



Guelph Sidewalk Needs Assessment Study

Paradigm Transportation Solutions Limited

December 2016

Project Number

150850

December 2016

Client

City of Guelph

1 Carden Street
Guelph ON N1H 3A1

Client Contact

Jennifer Juste

Consultant Project Team

Jim Mallett, M.A.Sc., P.Eng., MTOE
Matt Brouwer, P.Eng.

Guelph Sidewalk Needs Assessment Study

Signatures and Seals



Signature



Engineer's Seal

Disclaimer

This document has been prepared for the titled project or named part thereof (the "project") and except for approval and commenting municipalities and agencies in their review and approval of this project, should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authorization of Paradigm Transportation Solutions Limited being obtained. Paradigm Transportation Solutions Limited accepts no responsibility or liability for the consequence of this document being used for a purpose other than the project for which it was commissioned. Any person using or relying on the document for such other purpose agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Paradigm Transportation Solutions Limited for all loss or damage resulting there from. Paradigm Transportation Solutions Limited accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned and the approval and commenting municipalities and agencies for the project.

To the extent that this report is based on information supplied by other parties, Paradigm Transportation Solutions Limited accepts no liability for any loss or damage suffered by the client, whether through contract or tort, stemming from any conclusions based on data supplied by parties other than Paradigm Transportation Solutions Limited and used by Paradigm Transportation Solutions Limited in preparing this report.

Paradigm Transportation Solutions Limited

22 King Street South Suite 300
Waterloo ON N2J 1N8
p: 519.896.3163
www.ptsl.com

Executive Summary

Content

Paradigm Transportation Solutions Limited, in conjunction with MMM Group, has been retained by the City of Guelph to complete a Sidewalk Needs Assessment Update study (Reference Number 15-064, Part B).

The purpose of this study is to identify the missing links in the existing sidewalk network in the City of Guelph, to create a ranking system to compare and rank the missing links, and to present a list of gaps that should be given priority to for construction.

Missing links are defined in this study as segments of existing roads that do not have sidewalks on both sides of the street.

Evaluation Criteria

An evaluation criteria was needed to compare the missing links so that a priority ranking could be applied. The following characteristics were evaluated and scored for the missing links:

- ▶ Type of Road (Arterial, Collector, Local, Cul-de-sac, Urban and Rural) (scoring range between 0 and 10 points)
- ▶ Nearby Schools (Elementary, Secondary, University, Adult Continuing Education) (scoring range between 5 and 10 points)
- ▶ Sidewalks exist on one side or neither side (sidewalks on one side apply a factor of 0.5 to the Type of Road score)
- ▶ On a Transit Route (10 points)
- ▶ Adjacent Land Use (High, Medium and Low Density Residential, Commercial Retail, Office, Industrial) (scoring range between 2 and 6 points)
- ▶ Desire Lines (Beaten Paths) Exist along roadside (5 points)
- ▶ Within 500 m of proposed Active Transportation Network (4 points)
- ▶ Nearby Pedestrian Generators (Hospital, Library, Community Centre, Park, Sports Facility, Shopping Centre, Seniors Centre/Residence, Grocery Store) (scoring range between 0 and 6 points)
- ▶ A maximum score of 51 is possible, if a link scores in all categories.

The high ranking segments were divided into six categories:

- ▶ High Priority – Shorter Segments
- ▶ High Priority – Longer Segments
- ▶ Tied to Development



- ▶ Part of Reconstruction Plans
- ▶ Medium Priority
- ▶ Ranked High, but unlikely priority candidate

Community Engagement

Throughout the project, a number of community engagement opportunities were provided for concerned stakeholders and members of the public to give their input in the project. The following opportunities were provided for public input:

- ▶ Public Meetings
 - 1 July 2015 at Riverside Park Canada Day Celebrations
 - 31 October 2015 at Guelph Farmer's Market
- ▶ Stakeholder Meetings
 - 23 June 2015
 - 11 February 2016
- ▶ Ongoing input via project website and Mindmixer

Conclusions

Based on the study reported on above, it is concluded that:

- ▶ There are 463 streets in the City of Guelph with at least one segment missing a sidewalk. 235 of those streets have segments that do not have sidewalks on at least one side of the street.
- ▶ The ranking system devised in this study helped to initially rank the segments in order of importance
- ▶ Further review of the high ranking segments organized the missing link segments into six categories, which recommends which segments to prioritize and which segments may not be needed, despite ranking high.

Recommendations

It is recommended that the City of Guelph prioritize the following missing link segments:

- ▶ Category 1: Short segments
 - Willow Road between Elmira Road and 100 metres east of Elmira Road (estimated construction cost \$11,500);
 - Grange Road between Auden Road to 60 metres east of Auden Road (estimated construction cost \$7,000);



- Ptarmigan Drive between Niska Road and 30 metres south of Niska Road (estimated construction cost \$3,500);
 - Elmira Road North between Tovell Drive to 80 metres north of Tovell Drive (estimated construction cost \$9,000);
 - Exhibition Street between 125 metres south of Division Street and Powell Street West (estimated construction cost \$12,500);
 - Imperial Road North between Speedvale Avenue West and 100 metres south of Speedvale Avenue West (estimated construction cost \$22,500 for both sides);
 - Kathleen Street between 80 metres south of Division Street to 210 metres south of Division Street (estimated construction cost \$15,000); and
 - Eastview Road between Watson Parkway and Summit Ridge Drive (estimated construction cost \$38,500 for both sides).
- ▶ Category 2: Longer Segments
- Woodlawn Road West between Elmira Road and west city boundary (estimated construction cost \$1225,000 for both sides);
 - Edinburgh Road North between Speedvale Avenue and London Road West (estimated construction cost \$143,500);
 - Speedvale Avenue West between west city boundary and Imperial Road North, between Imperial Road North and Royal Road, between Marksam Road and the Hanlon Expressway, and between the Hanlon Expressway and Edinburgh Road North (estimated construction cost \$656,000 for both sides); and
 - Stone Road West between Hanlon Expressway and Scottsdale Road (estimated construction cost \$34,000).

Finally, with regards to updating the Alternative Design Standards, consideration should be given to:

- ▶ The section of former City Engineering Policy #23 that was repealed, which read “walks will be constructed on both sides of all new streets except cul-de-sacs with an overall length of 120 m or less” be reinstated.
- ▶ In new subdivisions, temporary sidewalks be constructed at the same time as the road, rather than be constructed at the time of the house (or other building) that the sidewalk will front.



Contents

1	Introduction	1
1.1	Background.....	1
1.2	Scope.....	1
2	Existing Conditions	2
2.1	Missing Links in the Sidewalk Network	2
2.1.1	Sidewalks Planned in 10-Year Capital Budget.....	2
3	Evaluation Criteria and Scoring System	4
3.1	Evaluation Criteria	4
3.2	Scoring System.....	4
4	Results of Ranking	6
4.1	High Ranking Segments.....	6
4.2	List of Priority Segments.....	6
4.2.1	Category 1: High Priority – Short Segments	6
4.2.2	Category 2: High Priority – Long Segments.....	10
4.2.3	Category 3: Tied to Development	12
4.2.4	Category 4: Included in Capital Projects.....	14
4.2.5	Category 5: Medium Priority	14
4.2.6	Category 6: High Ranking, but Unlikely Priority Candidates	17
5	Priority Segment Details	19
5.1	Cost Estimates.....	19
5.2	Land Restrictions.....	19
5.3	Other Concerns or Opportunities	20
6	Community Engagement	21
6.1	Public Meetings	21
6.2	Stakeholder Meetings	21
6.3	Mindmixer.....	21
7	Alternative Design Standards Update.....	24
8	Conclusions and Recommendations	26
8.1	Conclusions	26
8.2	Recommendations.....	26



Appendices

- Appendix A: Complete List of Missing Link Segments
- Appendix B: Highest 100 (plus ties) Ranking Missing Link Segments
- Appendix C: Community Engagement Feedback Samples

Figures

Figure 2.1:	City of Guelph GIS Sidewalk Map	3
Figure 4.1:	Priority Segments Category 1	9
Figure 4.2:	Priority Segments Category 2	11
Figure 4.3:	Priority Segments Category 3	13
Figure 4.4:	Priority Segments Category 4	15
Figure 4.5:	Priority Segments Category 5	16
Figure 4.6:	Priority Segments Category 6	18
Figure 6.1:	Example of PIC Feedback	23

Tables

Table 3.1:	Evaluation Criteria and Scoring System	5
Table 5.1:	Estimated Sidewalk Construction Costs	19



1 Introduction

1.1 Background

Paradigm Transportation Solutions Limited, in conjunction with MMM Group, has been retained by the City of Guelph to complete a Sidewalk Needs Assessment Update study (Reference Number 15-064, Part B). The City of Guelph completed a Sidewalk Needs Assessment (SNA) study in 2001, to which this study is an update. This study is complementary to work being undertaken to implement the Active Transportation Network Feasibility and Design Study, and addresses the City of Guelph's Transportation Demand Management goals to facilitate active transportation.

