to inform and engage the residents on the project and seek feedback. The survey asked the opinion of residents regarding pedestrian, cyclist and vehicle traffic in the area as well as their opinions regarding infrastructure and public realm features. The survey results provided the study team with valuable information from residents, including the following recurring responses:

- There are safety concerns regarding the underpass structure on McNabb Street;

- The condition of sidewalks in the neighbourhood are poor and;
- The most important public realm feature is wide sidewalks.

1.3.3 Visioning Workshop

The Visioning Workshop occurred on January 24, 2019 from 6:00 pm – 9:00 pm. The Visioning Workshop was advertised by means of updates to the Let's Talk Halton Hills website, a postcard delivery within the study area, direct invitation to stakeholders, and a direct email invitation sent to all participants of the walking tour conducted in September 2018. Approximately 25 members of the public attended the Visioning Workshop as shown in Figure 1-4.



Figure 1-4
Visioning Workshop – January 2019

The Visioning Workshop provided an opportunity to update residents on the study's progress, present information collected to date and gather further feedback from the residents. At the workshop a working session where the public further helped identify the area's needs and opportunities as well as the development of streetscaping expectations associated with the area was completed. The project team documented the Visioning Workshop proceedings into a summary report.

1.3.4 Ideas Workshop

An Ideas workshop occurred on May 16th, 2019 from 6:30 pm – 8:30 pm to gain further feedback from community members relating to the improvement options being considered for the Mill Street Neighbourhood Study as shown in Figure 1-5. These alternatives included aspects such as street cross sections among other public realm design elements. Over twenty community members attended the event, including many people who had attended the first Visioning Workshop and the Walking Tour. The community members were also joined by their Councillors. The input received from the public was used as input for selecting the preferred improvements and design for the neighbourhood.



Figure 1-5
Ideas Workshop – May 2019

1.4 Stakeholder Consultation

Various stakeholders were contacted over the course of the project work to obtain their feedback. Representatives from each agency were given the opportunity to discuss their individual needs and provide their input. The following stakeholders were contacted:

- Amico
- Metrolinx
- Credit Valley Conservation Authority

Below is a summary of the input gathered from the stakeholders.

1.4.1 Amico

A representative from Amico was contacted in November 2018 for the purposes of gathering information regarding their proposed high-density residential development at 42 Mill Street. The Amico representative provided a site plan for the development of the property and a proposed right-of-way drawing and cross-section for Mill Street to be implemented between Guelph Street and Dayfoot Drive.

The site plan shows three (3) buildings on the property situated in the northwest quadrant of Guelph Street and Mill Street with a single access from Mill Street. Two out of the three buildings will consist of multi-story residential condominium townhomes/apartments and the third will consist of a multi-storey apartment complex exclusively for retirees and nursing home patients.

As part of the site development, Amico will be modifying the cross-section of both Mill Street and Dayfoot Drive along the site's frontage. On Mill Street, Amico is proposing a wider sidewalk and a new boulevard with sod and trees. Amico will be conveying a 5.0 metres wide piece of property to the Town to accommodate the wider sidewalk and boulevard. On Dayfoot Drive, Amico is proposing a new sidewalk and boulevard consisting of sod and trees within the existing right-of-way.

1.4.2 Metrolinx

A representative from Metrolinx was contacted in November 2018 for the purposes of gaining information on Metrolinx's plans for improvements to the Georgetown GO station. The project team obtained an excerpt of a report outlining station improvements across their entire rail network. Improvements for the Georgetown GO Station relate to improving accessibility for pedestrians, cyclists and transit users and improvements for pick up/drop off areas, car pool passengers, parking supply expansion, micro-transit facilities and charging stations.

1.4.3 Credit Valley Conservation Authority

Representatives from the Credit Valley Conservation Authority were contacted in December 2018 and a teleconference was arranged for the purpose of gaining information regarding new trails through parks and open space within the study area.

The representatives indicated that generally there are no objections to new trails provided that all environmental challenges can be addressed. Some of these include flooding, in the case of trails situated near rivers and other waterways and erosion, where trails are located on slopes. The process of implementing new official trails must be coordinated with the Town's Parks and Recreation staff, must incorporate criteria provided by the Conservation Authority and ultimately be approved by the Ministry of Natural Resources.

1.5 Opportunity Evaluation

A number of opportunities were evaluated in order to improve and enhance and address needs of the neighbourhood. In certain areas, multiple opportunities were created in order to explore all possible options when addressing a need. These were then evaluated against the same set of criteria to rank and systematically select the optimal alternative.

These options were further refined based on discussions with Town staff in addition to further review of the proposed treatment (i.e. development of conceptual design and assessment of cross section and impacts to adjacent properties).

Each of the options were evaluated in consideration of the following:

- Impact on Walking
- Impact on Cycling
- Impact on Vehicular Traffic
- Feasibility/Right of Way Constraints
- Cost Implications
- Public Support
- Environmental Implications
- Enhancement to Neighbourhood Character

Those opportunities that scored favourably in terms of the criteria were recommended for implementation, as discussed in Section 2 below.

2 **PREFERRED DESIGN**

The preferred design for the Mill Street Neighbourhood Corridor Precinct Study has been organized into the following four (4) general categories as follows:

- Cross-Section Improvements;
- Infrastructure Improvements;
- Intersection Improvements, and;
- Public Realm Improvements.

Additionally, each of the designs were assigned an implementation schedule based on cost and coordination with other work. The implementation categories are as follows:

- Immediate
- Short-Term (2–5 years)
- Long-Term (10+ years)

No treatments were identified for implementation in the Medium-Term (6 – 9 years).

2.1 Cross Sections

Cross sections were developed for the following road sections:

- Mill Street between Dayfoot Drive and McNabb Street;
- McNabb Street between Mill Street and Queen Street; and
- Collector roads
 - King Street (entire section)
 - Queen Street (entire section)
 - John Street (entire section)

2.1.1 Mill Street

Option 3 was the preferred option for Mill Street. This cross section is to be implemented on Mill Street between Dayfoot Drive and McNabb Street and will consist of two 3.5 metre shared use lanes along with a 1.8 metre sidewalk on the west side and a 1.27 metre paved boulevard with planters. Figures 2-1 and Figure 2-2 show the perspective and plan view for the cross sections. The total width of the cross section is 10.07 metres. This cross section can be accommodated within the existing right-of-way.

This cross section will significantly improve the aesthetics along this section of Mill Street through use of the planters, improve walkability through the widening of the sidewalk on the west side, and indicate to motorists that road is meant to be a shared space with cyclists. It is recommended that the bridge railing on the west side be replaced at the culvert (Silver Creek). On the east side, the existing steel beam guiderail at Silver Creek will need to be relocated to accommodate the wider cross section.

The cross section is recommended to be implemented in the Short-Term (in 2 – 5 years).

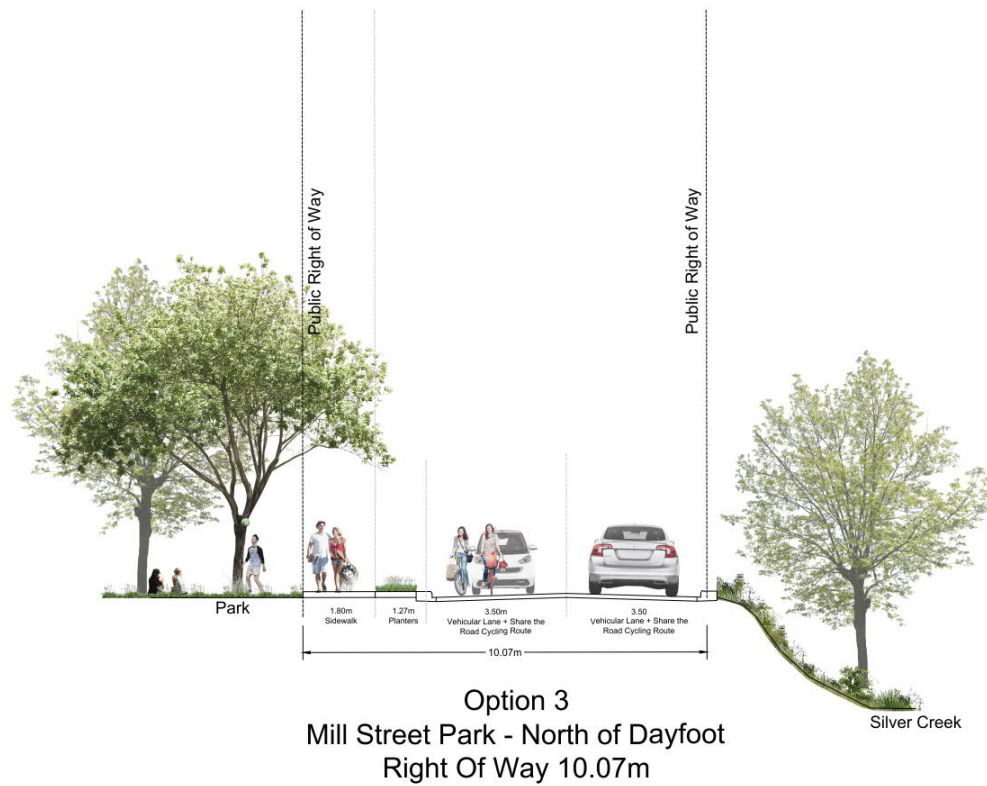


Figure 2-1
Mill Street Cross Section (Perspective View)

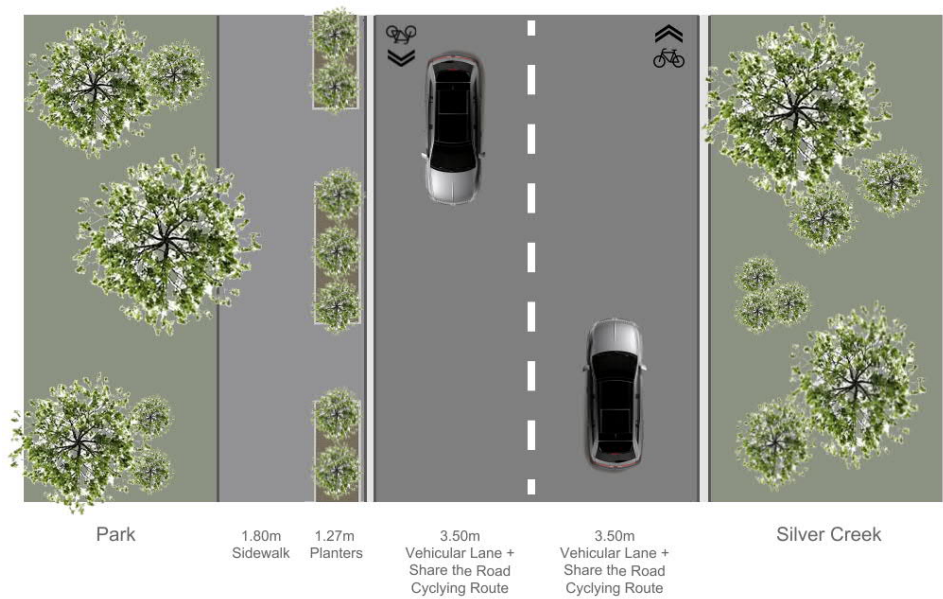


Figure 2-2
Mill Street Cross Section (Plan View)

2.1.2 McNabb Street

Option 1 was the preferred option for McNabb Street. This cross section is to be implemented on McNabb Street between Mill Street and Queen Street and will consist of two 3.5 metre shared use lanes along with 2.5 metre on-street parking (south side), a boulevard (various widths) and a 1.8 metre sidewalk (north side). The sidewalk on the south side will be removed. Figures 2-3 and Figure 2-4 show the perspective and plan view for the cross sections. The total width of the cross section is 14.7 metres. This cross section can be accommodated within the existing right-of-way.