1.2 Scope

The purpose of this study is to identify the missing links in the existing sidewalk network in the City of Guelph, compare and rank the missing links, and to present a list of gaps that should be given priority for construction.

Missing links are defined in this study as segments of existing roads that do not have sidewalks on both sides of the street.



2 Existing Conditions

2.1 Missing Links in the Sidewalk Network

The identification of missing sidewalk links was achieved by utilizing a combination of the City of Guelph's GIS Sidewalk map, recent aerial photography, and field observations.

The sidewalk map, as provided by the City of Guelph is shown in **Figure 2.1**. The map shows the existing sidewalks within the city rather than the missing links. Therefore, to create the list of missing links, the map had to be searched to discover the segments of existing roads that do not have sidewalks on both sides.

Along with the search of the sidewalk map, recent aerial photos were used to confirm the missing links. The City of Guelph's GIS website¹ (aerial photos dated 2012) and Google Earth (aerial photos dated 2013) were used for this process. To confirm the findings from use of aerial photos, street level field observations were made in areas where unique situations were present (property and geometric restrictions or other obstructions that would make sidewalk installation more difficult) or on streets that ranked high.

The investigation of the missing links revealed that there are currently 463 streets within the City of Guelph with segments where sidewalks do not exist on both sides of the street. 235 of those streets have segments that do not have sidewalks on at least one side of the street. The complete list of missing links is included in **Appendix A**.

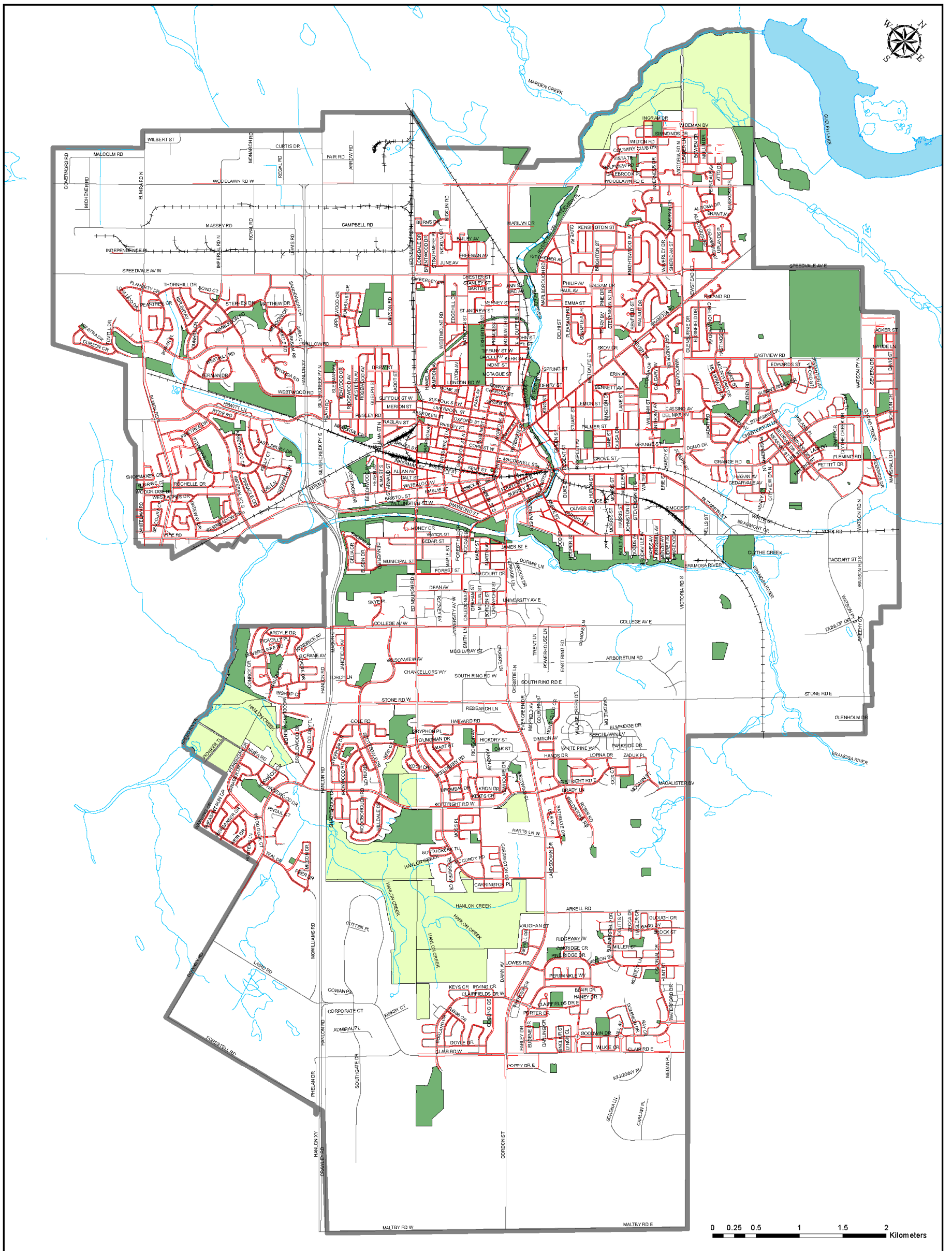
2.1.1 Sidewalks Planned in 10-Year Capital Budget

The 10 year (2016 – 2025) capital budget was reviewed to determine where in the city, new sidewalks were being planned for construction and therefore would not need to be addressed by this study. Three segments of sidewalks were noted as being planned in the capital budget which applied directly to this study:

- ▶ Stone Road – Evergreen to Victoria
- ▶ Multiuse boulevard trail on Woodlawn from Nicklin to Elmira Road
- ▶ York: Victoria to East City Limits

¹ <http://maps.guelph.ca/Guelph>





EXISTING SIDEWALK NETWORK (JUNE 2015)



Legend

- Sidewalk along both sides of Roadway
- Sidewalk along one side of Roadway
- Roads
- Rivers and Streams
- Railway
- Parks
- Conservation Lands
- Guelph Lake
- City Boundary



City of Guelph GIS Sidewalk Map

3 Evaluation Criteria and Scoring System

3.1 Evaluation Criteria

An evaluation criteria was needed to compare the missing links so that a priority ranking could be applied. To formulate the evaluation criteria, examples from similar studies conducted in other Ontario cities (Ottawa and Peterborough) were used as a starting point. From these examples, and with input from City of Guelph staff, community stakeholders, and residents (through stakeholder meetings and public information centres), a list of criteria was developed unique to Guelph. The following characteristics were evaluated for the missing links:

- ▶ Type of Road (Arterial, Collector, Local, Cul-de-sac, Urban and Rural)
- ▶ Nearby Schools (Elementary, Secondary, University, Adult Continuing Education)
- ▶ Sidewalks exist on one side or neither side
- ▶ On a Transit Route
- ▶ Existing Adjacent Land Use (High, Medium and Low Density Residential, Commercial Retail, Office, Industrial)
- ▶ Desire Lines (Beaten Paths) Exist along roadside
- ▶ Within 500 m of proposed Active Transportation Network
- ▶ Nearby Pedestrian Generators (Hospital, Library, Community Centre, Park, Sports Facility, Shopping Centre, Seniors Centre/Residence, Grocery Store)

3.2 Scoring System

To recognize that not all characteristics listed above have the same impact in determining the need for sidewalks, a weighted scoring system was devised, with the input of City of Guelph staff. **Table 3.1** outlines the evaluation criteria and scoring system used in this study. A maximum score of 51 is possible, if a segment scores maximum points in all categories.

The “Type of Road” category was based on whether the road characteristic is urban or rural, and the classification of arterial, collector, local, or cul-de-sac. The maximum score for this category is 10 (for an urban arterial) and the minimum score is 0 (for cul-de-sacs).

The “Existing Sidewalk” category is a factor applied to the “Type of Road” score. If the segment being evaluated has no sidewalks on either side of the street, a factor of 1 was applied to the “Type of Road” score (ie. no change). If a sidewalk exists on one side of the road, a factor of 0.5 was applied to the “Type of Road” score to reflect a lesser need for a sidewalk in that location.



The “Nearby School” category was used if a school is located nearby the missing sidewalk segment. The maximum score of 10 was given to elementary schools. Scores of 8 were given for secondary schools, 7 for university, and 5 for continuing education or English as a Second Language facilities.

The “Adjacent Land Use” category was used to account for land use types that might be more likely to attract pedestrians. The maximum score for this category was 6, given to office and commercial retail uses. A score of 4 was given to industrial employment areas. For residential land uses, scores of 4, 3, and 2 were given to high-density, medium-density and low-density, respectively.

If a missing sidewalk segment was located on a current transit route, a score of 10 was applied. If a missing sidewalk segment showed a visible “beaten path”, indicating that pedestrian traffic is using the location even without a proper sidewalk, a score of 5 was applied. If the missing sidewalk segment was within 500 metres of the proposed Active Transportation Network, a score of 4 was applied.

Scores between 1 and 6 were applied to segments with nearby specific pedestrian generators, such as hospitals, parks, seniors centres/residences, libraries, community centres, sports facilities, grocery stores and shopping centres.

TABLE 3.1: EVALUATION CRITERIA AND SCORING SYSTEM

Type of Road: Urban Arterial = 10, Urban Collectory = 8, Urban Local = 5, Rural Arterial = 3, Rural Collectory = 2, Urban Crescent = 1, Rural Local = 1, Cul-de-sac = 0.

Existing Sidewalk: If sidewalks exist on one side of road, apply factor of 0.5 to Type of Road score.

Nearby School: Elementary = 10, Secondary = 8, University = 7, Continuing Education / ESL = 5

Transit: On a Transit Route = 10

Adjacent Land Use: Office = 6, Commercial Retail = 6, Industrial = 4, High Density Residential = 4, Medium Density Residential = 3, Low Density Residential = 2

Desire Lines: Visible Beaten Path = 5

Active Transportation Network: Within 500m of Proposed ATN = 4

Nearby Pedestrian Generators: Hospital = 6, Park = 6, Senior Centres/Residence = 6, Library = 4, Community Centre = 4, Sports = 4, Grocery Store* = 2, Shopping Centre* = 1, None = 0 (* - in addition to Commercial Retail Land Use)



4 Results of Ranking

The missing link segments were scored according to the criteria discussed in Chapter 3. To increase focus on missing links with high potential to score high, the missing links that qualified to score in the highest categories (arterials, collectors, schools, and transit routes) were the primary focus. Road segments that did not score in these highest weighted categories were removed from consideration as priority segments, as the total scores without these categories would not be high enough to rank among the top segments.

The ranking of the missing link segments is just the first step of determining the prioritization. After the raw rankings are determined, each segment was further evaluated to determine if the high ranking is reasonable, the potential challenges posed at each location, and whether the missing link segment is planned to be constructed by another process. The high ranking segments were divided into six categories:

- ▶ High Priority – Short Segments
- ▶ High Priority – Long Segments
- ▶ Tied to Development
- ▶ Included in Capital Projects
- ▶ Medium Priority
- ▶ Ranked High, but unlikely priority candidate

4.1 High Ranking Segments

The 100 highest (plus ties) ranking segments are listed in **Appendix B**. The highest ranked of these were considered for further evaluation as priority segments. The further evaluation of these highest ranked segments included considering the context of each individual situation, as the numerical ranking was not the absolute consideration for considering a segment as a priority. In the end, 35 segments were included in the priority categories listed above.

4.2 List of Priority Segments

The top ranked segments were further evaluated and placed in the categories listed above.

4.2.1 Category 1: High Priority – Short Segments

This category includes high ranking segments that are short and have less constraints (such as property or design challenges) and therefore would be relatively easier to construct in the near term. Generally, these segments are less than 200 metres in length. **Figure 4.1** shows the segments in this category.



Willow Road between Elmira Road and 100 metres east of Elmira Road (100 metres)

The missing segment is on the north side of this arterial road. There is a well defined beaten path suggesting it is well used by pedestrians and is near to Mitchell Woods Public School. The segment is currently along a vacant block but has no active planning submissions. Ideally, this sidewalk should be constructed along with a development of the vacant lot, but with no active planning submissions, this link was placed in this priority category. (Location A in Figure 4.1)

Grange Road between Auden Road to 60 metres east of Auden Road (60 metres)

The missing segment is on the north side of this arterial road. Nearby to St. James Catholic Secondary School. This segment is immediately west of a segment which is tied to an impending development. This segment has a beaten path, is on a transit route and near the Active Transportation Network. (Location B in Figure 4.1)

Ptarmigan Drive between Niska Road and 30 metres south of Niska Road (30 metres)

The missing segment is on the east side of the collector road. To the south, an existing sidewalk abruptly ends leading to a well work beaten path. Nearby Kortright Hills Public School. (Location C in Figure 4.1)

Elmira Road North between Tovell Drive to 80 metres north of Tovell Drive (80 metres)

The missing link is on the east side of the arterial road with a well defined beaten path alongside Earl Brimblecombe Park. Nearby Mitchell Woods Public School. (Location D in Figure 4.1)

Exhibition Street between 125 metres south of Division Street and Powell Street West (110 metres)

The missing link is on the west side of this local road with a very well defined beaten path, which leads from where the sidewalk currently terminates at the service driveway of Exhibition Park Arena to the multi-use path that leads into Exhibition Park. Also near Victory Public School and with in 500 metres of the Active Transportation Network. (Location E in Figure 4.1)

Imperial Road North between Speedvale Avenue West and 100 metres south of Speedvale Avenue West (100 metres)

This missing link segment has no sidewalks on either side of this collector road. It is on a transit route and has visible beaten paths. Sidewalks abruptly end at the south end of this segment. Both sides of this segment are across frontage of vacant lots. (Location F in Figure 4.1)



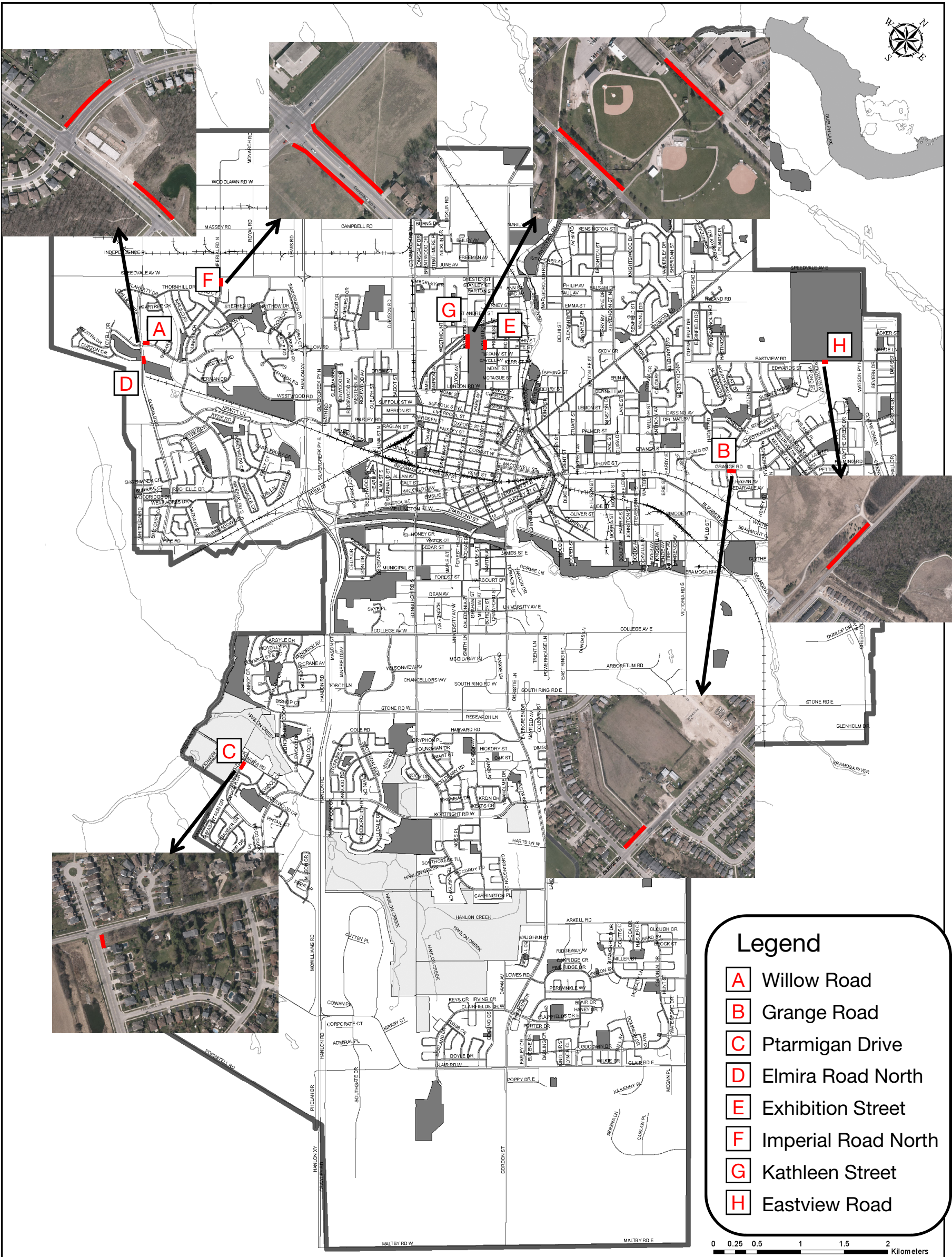
Kathleen Street between 80 metres south of Division Street to Powell Street West (130 metres)