This cross section will significantly improve the aesthetics along this section of McNabb Street through the provision of a boulevard. It will improve walkability through the widening of the sidewalk on the north side. The shared use lanes will indicate to motorists that the road is meant to be a shared space with cyclists. The on-street parking will need to be implemented in consideration of property constraints. The cross section is recommended to be implemented in the Short-Term (in 2 – 5 years).

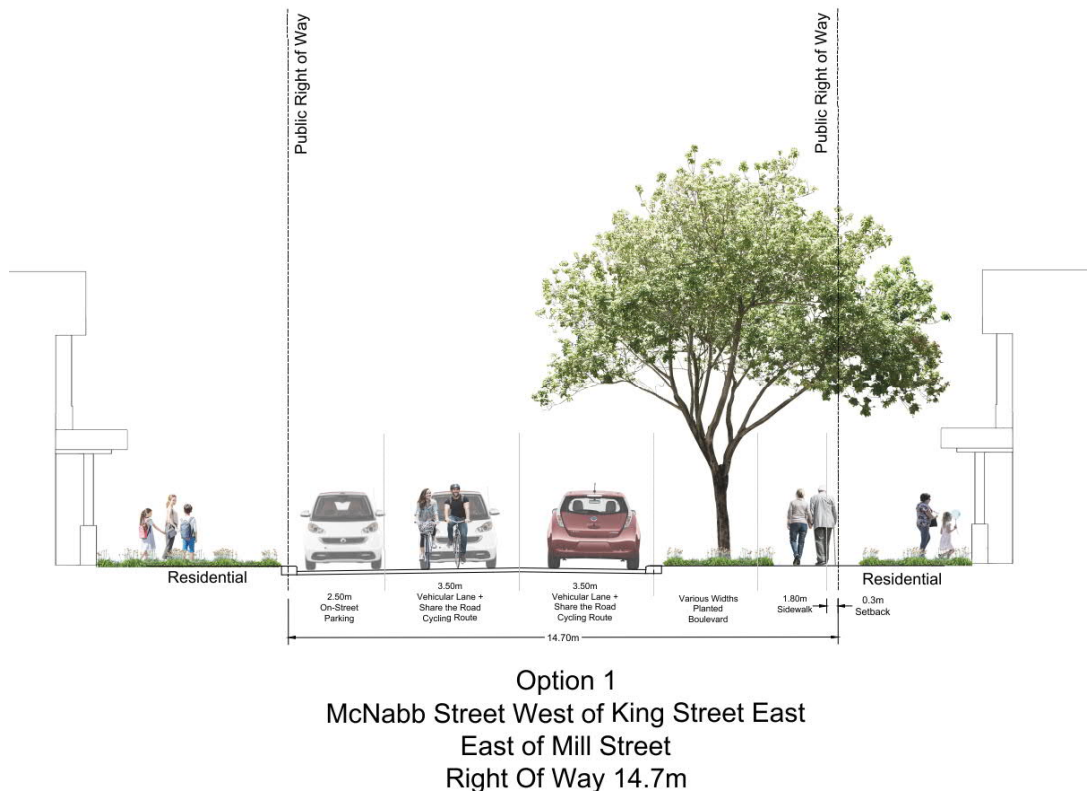


Figure 2-3
McNabb Street Cross Section (Perspective View)

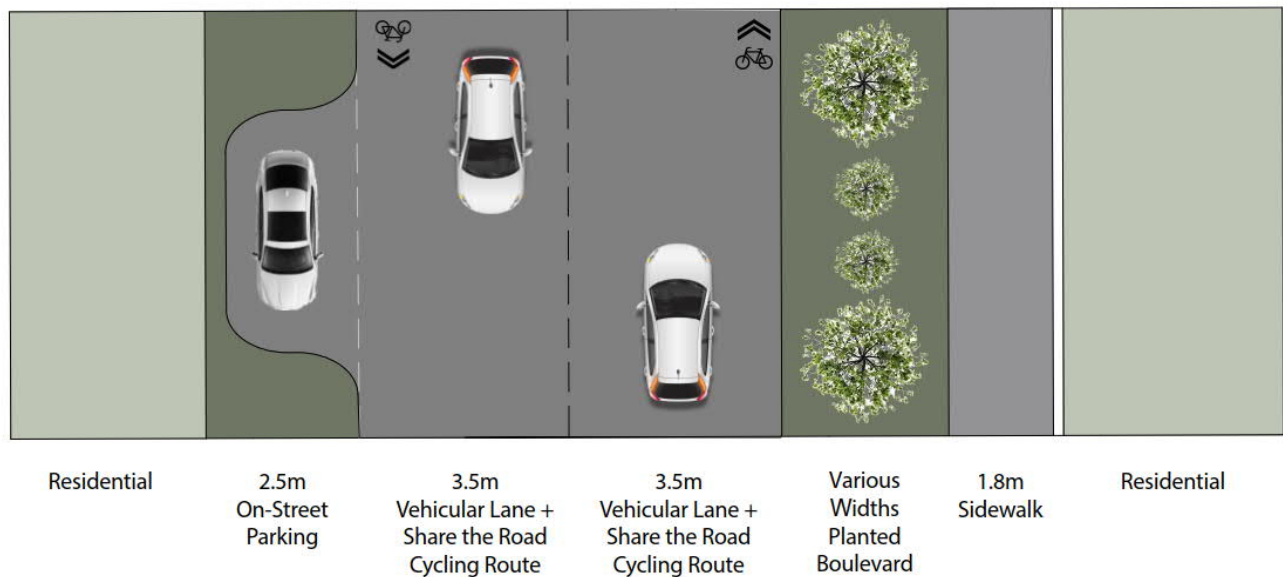


Figure 2-4
McNabb Street Cross Section (Plan View)

2.1.3 Collector Road Cross Section

A cross section suitable for collector roads is to be implemented along the entire length of King Street, Queen Street and John Street. The cross section will consist of two 4.0 metre shared vehicle-cycling lanes with on street parking permitted during off-peak hours, a boulevard (variable width), and a 1.8 metre sidewalk. The variable width for the boulevard will allow for flexibility in accommodating localized property constraints.

Figures 2-5 and Figure 2-6 show the perspective and plan view for the cross sections. This cross section can be accommodated within the existing right-of-way (20.0 metres).

This cross section will significantly improve the aesthetics along these three major gateway roads into the Mill Street neighbourhood through the widened boulevard (where space permits). It will improve walkability through the widening of the sidewalk on both sides of the roadway. The shared use lanes will indicate to motorists that the road is meant to be a shared space with cyclists.

The cross sections are recommended to be implemented in the Long-Term (in 10+ years).

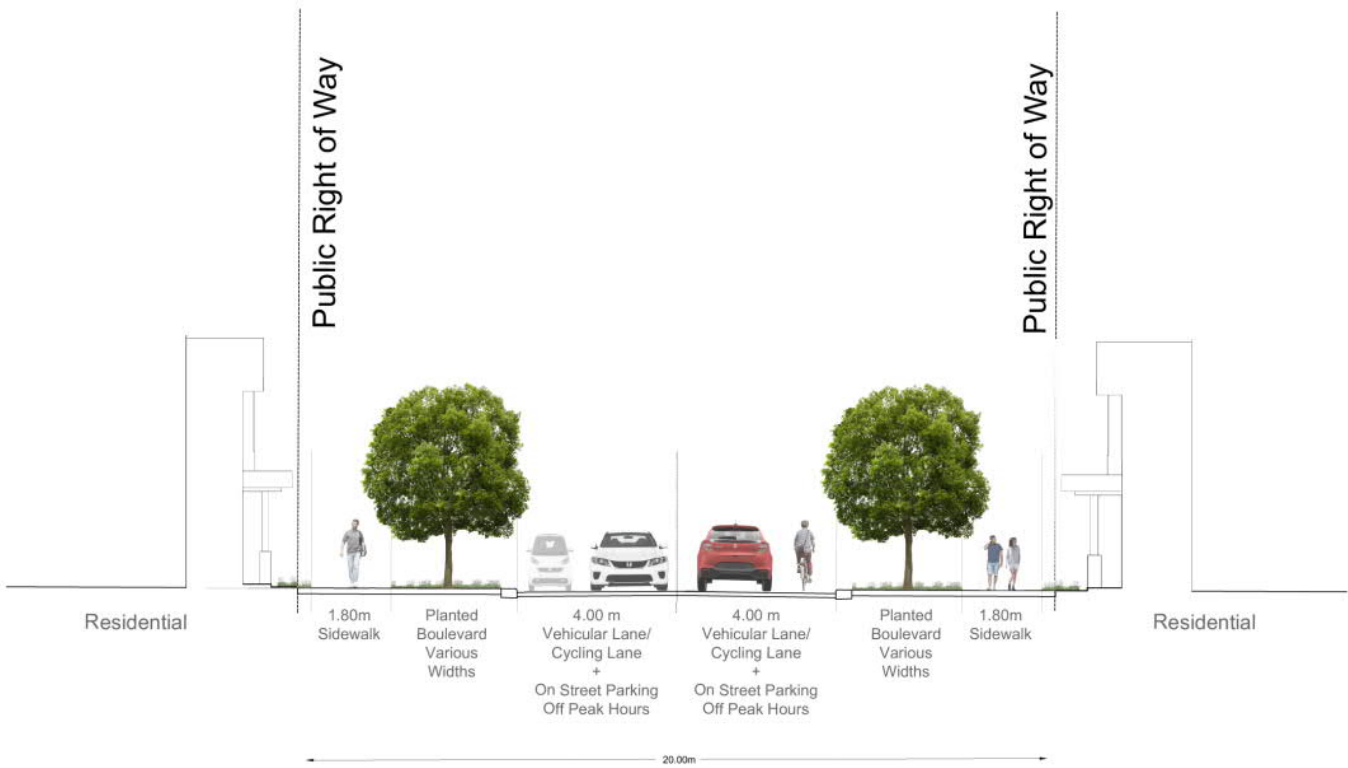


Figure 2-5
Collector Road Cross Section (Perspective View)