This missing segment is similar to the segment on Exhibition Street mentioned above. It is along the west side of Exhibition Park and connects the Royal Recreation Trail to the multi-use path through Exhibition Park. Also near Victory Public School and the Active Transportation Network. (Location G in Figure 4.1)

Eastview Road between Watson Parkway and Summit Ridge Drive (170 metres)

This segment connects two ends of the proposed Active Transportation Network trails. This segment will depend on the final design of the ATN and may be unnecessary if the trail on the north side is shifted to the west to line up with the trail on the south side. Pedestrians crossing Eastview Road may be a challenge. (Location H in Figure 4.1)





Legend

- A** Willow Road
- B** Grange Road
- C** Ptarmigan Drive
- D** Elmira Road North
- E** Exhibition Street
- F** Imperial Road North
- G** Kathleen Street
- H** Eastview Road

EXISTING SIDEWALK NETWORK (JUNE 2015)

Legend

- Sidewalk along both sides of Roadway
- Sidewalk along one side of Roadway
- Roads
- Rivers and Streams
- Railway
- Parks
- Conservation Lands
- GuelphLake
- City Boundary

CITY OF Guelph
Making a Difference
SIDEWALK NETWORK



**Category 1
(High Priority – Short Segments)**

4.2.2 Category 2: High Priority – Long Segments

This category includes high ranking missing link segments that likely require more planning than the Category 1 segments, either due to the long lengths or to other constraints (such as property or design challenges). Generally, segments with lengths greater than 200 metres are placed in this category (as opposed to Category 1). **Figure 4.2** shows the segments in this category.

Woodlawn Road West between Elmira Road and west city boundary (1000 metres)

Woodlawn Road is planned to be reconstructed with sidewalks (as seen below in Section 4.2.4), but the plans stop at Elmira Road. The segment west of Elmira Road still ranks high as it has no sidewalks on either side on this arterial road, on a transit line, and has a beaten path. (Location A in Figure 4.2)

Edinburgh Road North between Speedvale Avenue and London Road West (635 metres)

The missing link is on the west side of this arterial road. Nearby Our Lady of Lourdes Catholic School and St. Joseph's Health Centre. A transit route exists between Willow Road and London Road West. (Location B in Figure 4.2)

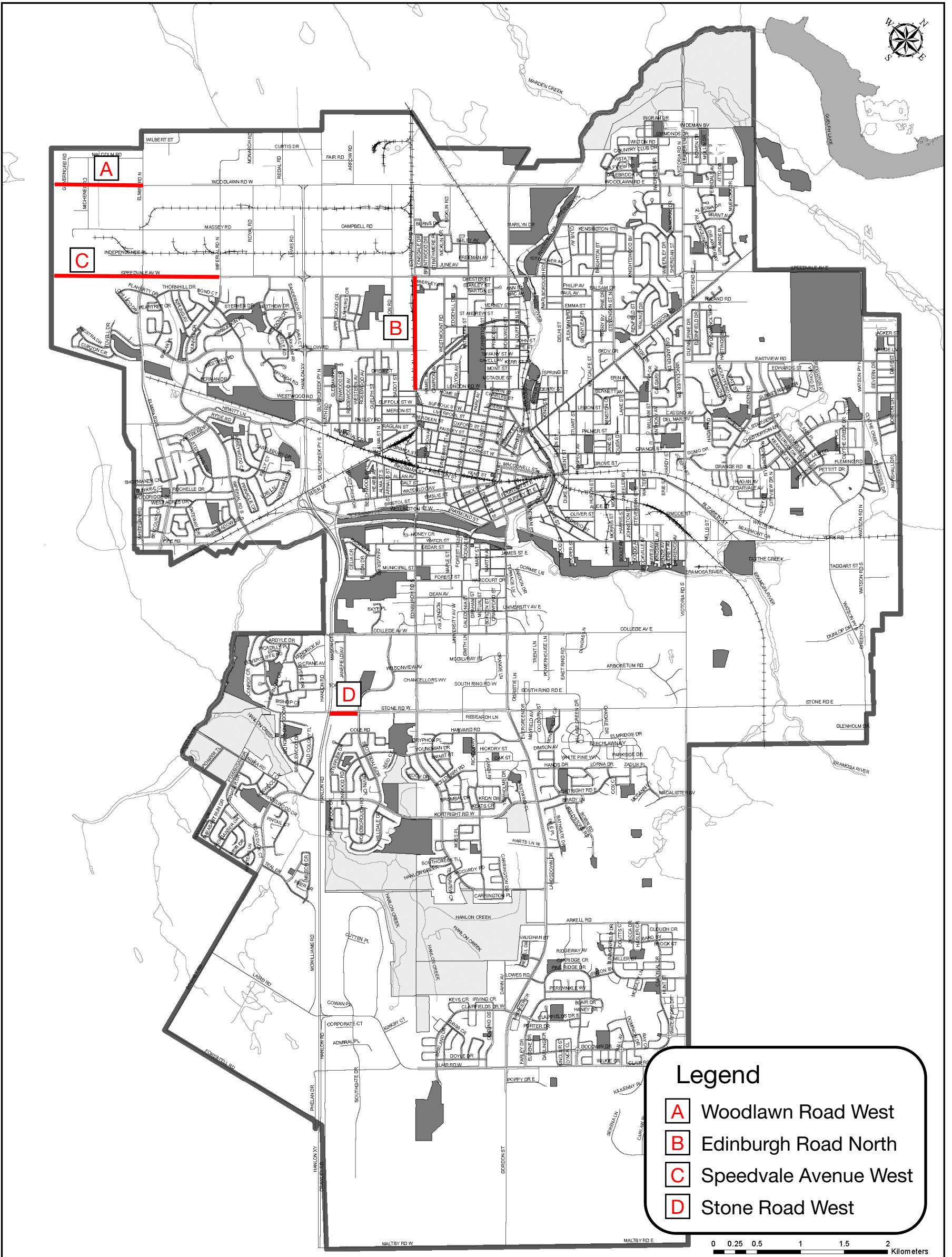
Speedvale Avenue West between west city boundary and Imperial Road North, between Imperial Road North and Royal Road, between Marksam Road and the Hanlon Expressway, and between the Hanlon Expressway and Edinburgh Road North

These four segments of this arterial road all ranked high, but have slightly different scores due to minor differences such as some segments having sidewalks on one side, the location of some pedestrian generators (Conestoga College, Academy of Learning). The attributes that these segments share include road type (arterial), on a transit line, and adjacent land use. All together, these four segments equal approximately 3875 metres in length. (Location C in Figure 4.2)

Stone Road West between Hanlon Expressway and Scottsdale Road

This 300 metre segment on the south side of the arterial road is along a transit route, near the proposed ATN and has a well defined beaten path. (Location D in Figure 4.2)





EXISTING SIDEWALK NETWORK (JUNE 2015)



Legend

- ≡ Sidewalk along both sides of Roadway
- ≡ Sidewalk along one side of Roadway
- Roads
- Rivers and Streams
- Railway
- Parks
- Conservation Lands
- GuelphLake
- City Boundary



**Category 2
(High Priority – Long Segments)**

4.2.3 Category 3: Tied to Development

This category includes missing link segments that ranked high, but are planned to be constructed along with pending developments. Therefore, while they are noted here, they are not considered as priority missing link segments. **Figure 4.3** shows the segments in this category.

Grange Road between 60 metres east of Auden Road to 54 metres west of Bradson Drive

180 metres along the arterial road. No sidewalk on the north side. Adjacent to the Category 1 segment listed above. (Location A in Figure 4.3)

Watson Parkway between Couling Crescent and 130 metres south of Couling Crescent

This 130 metre segment is intended to be constructed with Couling Crescent Public School. (Location B in Figure 4.3)

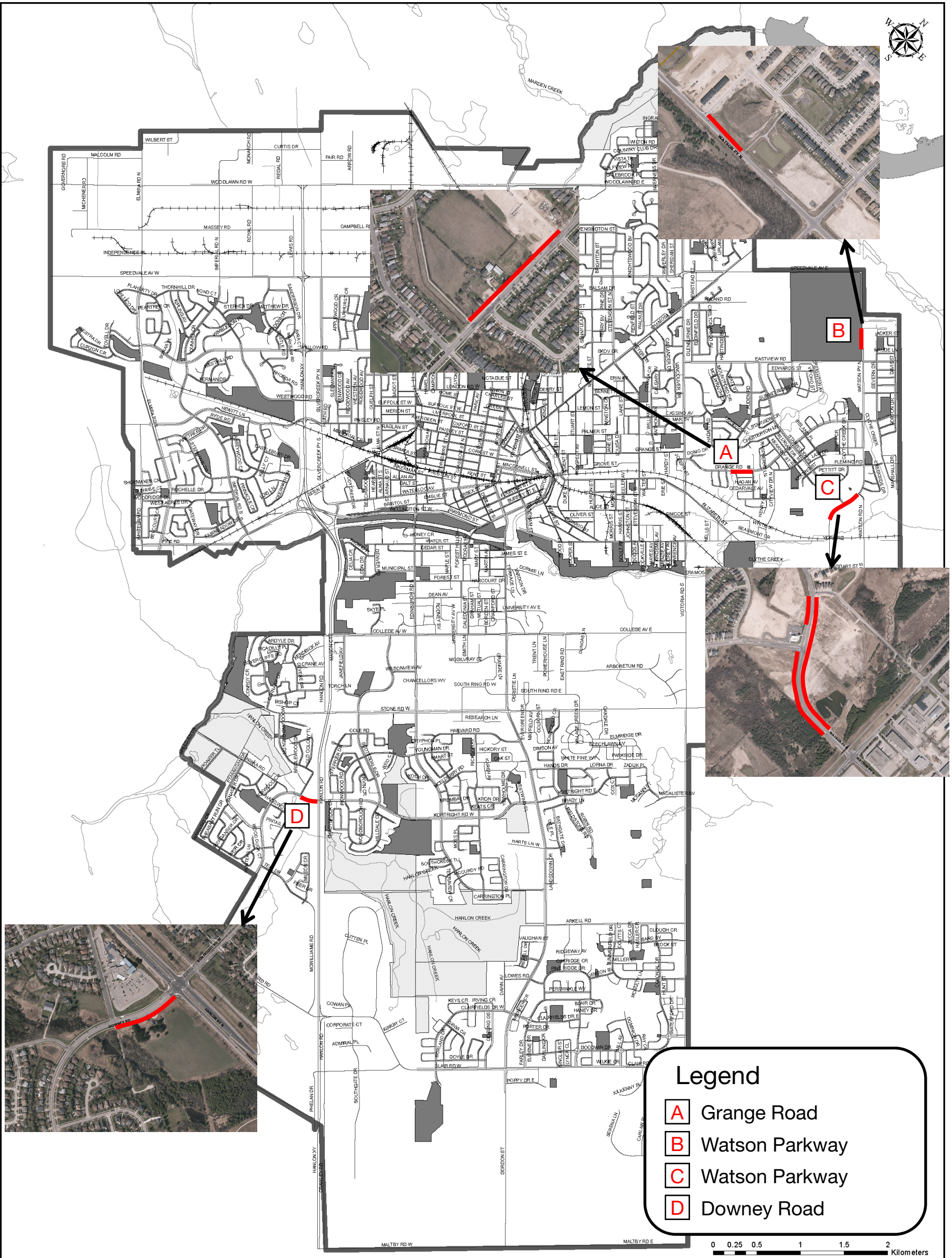
Watson Parkway between Watson Road North and 85 metres north of Starwood Drive, between 85 metres north of Starwood Drive and Starwood Drive, and between Starwood Drive and 130 metres north of York Road.

These three continuous segments combine for an approximate length of 540 metres along this arterial road. A short sidewalk exists on the west side of the road, just in front of the library. These segments are on a transit route and there are visible beaten paths. However, development is anticipated on the east side of Watson Parkway and there is no exceptional circumstance to prioritize construction of a sidewalk along these segments before development. Sidewalks should be constructed in a complete and continuous manner at the commencement of development. (Location C in Figure 4.3)

Downey Road between the Hanlon Expressway and Woodland Glen Drive.

This 200 metre segment along the arterial road is missing a sidewalk on the south side. This land is reserved for a future interchange at the Hanlon Expressway. The south side of the road is unique for this segment in that it more resembles a rural section of road (with shoulders and no curb) and the only development is a single house and therefore does not warrant being considered a priority. (Location D in Figure 4.3)





Legend

- A Grange Road
- B Watson Parkway
- C Watson Parkway
- D Downey Road

EXISTING SIDEWALK NETWORK (JUNE 2015)

CITY OF Guelph
Making a Difference

SIDEWALK NETWORK

Legend

- Sidewalk along both sides of Roadway
- Sidewalk along one side of Roadway
- Roads
- Rivers and Streams
- Railway
- Parks
- Conservation Lands
- Guelph Lake
- City Boundary



**Category 3
(Tied to Development)**

4.2.4 Category 4: Included in Capital Projects

The missing link segments included in this category are planned to be constructed by other projects included in the 10-year capital budget or other construction projects. **Figure 4.4** shows the segments in this category.

Stone Road East between Gordon Street and Oakdale Drive.

These segments in front of the University of Guelph are included in the Stone Road reconstruction project. (Location A in Figure 4.4)

Woodlawn Road West between Nicklin Road and Elmira Road

Multiple segments are planned to be (or have already been) constructed along with the Woodlawn Road reconstruction project. (Location B in Figure 4.4)

Victoria Road South between Florence Lane to 80 metres south of Florence Lane (80 metres)

A short missing sidewalk on the east side of the arterial road. Sidewalks exist on either end of the missing segment. This short gap is along the front of the property of the PDI plant. Victoria Road is scheduled for reconstruction in 2022-2023 and will receive sidewalks at that time. (Location C in Figure 4.4)

York Road between east city boundary and 100 metres east of Victoria Road.

(Location E in Figure 4.4)

4.2.5 Category 5: Medium Priority

These missing link segments did not rank as high as the priority segments listed above, and should be considered for construction after the priority segments have been addressed. **Figure 4.5** shows the segments in this category.

Nicklin Road between Woodlawn Road and 90 metres north of Burns Drive

(Location A in Figure 4.5)

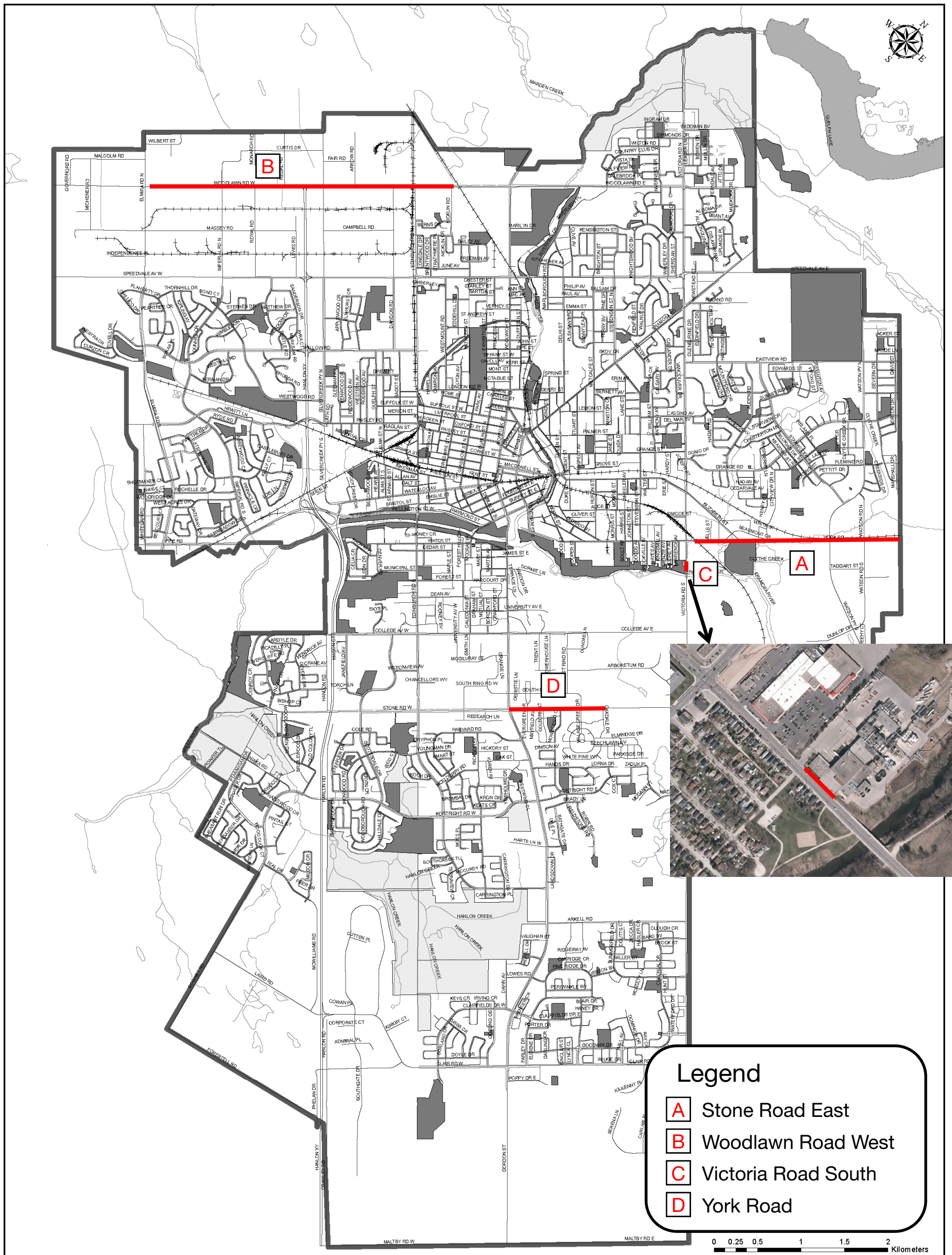
Goldie Avenue between Memorial Crescent and 75 metres east of Memorial Crescent