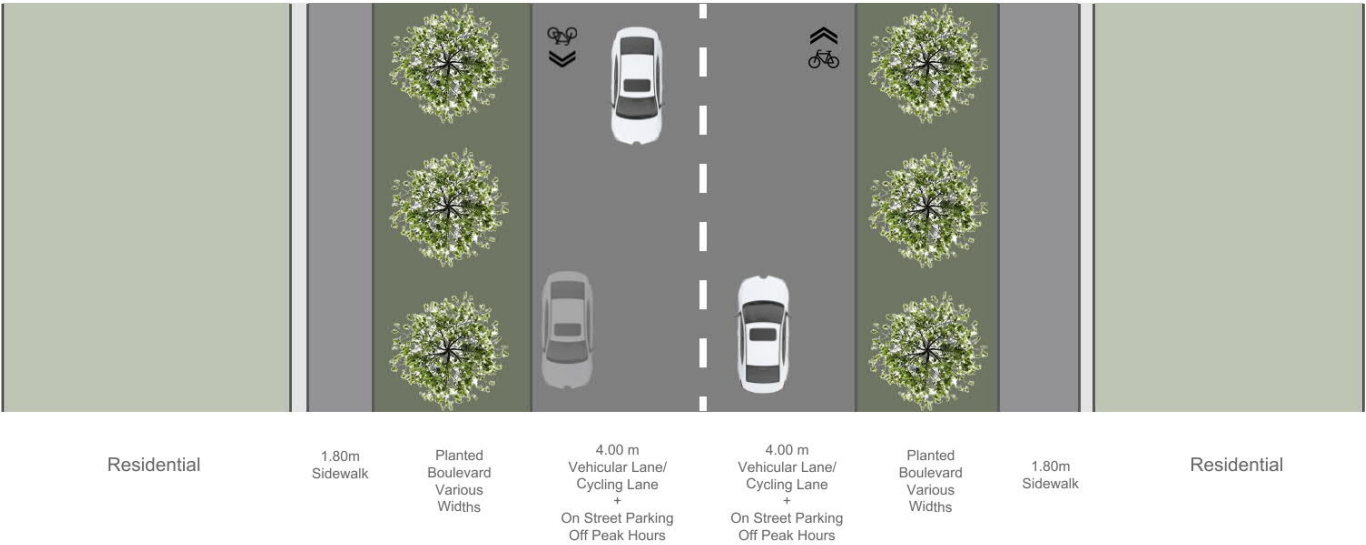


Figure 2-6
Collector Road Cross Section (Plan View)

2.2 Infrastructure

The following infrastructure improvements were recommended to be implemented within the Mill Street Neighbourhood:

- Pavement marking and route sign enhancements;
- Localized improvements to the McNabb Street underpass along with a 2-year pilot study in which the tunnel will be closed to vehicular traffic; and
- Sidewalk repairs and installations.

2.2.1 Pavement Marking and Route Sign Enhancements

Subject to the outcome of the Active Transportation Master Plan, the Town will be implementing 'sharrows' and bicycle route signs on the collector roads in the Mill Street Neighbourhood (King Street, Queen Street and John Street) immediately. Both sharrows and bicycle route signs will be implemented on Mill Street, McNabb Street and Albert Street in the Short-Term (2 – 5 years) as noted in the cross sections in Section 2.1. Examples are shown in Figure 2-7 and Figure 2-8 below.



Figure 2-7
Sharrows Pavement Marking



Figure 2-8
Bicycle Route Sign

Figure 2-9 on the following page shows the sharrows and bicycle route signs that are proposed to be implemented within the neighbourhood, subject to the outcome of the Active Transportation Master Plan.

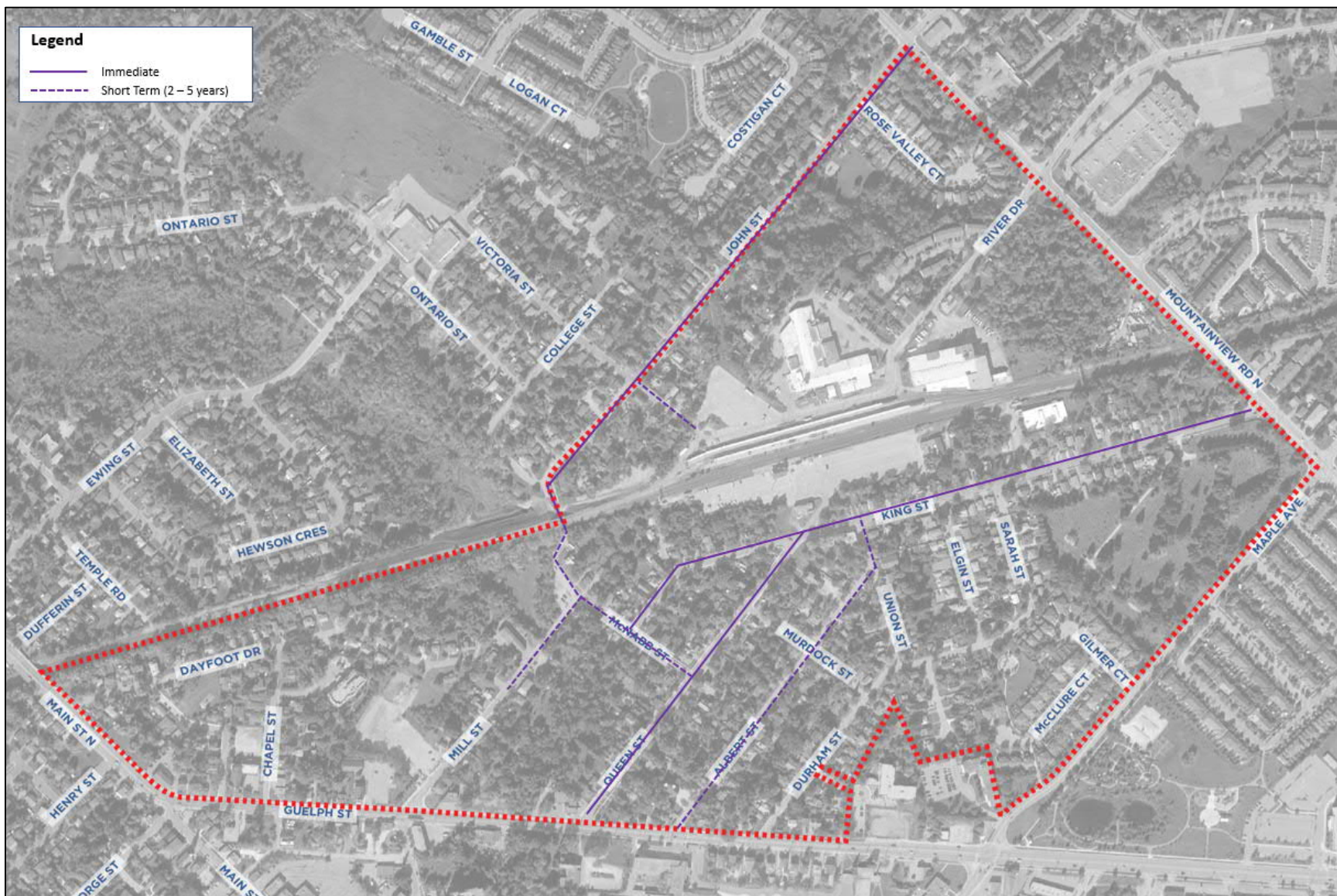


Figure 2-9
Shared Use Roads within Mill Street Neighbourhood (Sharrows and Bicycle Route Signs)

2.2.2 McNabb Street Underpass Closure Pilot Study

The Town will be implementing a 2-year pilot study in 2020 to close the McNabb Street underpass structure to vehicles, pictured in Figure 2-10. The underpass would remain open to pedestrians and cyclists, continuing to provide a safe and vital link between the north and south side of the CN railway tracks. The purpose of the pilot study will be to evaluate traffic impacts (to the surrounding road network) and gain public input regarding the closure. To that end, traffic data will be collected before and during the pilot to monitor traffic on area roadways. Should it be determined that traffic can be accommodated in the surrounding road network and the public is in general support with the closure, the closure will be made permanent. In the short term, additional lighting will be installed within the underpass structure to improve safety and security.



Figure 2-10
McNabb Street Underpass Structure

2.2.3 Sidewalk Improvements

In order to improve walkability and sidewalk connectivity, a number of sidewalk and trail improvements will be implemented. Figure 2-11 on the following page shows the existing sidewalk and trail network. Figure 2-12 shows the proposed improvements to the sidewalk and trail network.