(Location B in Figure 4.5)

Princess Street between Clarke Street and 25 metres south of Division Street

(Location C in Figure 4.5)





EXISTING SIDEWALK NETWORK (JUNE 2015)

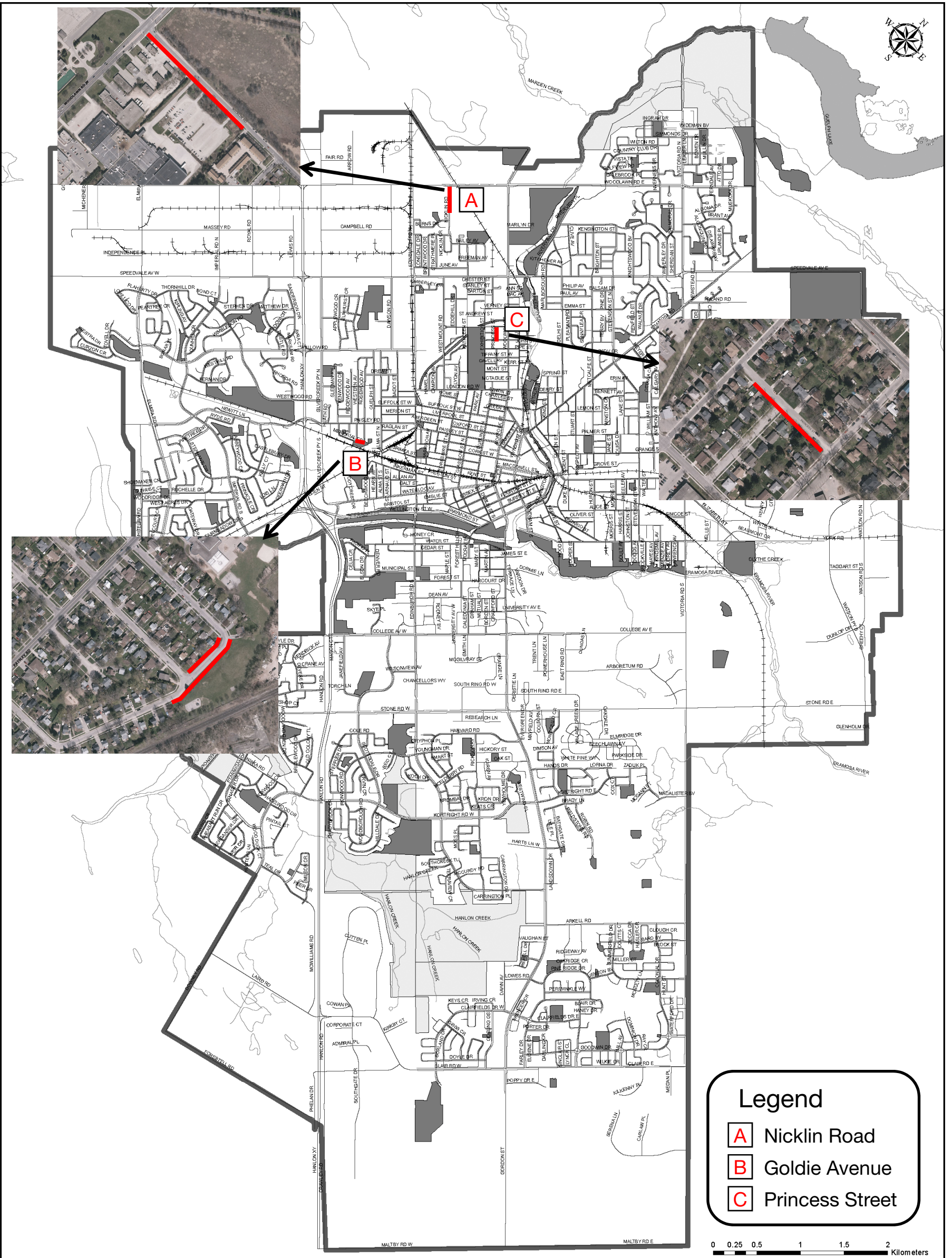


Legend

- Sidewalk along both sides of Roadway
- Sidewalk along one side of Roadway
- Roads
- Rivers and Streams
- Railway
- Parks
- Conservation Lands
- Guelph Lake
- City Boundary



**Category 4
(Included in Capital Projects)**



Legend

- A Nicklin Road
- B Goldie Avenue
- C Princess Street

0 0.25 0.5 1 1.5 2 Kilometers

EXISTING SIDEWALK NETWORK (JUNE 2015)



Legend

- Sidewalk along both sides of Roadway
- Sidewalk along one side of Roadway
- Roads
- Rivers and Streams
- Railway
- Parks
- Conservation Lands
- Guelph Lake
- City Boundary



**Category 5
(Medium Priority)**

4.2.6 Category 6: High Ranking, but Unlikely Priority Candidates

The missing link segments in this category ranked high, but upon further review, are unlikely candidates for construction. Further evaluation is recommended to determine if these locations would be suitable for a sidewalk. **Figure 4.6** shows the segments in this category.

Exhibition Street between Powell Street and Mont Street

This segment ranks high due to being near a school, near the ATN, and adjacent to a pedestrian generator (park). However, the missing link of this segment is on the west side of the street, which is along Exhibition Park. This section is a boulevard that separate Exhibition Street from a parking lot for the park and sidewalk in this location may not be useful for pedestrians. (Location A in Figure 4.6)