Figure 2-11
Existing Sidewalk and Trail Network

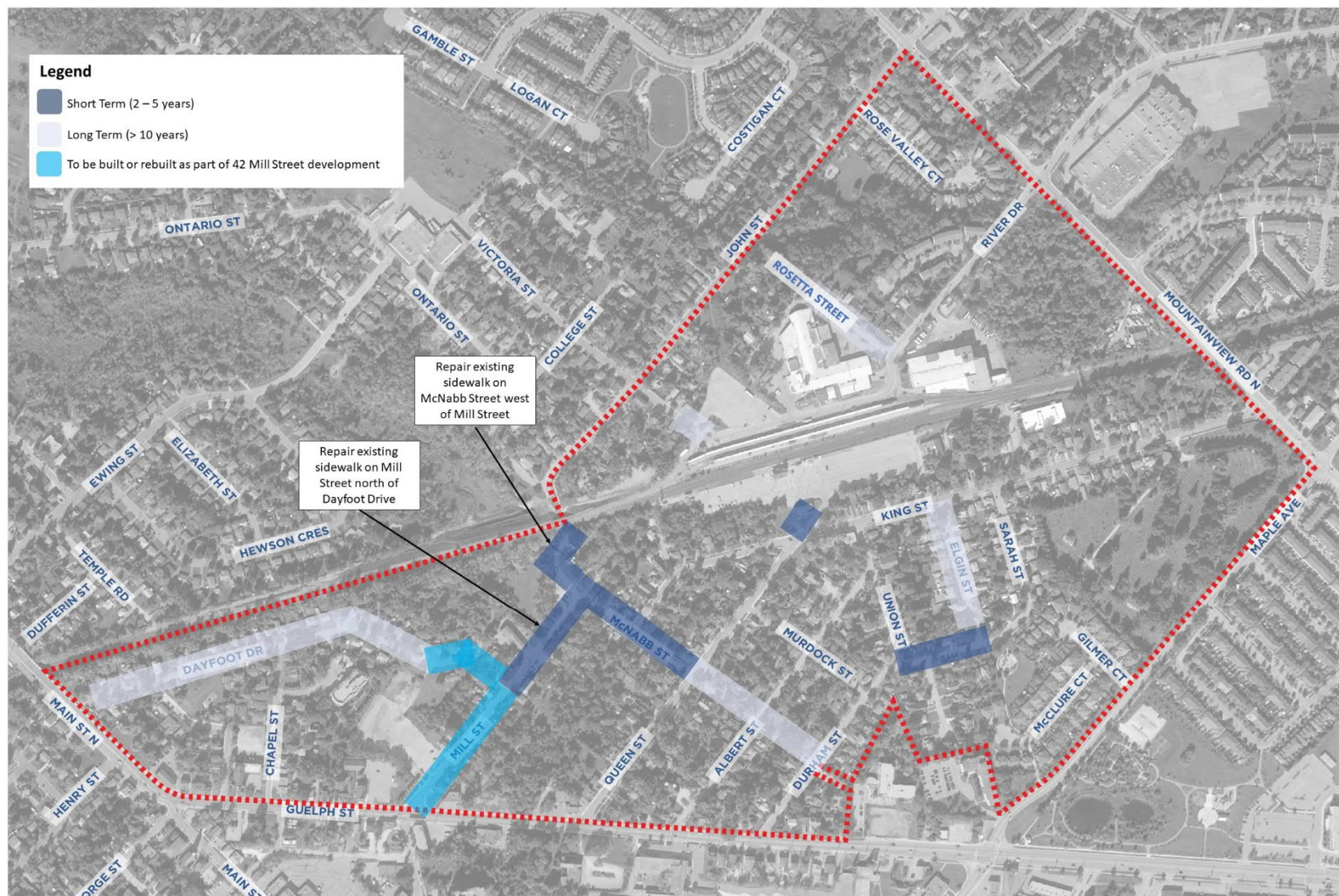


Figure 2-12
Proposed Additions/Improvements to the Sidewalk and Trail Network

The following sidewalk improvements/additions will be implemented in the Short-Term (2 -5 years):

- Repair to sidewalk on McNabb Street between Mill Street and the McNabb Street underpass;
- Provide sidewalk on Durham Street between Union Street and Elgin Street; and
- Provide sidewalk on Queen Street between south GO Train parking lot and King Street.

Sidewalks will be replaced on Mill Street and McNabb Street in conjunction with the new cross sections presented in Section 3.1. As part of the development of 42 Mill Street, a new sidewalk will be built on the west side of Mill Street and the south side of Dayfoot Drive along the property frontage.

Sidewalks will be constructed in the Long-Term (10+ years) at the following locations:

- The remainder of Dayfoot Drive;
- The remainder of McNabb Street (Queen Street to Durham Street);
- Elgin Street;
- Rosetta Street; and
- Victoria Street leading into the GO Train North Parking Lot.

The Town will also require that a trail be provided between John Street and the GO Train North Parking Lot in conjunction with any development of the vacant property at this location.

The sidewalk improvements will significantly improve walkability and connectivity within the Mill Street Neighbourhood.

2.2.4 John Street and River Drive Traffic Calming

While not part of the Mill Street Neighbourhood Study, the Town is also considering traffic calming treatments in the study area, primarily on John Street and River Drive. These treatments include:

- Two speed humps on John Street along with speed hump signs and 'Traffic Calmed Neighbourhood' signs;
- Two speed humps on River Drive along with speed hump signs and 'Traffic Calmed Neighbourhood' signs; and
- Stop bars and centrelines on Victoria Street, Rosetta Street and St. Michaels Street.

Further information on these proposed traffic calming treatment is available on the Let's Talk Halton Hills website - <https://www.letstalkhaltonhills.ca/john-street-neighbourhood-traffic-calming>.

2.3 Intersections

In order to calm traffic and reduce vehicular speeds within the neighbourhood, a number of modifications have been proposed, as noted below:

- Mill Street and McNabb Street;
- Queen Street and King Street; and

- Curb extensions at three additional intersections.

2.3.1 Mill Street and McNabb Street

The intersection of Mill Street and McNabb Street, shown in Figure 2-13 is a stop-controlled t-intersection. The Stop controls are on the McNabb Street approaches. The large radius corners are encouraging non-compliance with the Stop signs, particularly illegal westbound left turns at the intersection and excessive speeds through the intersection. Staff are currently investigating the implementation of centre line bollards to discourage this movement.

In the Short-Term (2 – 5 years), the radius on the corner will be reduced to 10 metres and zebra crosswalk markings will be provided on McNabb Street (west leg) to facilitate pedestrian movements between Mill Street and McNabb Street. Appendix B contains a conceptual drawing of the intersection improvements, also showing the modified cross section on Mill Street and McNabb Street.



Figure 2-13
Mill Street and McNabb Street

With the closure of the McNabb Street underpass structure (to vehicles) proceeding as a pilot study, further modifications may occur on the west leg of the intersection should the underpass structure be permanently closed to vehicular traffic. They may include converting the section of McNabb Street west of Mill Street to a narrow laneway provided to access properties located between Mill Street and the underpass structure, with the remaining paved portion of the roadway being converted into park space. Further discussion on the East Side Park that is planned for the southwest corner of Mill Street and McNabb Street is presented in Section 2.4.

2.3.2 Queen Street and King Street

The intersection of King Street and Queen Street, shown in Figure 2-14, is an all-way stop-controlled intersection. This intersection is a key entry point to the Georgetown GO Train Station and a gateway intersection to the neighbourhood. The approaches are highly skewed, reducing sightlines on the approaches and encouraging higher operating speeds. The Town has already implemented high visibility zebra crosswalks on the four approaches to the intersection.

In the short term (2 – 5 years), medians will be added to the east and west (King Street) approaches and the south (Queen Street) approach to calm traffic. Visibility will be improved on the southwest and northeast quadrants of the intersection. In addition, a sidewalk will be added on the west side of Queen Street (north leg) to facilitate pedestrian movements between the south parking lot of the Georgetown GO Train Station and the intersection. A townhouse complex is currently being constructed on the northwest corner of the intersection. Appendix B contains a conceptual drawing of the intersection improvements.



Figure 2-14
Queen Street and King Street

2.3.3 Curb Extensions

Curb extensions have been proposed for implementation in the Short-Term (2 – 5 years) at the intersections of King Street and Elgin Street, Queen Street and McNabb Street and Union Street and Durham Street. A typical curb

extension is shown in Figure 2-15. At each of these intersections, the corner radius will be reduced and the cross section will be narrowed on the free flow approach to reduce operating speeds and facilitate pedestrian movements across the roadway. As a whole, the curb extensions together with the other intersection improvements will calm traffic throughout the study area. The final preferred design for each of the curb extensions are provided in Appendix B.



Figure 2-15
Typical Curb Extension

2.4 Public Realm Spaces

A number of public realm spaces are planned to be implemented in the short and long term within the Mill Street Neighbourhood that will take advantage of natural features (Silver Creek) and existing open spaces. The final preferred design for the public realm elements is provided in Figure 2-16. They include the following:

- Future Lion's Park
- East Side Park
- West Side Park
- Silver Creek Natural Heritage System



Figure 2-16
Proposed Public Realm Elements

2.4.1 Short Term Treatments

A parkette (East Side Park) has been proposed for implementation on the southwest corner of Mill Street and McNabb Street in the short term (2 – 5 years). This space is currently a vacant lot as shown in Figure 2-17. The parkette will include benches and a public garden. The Town is planning on removing brush within the ravine at the back of East Side Park to open up views of Silver Creek. In addition, the developers at 42 Mill Street will be reinstating Lion's Park on Dayfoot Drive.



Figure 2-17
Future Location of East Side Park

2.4.2 West Side Park

A second parkette is planned to be implemented in the long term (10+ years) on the west side of Silver Creek within a vacant lot shown in Figure 2-18. This larger open space will allow for open space programming (informal active field, frisbee game and soccer).



Figure 2-18
Future Location of West Side Park

Finally, a trail system has been proposed for implementation in the long term along Silver Creek. The trail system would provide a connection between downtown Georgetown and the Mill Street Neighbourhood, potentially crossing under Guelph Street via an underpass structure and continuing north on the west side of Silver Creek up to Mill Street. Implementation of this pathway will require coordination with Credit Valley Conservation Authority to ensure that the pathway does not adversely impact the natural environment and does not result in erosion issues. As the pathway would travel behind properties along Mill Street, there would be a need to ensure that privacy is maintained.

3 SUMMARY OF RECOMMENDED IMPROVEMENTS

A summary of the recommended design along with their implementation schedule is provided in Table 3-1.

Table 3-1
Recommended Improvements and Implementation Schedule

	Immediate	Short-Term (2–5 years)	Long-Term (10+ years)
Cross-Section Improvements		<ul style="list-style-type: none"> • Mill Street (Between Dayfoot Drive and McNabb Street) - concrete sidewalk on west side with provision for planters, shared bicycle lanes and no sidewalk on east side. • McNabb Street (Between Mill Street and Queen Street) - Sidewalk on one side with boulevard, shared bike lanes, on-street parking on one side, localized traffic calming improvements 	<ul style="list-style-type: none"> • King Street, Queen Street and John Street (Entire Length) – sidewalk on both sides measuring 1.8 metres, variable 1.0 – 3.9 metre boulevard and two 4.0 metre shared vehicle lane/cycling lane with on-street parking during off-peak hours.
Infrastructure Improvements	<ul style="list-style-type: none"> • Sharrows and associated bike route signs on King Street, entire length; Queen Street, entire length; John Street, entire length (pending outcome of Active Transportation Master Plan) • Minor improvements in McNabb Street underpass. 	<ul style="list-style-type: none"> • McNabb Street underpass closure (2-year pilot) • New sidewalk on Durham Street between Elgin Street and Union Street • Sidewalk repairs on Mill Street between Dayfoot Drive and McNabb Street and McNabb Street between McNabb Street and the CN overpass. • Sharrows and associated Bike Route signs on Albert Street from Guelph Street to Union Street, Union Street from Albert Street and King Street, Victoria Street between John Street and the GO Train Station parking lot (pending outcome of Active Transportation Master Plan) 	<ul style="list-style-type: none"> • New sidewalks on Dayfoot Drive (Entire length); ii) on McNabb (Between Queen Street and Durham Street); iii) on Elgin Street (Between King Street and Durham Street), one side only; iv) and on Rosetta Street (Between River Drive and Caroline Street). • New walkway (off-street) connection from John Street and the north GO train parking lot (in coordination with development).
Intersection Improvements		<ul style="list-style-type: none"> • Mill Street and McNabb Street - reduce the curb radii and provide enhanced pavement markings. • Queen Street and King Street – new median along King Street/Queen Street for traffic calming, sidewalk added to the north leg on the west side. • Queen Street and McNabb Street - curb extension. • Union Street and Durham Street - curb extension. • King Street and Elgin Street - curb extension. 	
Public Realm Improvements		<ul style="list-style-type: none"> • New east side park (East Parkette) including benches 	<ul style="list-style-type: none"> • New west side park (West Parkette). • New Silver Creek natural heritage system including walking trails and lookout points.

CERTIFICATION PAGE

This report presents our findings regarding the Town of Halton Hills
Mill Street Neighbourhood Study Phase 4: Preferred Design

APPENDIX A – DESIGN COST ESTIMATE

Immediate Items

Segments	Description	Quantity	Unit	Unit Price	Total
John Street					
(Entire segment)	Shared Bike Lanes				
	Sharrows	28	each	\$170.00	\$4,760.00
	Signage	28	each	\$300.00	\$8,400.00
					\$13,160.00
King Street					
(Entire segment)	Shared Bike Lanes				
	Sharrows	24	each	\$170.00	\$4,080.00
	Signage	25	each	\$300.00	\$7,500.00
					\$11,580.00
Queen Street					
(Entire segment)	Shared Bike Lanes				
	Sharrows	14	each	\$170.00	\$2,380.00
	Signage	13	each	\$300.00	\$3,900.00
					\$6,280.00
McNabb Street					
(Entire segment)	Shared Bike Lanes				
	Sharrows	20	each	\$170.00	\$3,400.00
	Signage	12	each	\$300.00	\$3,600.00
					\$7,000.00

Intersection	Description	Quantity	Unit	Unit Price	Total
Queen Street at King Street					
	Enhanced Cross Walks				
	Lines (100mm Width)	150	m	\$10.00	\$1,500.00
	Zebra (600mm Width)	75	m	\$50.00	\$3,750.00
					\$5,250.00
Queen Street at McNabb Street					
	Enhanced Cross Walks				
	Lines (100mm Width)	41.82	m	\$10.00	\$418.20
					\$418.20

Park	Description	Quantity	Unit	Unit Price	Total
Dayfoot Park and Durham Park					
	Bench	6	each	\$2,000.00	\$12,000.00
					\$12,000.00

Park	Description	Quantity	Unit	Unit Price	Total
	Vandal Proof Mirror	1	each	\$100.00	\$100.00
Mill Street Underpass	Improved Lighting	1	each	\$2,000.00	\$2,000.00
					\$2,100.00

SUBTOTAL					\$57,788.20
CONTINGENCY(25%)					\$14,447.05
Design (8%)					\$4,623.06
TOTAL					\$76,858.31

Short Term Items (2-5 years)

Segments	Description	Quantity	Unit	Unit Price	Total
Mill Street Cross Section					
	Road Reconfiguration				
(Dayfoot to McNabb)	Removals				
	Asphalt Roadway	900	m ²	\$10.00	\$9,000.00
	Topsoil Removal and Disposal (East)	141	m ²	\$20.00	\$2,820.00
	Traffic Signs	1	each	\$200.00	\$200.00
	Excavation				
	Full Depth Roadway Excavation	705.6	m ³	\$35.00	\$24,696.00
	Road Base (Granular Materials)	1330.56	t	\$30.00	\$39,916.80
	Asphalt milling and sawcutting	2080	m ²	\$10.00	\$20,800.00
	Tack coat supply and application	2080	m ²	\$5.00	\$10,400.00
	Supply, place and compact hot mix asphalt	161.772	t	\$235.00	\$38,016.42
	Curb (East and West)				
	OPSD 600.040 - Concrete Barrier	280	m	\$90.00	\$25,200.00
	OPSD 600.100 - Gutter	2	m	\$90.00	\$180.00
	Handwork	141	m	\$125.00	\$17,625.00
	Gutters				
	Relocation	3	each	\$1,000.00	\$3,000.00
	Regrading earth on east side (Grading of ditches and swales)	25	m	\$30.00	\$750.00
	Guard Rail Movement		LS	\$2,500.00	\$2,500.00
	Hydro Pole - Unknown if removal or work around		LS	\$10,000.00	\$10,000.00
	Reinstall Sign	1	each	\$400.00	\$400.00
	Shared Bike Lanes				
	Sharrows	10	each	\$200.00	\$2,000.00
	Signage	8	each	\$400.00	\$3,200.00
	Sidewalks				
	Removal	804	m ²	\$20.00	\$16,080.00
	Install	345	m ²	\$70.00	\$24,150.00
	Boulevards				
	Asphalt removal included in Road Reconfig	-	-	-	-
	Excavation included in Road Reconfig	-	-	-	-
	Road Base included in Road Reconfig	-	-	-	-
	Curb included in Road Reconfig	-	-	-	-
	Supply and Place 100 mm topsoil Sod restoration	177.8	m ²	\$20.00	\$3,556.00
	Manhole				
	Manhole Removal	4	each	\$1,200.00	\$4,800.00
	Manhole Installation				
	Up to 300 mm	4	each	\$975.00	\$3,900.00
	Concrete Collars Base	4	each	\$2,200.00	\$8,800.00
	Catchbasins				
	Removal	3	each	\$620.00	\$1,860.00
	Installation				
	Up to 300 mm	3	each	\$475.00	\$1,425.00
	Base asphalt to finished grade - All	3	each	\$349.00	\$1,047.00
					\$276,322.22

McNabb Street Resurfacing						
	Sidewalk Repair					
(Mill St to Underpass)		Removal	198	m²	\$20.00	\$3,960.00
		Install	198	m²	\$70.00	\$13,860.00
	Road Repaving					
		Asphalt milling and sawcutting	280	m²	\$10.00	\$2,800.00
		Tack coat supply and application	280	m²	\$5.00	\$1,400.00
		Supply, place and compact hot mix asphalt	217.464	t	\$235.00	\$51,104.04
	Manhole					
		Manhole Removal	2	each	\$1,200.00	\$2,400.00
		Manhole Installation				
		Up to 300 mm	2	each	\$975.00	\$1,950.00
		Concrete Collars Base	2	each	\$2,200.00	\$4,400.00
						\$81,874.04
McNabb Street Cross Section						
(Mill to Queen)	Road Reconfiguration					
	Removals					
		Asphalt Roadway	1295	m²	\$10.00	\$12,950.00
		Topsoil Removal and Disposal	375	m²	\$20.00	\$7,500.00
		Traffic Signs	5	each	\$200.00	\$1,000.00
	Excavation					
		Full Depth Roadway Excavation	1163.75	m³	\$35.00	\$40,731.25
		Road Base (Granular Materials)	2793	t	\$30.00	\$83,790.00
		Asphalt milling and sawcutting	1662.5	m²	\$10.00	\$16,625.00
		Tack coat supply and application	1662.5	m²	\$5.00	\$8,312.50
		Supply, place and compact hot mix asphalt	440.895	t	\$235.00	\$103,610.33
	Curb (East and West)					
		OPSD 600.040 - Concrete Barrier	340	m	\$90.00	\$30,600.00
		OPSD 600.100 - Gutter	6	m	\$90.00	\$540.00
		Handwork	170	m	\$125.00	\$21,250.00
		Hydro Pole - Unknown if removal or work around		LS	\$10,000.00	\$10,000.00
	Shared Bike Lanes					
		Sharrows	6	each	\$200.00	\$1,200.00
		Signage	7	each	\$400.00	\$2,800.00
	Sidewalk					
		Removal	267	m²	\$20.00	\$5,340.00
		Install	175	m²	\$70.00	\$12,250.00
	Boulevards					
		Asphalt removal included in Road Reconfig	-	-	-	-
		Excavation included in Road Reconfig	-	-	-	-
		Road Base included in Road Reconfig	-	-	-	-
		Curb included in Road Reconfig	-	-	-	-
		Supply and Place 100 mm topsoil Sod restoration	419.067	m²	\$20.00	\$8,381.34
	On-Street Parking (1S)					
		Signage	5	each	\$400.00	\$2,000.00
	Manhole					
		Manhole Removal	5	each	\$1,200.00	\$6,000.00
		Manhole Installation				
		Up to 300 mm	5	each	\$975.00	\$4,875.00
		Concrete Collars Base	5	each	\$220.00	\$1,100.00
	Catchbasins					
		Removal	3	each	\$620.00	\$1,860.00
		Installation				
		Up to 300 mm	3	each	\$475.00	\$1,425.00
		Base asphalt to finished grade - All	3	each	\$349.00	\$1,047.00
						\$385,187.42