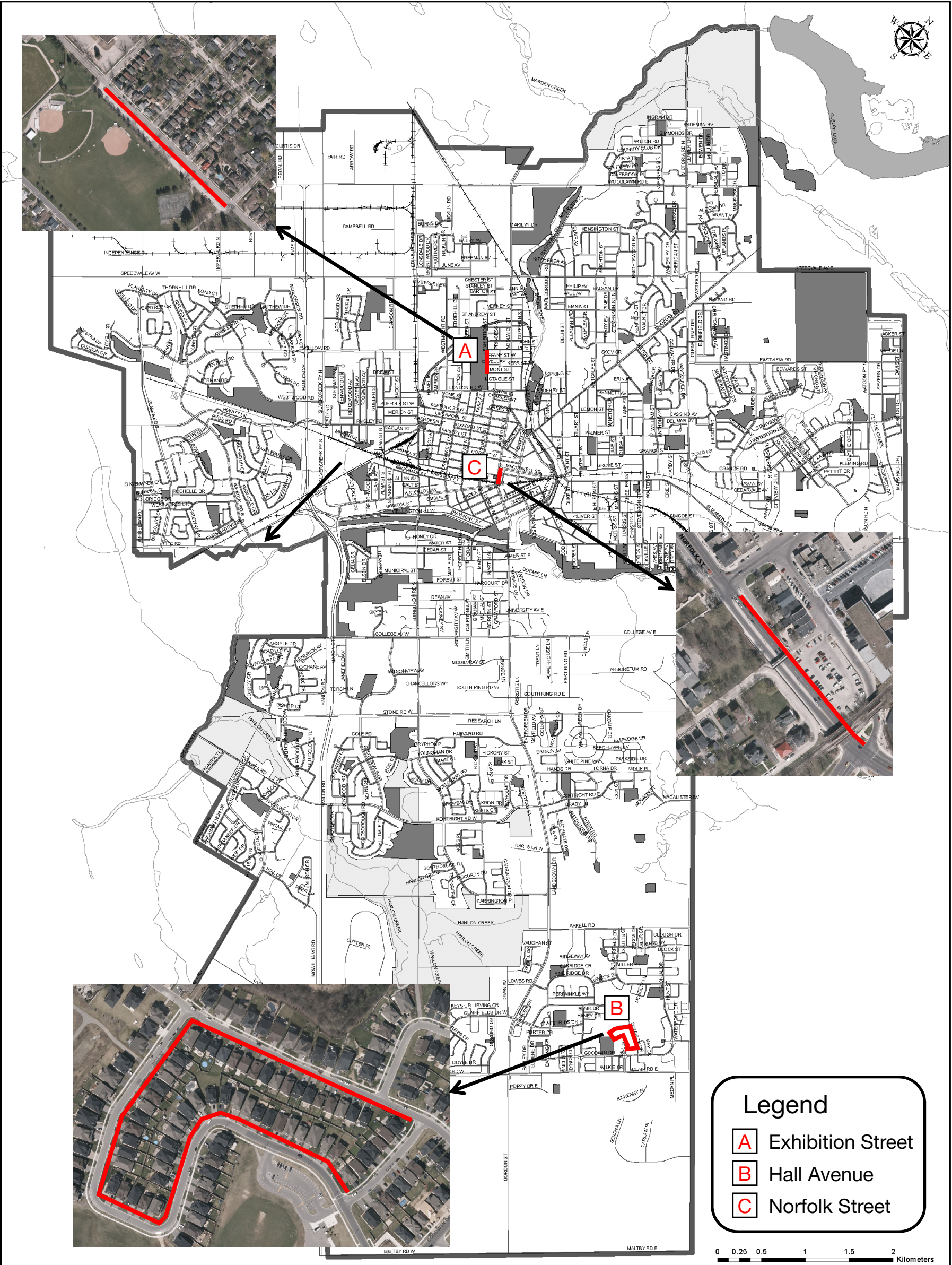
Hall Avenue, the entire length

This street ranks high due to the proximity to a school, a park and the proposed ATN route. This short residential street has a sidewalk on one side and the properties on the side without a sidewalk are designed to be closer to the road. Building a second sidewalk on this low volume street would not likely provide much benefit and unnecessarily disrupt current property lines. (Location B in Figure 4.6)

Norfolk Street, between MacDonell Street and Wilson Street

This downtown missing link segment is on the east side of the street, which passes underneath the CN rail bridge and has a retaining wall immediately beside it. A narrow shoulder above the curb exists now, but too narrow to be considered a proper sidewalk. However, pedestrians are observed using this segments. Widening of this shoulder to meet proper sidewalk width would require either the elimination of the bike lane on Norfolk Street or major reconstruction to relocate the retaining wall. (Location C in Figure 4.6)





Legend

- A Exhibition Street
- B Hall Avenue
- C Norfolk Street

0 0.25 0.5 1 1.5 2 Kilometers



EXISTING SIDEWALK NETWORK (JUNE 2015)

Legend

- Sidewalk along both sides of Roadway
- Sidewalk along one side of Roadway
- Roads
- Rivers and Streams
- Railway
- Parks
- Conservation Lands
- GuelphLake
- City Boundary



Category 6
(High Ranking, but not Priority)

5 Priority Segment Details

5.1 Cost Estimates

The costs estimated for each missing link segment were developed by using the estimated average unit cost for sidewalk, as supplied by the City of Guelph. The estimated average unit cost of a sidewalk is \$75/m². Assuming a sidewalk is 1.5 metres wide, the estimated average cost of a sidewalk is \$112.50 / m. **Table 5.1** summarizes the estimated cost of sidewalk construction for each missing link segment in Categories 1, 2, 5 and 6. The costs for each category are as follows: \$119,500 for Category 1, \$1,058,500 for Category 2, \$108,500 for Category 5, and \$121,000 for Category 6.

TABLE 5.1: ESTIMATED SIDEWALK CONSTRUCTION COSTS

Category	Street Name	Segment	Length	Sides Missing	Cost Estimate
1	Willow Rd	Elmira Rd to 100m E of Elmira Rd	100	1	\$11,500.00
1	Grange Rd	Auden Rd to 60m E of Auden Rd	60	1	\$7,000.00
1	Ptarmigan Dr	Niska Rd to 30m S of Niska Rd	30	1	\$3,500.00
1	Elmira Rd N	Tovell Dr to 80m N of Tovell Dr	80	1	\$9,000.00
1	Exhibition St	125m south of Division St to Powell St W	110	1	\$12,500.00
1	Kathleen St	80 m S of Division St to 210 m S of Division St	130	1	\$15,000.00
1	Imperial Rd N	Speevale Ave W to 100m S of Speevale Ave W	100	2	\$22,500.00
1	Eastview Rd	Summit Ridge Dr to Watson Pkwy	170	2	\$38,500.00
Total Cost Estimate (Category 1)					\$119,500.00
2	Woodlawn Rd W	Elmira Rd to West Boundary	1000	2	\$225,000.00
2	Edinburgh Rd N	Speedvale Ave to Willow Rd	815	1	\$92,000.00
2	Edinburgh Rd N	Willow Rd to London Rd W	457	1	\$51,500.00
2	Speedvale Ave W	West Boundary to Imperial Rd N	1945	2	\$438,000.00
2	Speedvale Ave W	Imperial Rd N to Royal Rd	350	1	\$39,500.00
2	Speedvale Ave W	Marksam Rd to Hanlon	370	1	\$42,000.00
2	Speedvale Ave W	Hanlon to Edinburgh Rd N	1210	1	\$136,500.00
2	Stone Rd W	Hanlon Expressway to Scottsdale Drive	300	1	\$34,000.00
Total Cost Estimate (Category 2)					\$1,058,500.00
5	Nicklin Rd	Woodlawn Rd W to 90m N of Burns Dr	290	2	\$65,500.00
5	Goldie Ave	Memorial Cres to 75m E of Memorial Cres	75	2	\$17,000.00
5	Princess St	25m S of Division St to Clarke St	115	2	\$26,000.00
Total Cost Estimate (Category 5)					\$108,500.00
6	Exhibition St	Powell St W to Mont St	260	1	\$29,500.00
6	Hall Ave	All	670	1	\$75,500.00
6	Norfolk St	Macdonell St and Wilson St	140	1	\$16,000.00
Total Cost Estimate (Category 6)					\$121,000.00

5.2 Land Restrictions

Most of the missing link segments would be able to be constructed in the existing right of way. If property acquisitions are required, the estimated costs for different zoning designations, which were obtained from City of Guelph Realty Services, are as follows: \$25,000 per acre (\$6.18 per m²) for conservation zones, \$275,000 per acre (\$67.95 per m²) for industrial zones, \$500,000 per acre (\$123.44 per m²) for commercial zones, and \$1,100,000 per acre (\$271.82 per m²) for residential zones.



The missing link segments in Categories 1 and 2 appear to be within the existing right of way and will not require additional property acquisitions. However, property requirements should be checked when doing more detailed planning and design work for the construction of the sidewalk.

Ongoing maintenance costs associated with the segments identified as priorities are not anticipated to be significantly different from existing sidewalks and will not require special consideration in annual budgeting for city-wide sidewalk maintenance. Typically, these annual costs are in the order of 5% of the original capital cost of the project.

5.3 Other Concerns or Opportunities

The following missing link segments in Category 1 have potential issues that would need to be resolved before construction takes place:

- ▶ Willow Road. The segment is currently along a vacant block but has no active planning submissions. Ideally, this sidewalk should be constructed along with a development of the vacant lot.
- ▶ Eastview Road. This segment will connect the proposed Active Transportation Network trails, west of Watson Parkway. The grading on the sides of Eastview Road in this section pose an issue as the roadway is quite elevated compared to the adjacent land and therefore to construct a sidewalk alongside the road would require grading design. If the trail location on the north side of Eastview Road is shifted to the west to align with the trail location on the south side of Eastview Road, the need for a sidewalk could be eliminated. Therefore, the need for this sidewalk will depend on the outcome of the Active Transportation Network Feasibility and Design Study.
- ▶ All new sidewalk construction should conform to the Accessibility for Ontarians with Disabilities Act.



6 Community Engagement

Throughout the project, a number of community engagement opportunities were provided for concerned stakeholders and members of the public to give their input in the project. Two public meetings and two stakeholder meetings were held and a project website using the City's Mindmixer tool were available throughout the project. The main objective of the public input was to determine if the ranking/priority system used by the project was agreeable and to receive input on missing links that may not have ranked high but the public considered important. These community engagement sessions with conducted along with the Active Transportation Network Feasibility and Design Study.

6.1 Public Meetings

The first public meeting was held at the City of Guelph Canada Day celebrations in Riverside Park on 1 July 2015. The second public meeting was held at the Guelph Farmer's Market on 31 October 2015. At these events, display boards were presented with members of the project team available to answer any questions that the public had. People who had comments were able to leave them directly on the display maps (on sticky notes) or were provided with contact information to provide input at a later time. **Figure 6.1** shows an example of feedback gathered at the public meetings.