Albert Street (Guelph to Union)	Shared Bike Lanes				
	Sharrows	12	each	\$200.00	\$2,400.00
	Signage	12	each	\$400.00	\$4,800.00
					\$7,200.00
Union Street (Albert to King)	Shared Bike Lanes				
	Sharrows	4	each	\$200.00	\$800.00
	Signage	4	each	\$400.00	\$1,600.00
					\$2,400.00
Durham Street (Elgin to Union)	Sidewalk				
	Install	184	m ²	\$70.00	\$12,880.00
					\$12,880.00
Victoria Street (John to Go)	Shared Bike Lanes				
	Signage	6	each	\$200.00	\$1,200.00
	Sharrows	4	each	\$400.00	\$1,600.00
					\$2,800.00

Intersection	Description	Quantity	Unit	Unit Price	Total
Queen Street at McNabb Street Curb Extension	New Curb Extensions				
	Remove Barrier Curb	101	m	\$15.00	\$1,515.00
	Remove Asphalt	86	m ²	\$10.00	\$860.00
	Excavation of Roadway (700 mm)	60.2	m ³	\$35.00	\$2,107.00
	Remove Signs	2	each	\$200.00	\$400.00
	Road Base (550 mm)	18.92	t	\$30.00	\$567.60
	Install Concrete Curb and Gutter				
	Standard Curb OPSD 600.040	110	m	\$90.00	\$9,900.00
	Handwork	55	m	\$125.00	\$6,875.00
	Supply and Place 100 mm topsoil Sod restoration	69.829	m ²	\$20.00	\$1,396.58
	Signs and posts	6	each	\$400.00	\$2,400.00
	Restore Asphalt (170 mm)	6.4515	t	\$150.00	\$967.73
					\$26,988.91
Union Street at Durham Street Curb Extension	New Curb Extensions				
	Remove Barrier Curb	91.5	m	\$15.00	\$1,372.50
	Remove Asphalt	86	m ²	\$10.00	\$860.00
	Excavation of Roadway (700 mm)	60.2	m ³	\$35.00	\$2,107.00
	Remove Signs	1	each	\$200.00	\$200.00
	Road Base (550 mm)	18.92	t	\$30.00	\$567.60
	Install Concrete Curb and Gutter				
	Standard Curb OPSD 600.040	94.5	m	\$90.00	\$8,505.00
	Handwork	47.25	m	\$125.00	\$5,906.25
	Supply and Place 100 mm topsoil Sod restoration	81.1375	m ²	\$20.00	\$1,622.75
	Signs and posts	4	each	\$400.00	\$1,600.00
	Restore Asphalt (170 mm)	5.542425	t	\$150.00	\$831.36
					\$23,572.46

King Street at Elgin Street Curb Extension						
	New Curb Extensions					
		Remove Barrier Curb	101.5	m	\$15.00	\$1,522.50
		Remove Asphalt	139.5	m ²	\$10.00	\$1,395.00
		Excavation of Roadway (700 mm)	97.65	m ³	\$35.00	\$3,417.75
		Remove Signs	2	each	\$200.00	\$400.00
		Road Base (550 mm)	30.69	t	\$30.00	\$920.70
		Install Concrete Curb and Gutter				
		Standard Curb OPSD 600.042	113	m	\$90.00	\$10,170.00
		Handwork	56.5	m	\$125.00	\$7,062.50
		Supply and Place 100 mm topsoil Sod restoration	120.9201	m ²	\$20.00	\$2,418.40
		Signs and posts	6	each	\$400.00	\$2,400.00
		Restore Asphalt (170 mm)	6.62745	t	\$150.00	\$994.12
						\$30,700.97
King Street at Queen Street Medians						
	Median					
		Remove Asphalt	43	m ²	\$10.00	\$430.00
		Excavation of Roadway	30.1	m ³	\$35.00	\$1,053.50
		Remove Signs	0	each	\$200.00	\$0.00
		Road Base	9.46	t	\$30.00	\$283.80
		Install Concrete Curb and Gutter				
		Standard Curb OPSD 600.040	28	m	\$90.00	\$2,520.00
		Handwork	14	m	\$125.00	\$1,750.00
		Supply and Place 100 mm topsoil Sod restoration	43	m ²	\$20.00	\$860.00
		Signs and posts	4	each	\$400.00	\$1,600.00
		Restore Asphalt (170 mm)	1.6422	t	\$150.00	\$246.33
						\$8,743.63
McNabb Street at Mill Street Intersection Improvements						
	Enhanced Pavement Markings					
		Stop Bar (600 mm width)	7	m	\$50.00	\$350.00
		Centreline (100 mm width)	45	m	\$50.00	\$2,250.00
		Lines (100 mm width)	12.36	m	\$10.00	\$123.60
		Zebra (600 mm width)	13.54	m	\$50.00	\$677.00
	Curb Extension					
		Remove Asphalt	40	m ²	\$10.00	\$400.00
		Excavation of Roadway (700 mm)	28	m ³	\$35.00	\$980.00
		Road Base (550 mm)	52.8	t	\$30.00	\$1,584.00
		Install Concrete Curb and Gutter				
		Standard Curb OPSD 600.042	25	m	\$90.00	\$2,250.00
		Handwork	12.5	m	\$125.00	\$1,562.50
		Supply and Place 100 mm topsoil Sod restoration	40	m ²	\$20.00	\$800.00
		Restore Asphalt (170 mm)	1.46625	t	\$150.00	\$219.94
						\$11,197.04

Parkette	Description		Quantity	Unit	Unit Price	Total
East						
	Total Parkette					
		Excavation 100 mm	85.50	m ³	\$ 30.00	\$2,565.00
		Supply and Place 100 mm topsoil, hydraulic seed and mulch	855.00	m ²	\$ 10.00	\$8,550.00
		Curb	50.00	m	\$ 100.00	\$5,000.00
		Handwork	25	m	\$125.00	\$3,125.00
	Benches x 3					
		Remove Earth 700 mm	6.3	m ³	\$ 50.00	\$315.00
		Granular	12.42	t	\$ 23.95	\$297.46
		Concrete base 125 mm	9	m ²	\$ 130.00	\$1,170.00
		Bench	3	each	\$ 2,000.00	\$6,000.00
	Garden Bed with Bushes					
		Remove Earth 500 mm	10	m ³	\$ 31.40	\$314.00
		Install Soil 500 mm	20	m ²	\$ 10.00	\$200.00
		Bushes	7	each	\$ 100.00	\$700.00
	Trees		3	each	\$ 500.00	\$1,500.00
						\$29,736.46

Segments	Description		Quantity	Unit	Unit Price	Total
Victoria Street						
(John to Go)	Sidewalks					
		Removal	96	m ²	\$20.00	\$1,920.00
		Install	191	m ²	\$70.00	\$13,370.00
						\$15,290.00

SUBTOTAL		\$914,893.14
CONTINGENCY(25%)		\$228,723.28
Design (8%)		\$73,191.45
TOTAL		\$1,216,807.88

Long Term Items (10+ years)

Segments	Description	Quantity	Unit	Unit Price	Total
King Street					
Entire Segment	Shared Bike Lanes				
New Cross Section	Sharrows	10	each	\$170.00	\$1,700.00
Reconstruction	Signage	8	each	\$300.00	\$2,400.00
	Road Reconstruction				
	Removals				
	Asphalt Roadway	7104.8	m ²	\$5.00	\$35,524.00
	Topsoil Removal and Disposal (of Boulevard)	1838	m ²	\$10.00	\$18,380.00
	Traffic Signs	10	each	\$100.00	\$1,000.00
	Excavation				
	Full Depth Roadway Excavation	11984	m ³	\$20.00	\$239,680.00
	Road Base (Granular Materials)	22598.4	t	\$16.00	\$361,574.40
	Asphalt milling and sawcutting	6848	m ²	\$5.00	\$34,240.00
	Tack coat suply and application	6848	m ²	\$1.00	\$6,848.00
	Supply, place and compact hot mix asphalt	1851.6992	t	\$110.00	\$203,686.91
	Curb (East and West)				
	OPSD 600.040 - Concrete Barrier	1642	m	\$60.00	\$98,520.00
	Handwork	821	m	\$125.00	\$102,625.00
	Reinstall Sign	10	each	\$300.00	\$3,000.00
	Boulevards				
	Asphalt removal included in Road Reconfig	-	-	-	-
	Excavation included in Road Reconfig	-	-	-	-
	Road Base included in Road Reconfig	-	-	-	-
	Curb included in Road Reconfig	-	-	-	-
	Supply and Place 100 mm topsoil and sod restoration	13136	m ²	\$10.00	\$131,360.00
	Sidewalks				
	Removal	1589	m ²	\$20.00	\$31,780.00
	Install	1589	m ²	\$70.00	\$111,230.00
	On-Street Parking (2S)				
	Signa	48	each	\$300.00	\$14,400.00
	Manhole				
	Manhole Removal	13	each	\$1,200.00	\$15,600.00
	Manhole Installation				
	Up to 300 mm	13	each	\$975.00	\$12,675.00
	Concrete Collars Base	13	each	\$220.00	\$2,860.00
	Catchbasins				
	Removal	26	each	\$620.00	\$16,120.00
	Installation				
	Up to 300 mm	26	each	\$475.00	\$12,350.00
	Base asphalt to finished grade - All	26	each	\$349.00	\$9,074.00
					\$1,452,227.31

Queen Street						
(Entire segment)	Sidewalks					
New Cross Section		Removal	895	m²	\$20.00	\$17,900.00
Reconstruction		Install	940	m²	\$70.00	\$65,800.00
	Road Reconstruction					
		Removals				
		Asphalt Roadway	3983.35	m²	\$5.00	\$19,916.75
		Topsoil Removal and Disposal (Blvd)	1288.5	m²	\$10.00	\$12,885.00
		Traffic Signs	5	each	\$100.00	\$500.00
		Excavation				
		Full Depth Roadway Excavation	7000	m³	\$20.00	\$140,000.00
		Road Base (Granular Materials)	13200	t	\$16.00	\$211,200.00
		Asphalt milling and sawcutting	4000	m²	\$5.00	\$20,000.00
		Tack coat suply and application	4000	m²	\$1.00	\$4,000.00
		Supply, place and compact hot mix asphalt	1060.8	t	\$110.00	\$116,688.00
		Curb (East and West)				
		OPSD 600.040 - Concrete Barrier	950	m	\$60.00	\$57,000.00
		Handwork	475	m	\$125.00	\$59,375.00
		Reinstall Sign	5	each	\$300.00	\$1,500.00
	Boulevards					
		Asphalt removal included in Road Reconfig	-	-	-	-
		Excavation included in Road Reconfig	-	-	-	-
		Road Base included in Road Reconfig	-	-	-	-
		Curb included in Road Reconfig	-	-	-	-
		Supply and Place 100 mm topsoil and sod restoration	7600	m²	\$10.00	\$76,000.00
	On-Street Parking (2S)					
		Signage	26	each	\$300.00	\$7,800.00
	Manhole					
		Manhole Removal	8	each	\$1,200.00	\$9,600.00
		Manhole Installation				
		Up to 300 mm	8	each	\$975.00	\$7,800.00
		Concrete Collars Base	8	each	\$220.00	\$1,760.00
	Catchbasins					
		Removal	16	each	\$620.00	\$9,920.00
		Installation				
		Up to 300 mm	16	each	\$475.00	\$7,600.00
		Base asphalt to finished grade - All	16	each	\$349.00	\$5,584.00
						\$852,828.75

John Street						
(Entire segment)	On-Street Parking (2S)					
New Cross Section	Signage	38	each	\$300.00	\$11,400.00	
Reconstruction	Road Reconstruction					
	Removals					
	Asphalt Roadway	5984.3	m ²	\$5.00	\$29,921.50	
	Topsoil Removal and Disposal (East)	2299.9	m ²	\$10.00	\$22,999.00	
	Traffic Signs	9	each	\$100.00	\$900.00	
	Excavation					
	Full Depth Roadway Excavation	10220	m ³	\$20.00	\$204,400.00	
	Road Base (Granular Materials)	19272	t	\$16.00	\$308,352.00	
	Asphalt milling and sawcutting	5840	m ²	\$5.00	\$29,200.00	
	Tack coat supply and application	5840	m ²	\$1.00	\$5,840.00	
	Supply, place and compact hot mix asphalt	1548.768	t	\$110.00	\$170,364.48	
	Curb (Both Sides)					
	OPSD 600.040 - Concrete Barrier	1430	m	\$60.00	\$85,800.00	
	Handwork	715	m	\$125.00	\$89,375.00	
	Reinstall Sign	9	each	\$300.00	\$2,700.00	
	Boulevards					
	Asphalt removal included in Road Reconfig	-	-	-	-	
	Excavation included in Road Reconfig	-	-	-	-	
	Road Base included in Road Reconfig	-	-	-	-	
	Curb included in Road Reconfig	-	-	-	-	
	Supply and Place 100 mm topsoil and sod restoration	11440	m ²	\$10.00	\$114,400.00	
	Sidewalks					
	Removal	856	m ²	\$20.00	\$17,120.00	
	Install	1404	m ²	\$70.00	\$98,280.00	
	Manhole					
	Manhole Removal	10	each	\$1,200.00	\$12,000.00	
	Manhole Installation					
	Up to 300 mm	10	each	\$975.00	\$9,750.00	
	Concrete Collars Base	10	each	\$220.00	\$2,200.00	
	Catchbasins					
	Removal	18	each	\$620.00	\$11,160.00	
	Installation					
	Up to 300 mm	18	each	\$475.00	\$8,550.00	
	Base asphalt to finished grade - All	18	each	\$349.00	\$6,282.00	
						\$1,240,993.98
Dayfoot Drive						
(Entire segment)	Sidewalks					
	Removal	0	m ²	\$20.00	\$0.00	
	Install	1038	m ²	\$70.00	\$72,660.00	
						\$72,660.00
McNabb Street						
(Queen to Durham)	Sidewalks					
	Removal	0	m ²	\$20.00	\$0.00	
	Install	346	m ²	\$70.00	\$24,220.00	
						\$24,220.00
Elgin Street						
(King to Durham)	Sidewalks					
	Removal	0	m ²	\$20.00	\$0.00	
	Install	353	m ²	\$70.00	\$24,710.00	
						\$24,710.00
Rosetta Street						
(River to Caroline)	Sidewalks					
	Removal	0	m ²	\$20.00	\$0.00	
	Install	220	m ²	\$70.00	\$15,400.00	
						\$15,400.00

SUBTOTAL		\$3,683,040.04
CONTINGENCY(25%)		\$920,760.01
Design (8%)		\$294,643.20
TOTAL		\$4,898,443.26

Totals

Description	Total
Immediate	\$57,788.20
Short Term	\$914,893.14
Long Term	\$3,683,040.04

SUBTOTAL	\$4,655,721.38
Design Cost (8%)	\$372,457.71
Contingency (25%)	\$1,163,930.35
TOTAL ALL TERMS	\$6,192,109.44

APPENDIX B – FINAL PREFERRED INTERSECTIONS DESIGN

1. Proposed sharrow markings / bike route signs are subject to the outcome of the Active Transportation Master Plan.

Existing Sidewalk
To be Repaired

Future Parkette
Area

R10.00-

Mill St.
Option 3

3.07-

Railing to be Replaced-

3.5000 typ.

—R10.00

McNabb St. W
Option 1

Sidewalk
Boulevard

Variable Width 1.80

2.50-

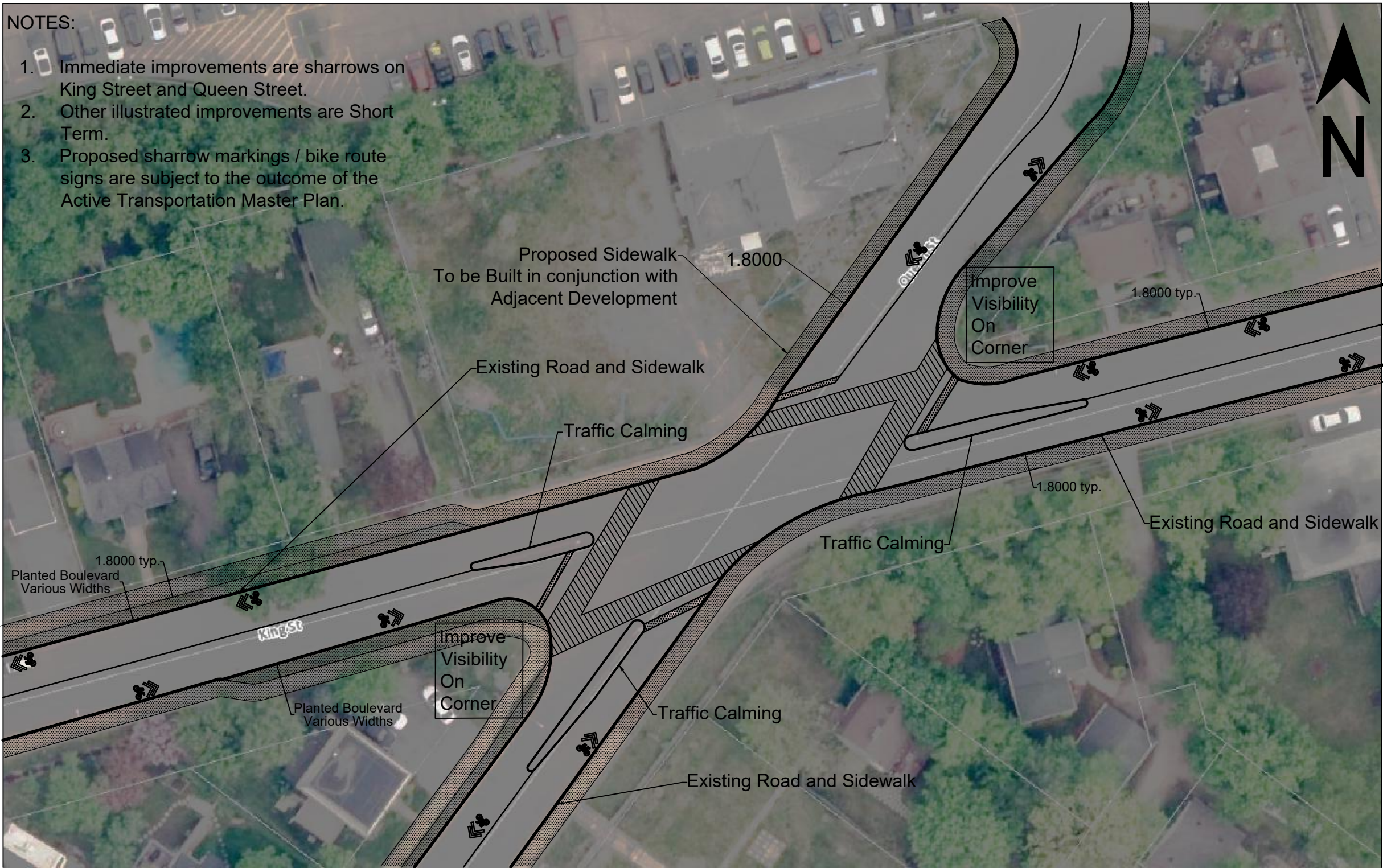
2.5000-

AE PROJECT No.	20185244-00
SCALE	NTS
APPROVED	J Suggett /dd
DATE	20191205
REV	1
DESCRIPTION	ISSUED FOR REVISION

DWG No. AE_11X17-DET-V_01

NOTES:

1. Immediate improvements are sharrows on King Street and Queen Street.
2. Other illustrated improvements are Short Term.
3. Proposed sharrow markings / bike route signs are subject to the outcome of the Active Transportation Master Plan.



King Street and Queen Street

TOWN OF HALTON HILLS

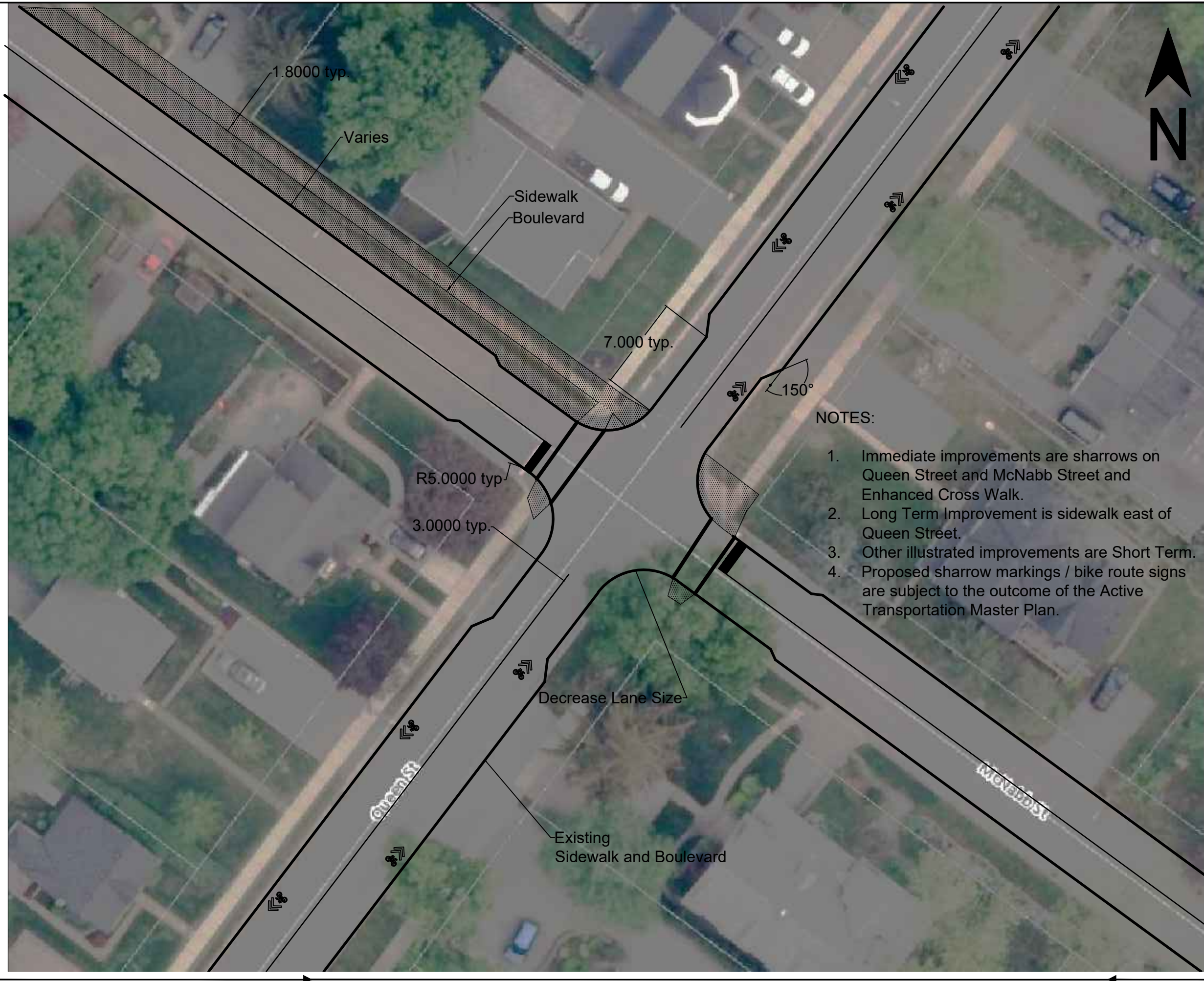
TRANSPORTATION PLANNING GROUP
Mill Street Corridor Precinct Neighbourhood Study
PROPOSED CHANGES

AE PROJECT No.	20185244-00
SCALE	NTS
APPROVED	J Suggett /dd
DATE	20191205
REV	1
DESCRIPTION	ISSUED FOR REVISION

DWG No. AE_11X17-DET-V_01 (3)

PLOT DATE: 12/23/2019 10:29:08 AM
SAVE DATE: 12/23/2019 10:23:32 AM
DWG PATH: p:\2018524400_mill_st_corridor\working_dwg\100_civil\mill_street_improvements\2019\millerad.mill_st_at_mcnabb_st_v2.dwg

IF NOT 25 mm ADJUST SCALES
SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE



NOTES:

1. Immediate improvements are sharrow on Queen Street and McNabb Street and Enhanced Cross Walk.
2. Long Term Improvement is sidewalk east of Queen Street.
3. Other illustrated improvements are Short Term.
4. Proposed sharrow markings / bike route signs are subject to the outcome of the Active Transportation Master Plan.

Queen Street and McNabb Street

TOWN OF HALTON HILLS

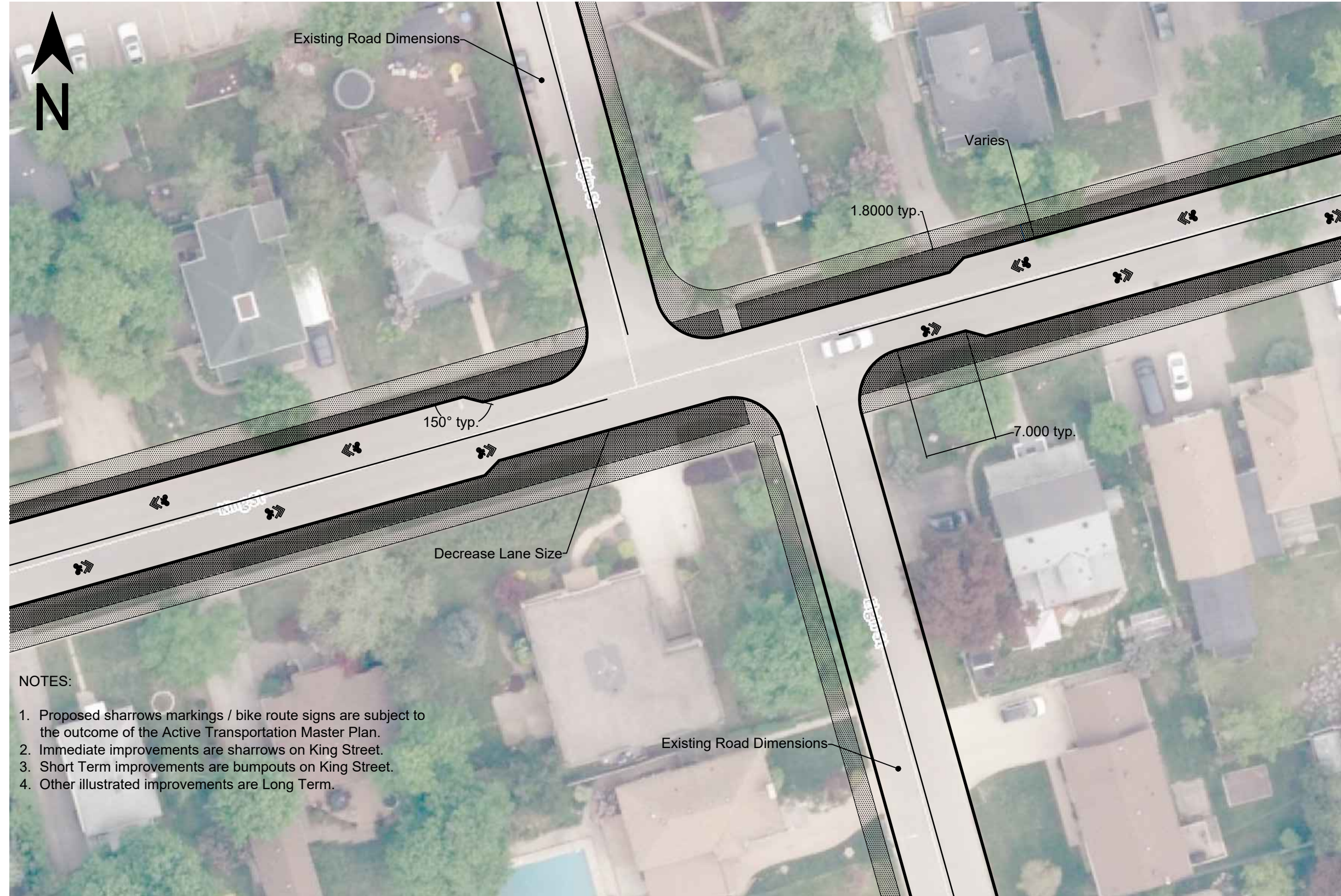
TRANSPORTATION PLANNING GROUP
Mill Street Corridor Precinct Neighbourhood Study
PROPOSED CHANGES

AE PROJECT No.	20185244-00
SCALE	NTS
APPROVED	J Suggett /dd
DATE	20191205
REV	1
DESCRIPTION	ISSUED FOR REVISION

DWG No. AE_11X17-DET-V_01 (4)

PLOT DATE: 12/23/2019 10:16:09 AM
SAVE DATE: 12/20/2019 4:41:42 PM
DWG PATH: p:\2018524400_mill_st_corridor\working_dwg\100_civil\mill_street_improvements\2019may\cad.mill_st at incabls st_v2.dwg

IF NOT 25 mm ADJUST SCALES
SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE



NOTES:

1. Proposed sharrows markings / bike route signs are subject to the outcome of the Active Transportation Master Plan.
2. Immediate improvements are sharrows on King Street.
3. Short Term improvements are bumpouts on King Street.
4. Other illustrated improvements are Long Term.

King Street and Elgin Street

TOWN OF HALTON HILLS

TRANSPORTATION PLANNING GROUP
Mill Street Corridor Precinct Neighbourhood Study
PROPOSED CHANGES

AE PROJECT No.	20185244-00
SCALE	NTS
APPROVED	J Suggett /dd
DATE	20191205
REV	1
DESCRIPTION	ISSUED FOR REVISION

DWG No. AE_11X17-DET-V_01 (2)

PLOT DATE: 12/23/2019 10:31:18 AM
SAVE DATE: 12/23/2019 10:23:32 AM
DWG PATH: p:\2018524400_mill_st_corridor\working_dwg\100_civil\mill_street_improvements\2019may\cad_mill_st_at_incrabls_st_v2.dwg

IF NOT 25 mm ADJUST SCALES
SCALE(S) SHOWN ARE INTENDED FOR TABLOID (11X17) SIZE DRAWINGS UNLESS NOTED OTHERWISE



Union Street and Durham Street	
TOWN OF HALTON HILLS	
TRANSPORTATION PLANNING GROUP Mill Street Corridor Precinct Neighbourhood Study PROPOSED CHANGES	
AE PROJECT No.	20185244-00
SCALE	NTS
APPROVED	J Suggett /dd
DATE	20191205
REV	1
DESCRIPTION	ISSUED FOR REVISION
DWG No.	AE_11X17-DET-V_01 (5)