6.2 Stakeholder Meetings

Two series of stakeholder meetings were held on 23 June 2015 and 11 February 2016. On each date, two meetings were held, one with government organizations and the other with community organizations. At these meetings, the project progress and results were presented to the stakeholders allowing them to provide feedback on the project.

Among the feedback received at these meetings was a request from the school board to have sidewalks constructed along new development first instead of waiting for each individual house to be built, thus allowing students to use continuous sidewalks. Also, received among the feedback was a request to have a closer look at the missing link segment along Norfolk Street between MacDonell Street and Wilson Street, which is now listed in Category 6.

6.3 Mindmixer

The City of Guelph's Mindmixer tool was utilized to allow members of the public to provide input on the project outside of the public meetings. Mindmixer is an online commenting forum where topic are presented, allowing the public to comment on the topic and to others' comments.



The feedback received on Mindmixer was varied and did not always stay within the scope of the project. However, a few comments were made that suggested that segments on Stone Road West and on Elmira be considered for new sidewalks, both of which were re-evaluated and the Stone Road West segment is now listed in Category 2.





7 Alternative Design Standards Update

The City of Guelph has a report on file titled “Alternative Development Standards” written on 22 October 1996 which includes recommendations for sidewalk planning standards. The document is in the process of being updated and the City of Guelph asked for any input that could be provided with respect to sidewalk planning.

With regards to sidewalks, the current document states: “*City Engineering Policy #23 regarding sidewalk on both sides of the street shall be repealed in favour of one sided or totally eliminated sidewalk on Mews and Minor streets with less than 50 residential units and/or no through pedestrian traffic*”. Also, with regards to Right-of-Way Cross-Sections: “*A new range of streets as outlined in Table 2 is now being offered as an alternative to the standard 20m right-of-way used for minor-local and local streets. The alternative cross-sections ranging from 17-13m offer reduced pavement width and an option to place sidewalk on just one side of the street or to eliminate sidewalks from streets with very low pedestrian demands. Current City Engineering Policy #23 stating that ‘walks will be constructed on both sides of all new streets except cul-de-sacs with an overall length of 120m or less...’, will need to be repealed.*”

The change from the previous policy of providing sidewalks on both sides of the street (except for cul-de-sacs) to providing sidewalks on only one side or no sidewalks at all on mews and minor streets with less than 50 residential units and/or no through pedestrian traffic was made as a cost saving measure to reduce the construction and maintenance costs associated with providing sidewalks on both sides of the street. However, in the 20 years since that document was written (as evidenced by this project), public priorities have shifted back to providing all users of the roads safe and accessible means to travel, not just automobiles. As can be seen by some of the recommendations provided in this report, retrofit opportunities are now being considered for the sidewalks that are missing, which may not have been, if they were constructed along with the road initially.

Another issue, not addressed by the current wording of the Alternative Design Standards, is the building of sidewalks in new developments. Currently, sidewalks are not constructed until the lot in which the sidewalk will cross is built upon. This creates a “patchwork” nature of sidewalks, where there won’t be a continuous sidewalk, with one property have a completed sidewalk and the adjacent one still having dirt to walk across. Currently, examples of this can be seen in the Category 1 segments on Grange Road, Willow Road and Ptarmigan Drive. To better accommodate pedestrians, sidewalks should be constructed at the same time as the road.

To have this document better reflect the transportation priorities of the City of Guelph, it is recommended that:

- ▶ The section of former City Engineering Policy #23 that was repealed, which read “walks will be constructed on both sides of all new



streets except cul-de-sacs- with an overall length of 120 m or less” be reinstated.

- ▶ In new subdivisions, temporary sidewalks be constructed at the same time as the road, rather than be constructed at the time of the house (or other building) that the sidewalk will front.



8 Conclusions and Recommendations

8.1 Conclusions

Based on the study reported on above, it is concluded that:

- ▶ There are 463 streets in the City of Guelph with at least one segment missing a sidewalk. 235 of those streets have segments that do not have sidewalks on at least one side of the street.
- ▶ The ranking system devised in this study helped to initially rank the segments in order of importance
- ▶ Further review of the high ranking segments organized the missing link segments into six categories, which recommends which segments to prioritize and which segments may not be needed, despite ranking high.

8.2 Recommendations

It is recommended that the City of Guelph prioritize the following missing link segments:

- ▶ Category 1: Short segments
 - Willow Road between Elmira Road and 100 metres east of Elmira Road (estimated construction cost \$11,500);
 - Grange Road between Auden Road to 60 metres east of Auden Road (estimated construction cost \$7,000);
 - Ptarmigan Drive between Niska Road and 30 metres south of Niska Road (estimated construction cost \$3,500);
 - Elmira Road North between Tovell Drive to 80 metres north of Tovell Drive (estimated construction cost \$9,000);
 - Exhibition Street between 125 metres south of Division Street and Powell Street West (estimated construction cost \$12,500);
 - Imperial Road North between Speedvale Avenue West and 100 metres south of Speedvale Avenue West (estimated construction cost \$22,500 for both sides);
 - Kathleen Street between 80 metres south of Division Street to 210 metres south of Division Street (estimated construction cost \$15,000); and
 - Eastview Road between Watson Parkway and Summit Ridge Drive (estimated construction cost \$38,500 for both sides).
- ▶ Category 2: Longer Segments
 - Woodlawn Road West between Elmira Road and west city boundary (estimated construction cost \$1225,000 for both sides);



- Edinburgh Road North between Speedvale Avenue and London Road West (estimated construction cost \$143,500);
- Speedvale Avenue West between west city boundary and Imperial Road North, between Imperial Road North and Royal Road, between Marksam Road and the Hanlon Expressway, and between the Hanlon Expressway and Edinburgh Road North (estimated construction cost \$656,000 for both sides); and
- Stone Road West between Hanlon Expressway and Scottsdale Road (estimated construction cost \$34,000).

Finally, with regards to updating the Alternative Design Standards, consideration should be given to:

- ▶ The section of former City Engineering Policy #23 that was repealed, which read “walks will be constructed on both sides of all new streets except cul-de-sacs- with an overall length of 120 m or less” be reinstated.
- ▶ In new subdivisions, temporary sidewalks be constructed at the same time as the road, rather than be constructed at the time of the house (or other building) that the sidewalk will front.



Appendix A

Complete List of Missing Link Segments



Street Count	Street Name	Missing Link Segment	Missing Side
1	Acorn Pl	All	Both Sides
2	Admiral Pl	All	Both Sides
3	Airpark Pl	All	Both Sides
4	Albert St	Gordon St to Martin Ave	North Side
5	Amalia Cr	All	Both Sides
6	Amberwood Ln	All	West Side
7	Amy Ct	All	Both Sides
8	Arbordale Walk	All	South Side
9	Arkell Rd	Summerfield Dr to Victoria Rd	North Side
9	Arkell Rd	Gordon St to Summerfield Dr	North Side
10	Armstrong Ave	15m S of Balsarroch Pl to South End	Both Sides
10	Armstrong Ave	Blasaroch Pl to 15m S of Balsarroch Pl	East Side
11	Arrow Rd	All	Both Sides
12	Arthur St N	Norwich St to North End	West Side
13	Arthur St S	Elizabeth St to Cross St	West Side
13	Arthur St S	Ontario St to 75m N of Ontario St	West Side
14	Aspenwood Pl	All	Both Sides
15	Augustine Ct	All	Both Sides
16	Avra Ct	All	Both Sides
17	Bailey Ave	30m E of Beattie St to Freeman Ave	North Side
18	Balfour Ct	All	Both Sides
19	Balsarroch Pl	All	South Side
20	Barber Ave	All	North Side
21	Bard Blvd	Victoria Rd to 80m W of Victoria Rd	North Side
22	Basswood Dr	Driftwood Dr to Elmridge Dr	South Side
22	Basswood Dr	Elmridge Dr to Parkside Dr	East Side
23	Baxter Dr	All	East Side
24	Bayberry Dr	All	South Side
25	Beachwood Ave	All	West Side
26	Beaumont Cr	All	Both Sides
27	Beechlawn Blvd	All	Both Sides
28	Bell Ave	All	Both Sides
29	Bellevue St	All	Both Sides
30	Berry Dr	All	South Side
31	Bett Ct	All	Both Sides
32	Beverly St	Morris St to Hayes Ave	Both Sides
32	Beverly St	Hayes Ave to Kingsmill Ave	North Side
33	Birch St	All	Both Sides
34	Bishop Ct	Coventry Dr to West End	Both Sides
35	Blueridge Ct	Marksam Park Path to End of Street	Both Sides
36	Bond Ct	All	South Side
37	Borden St	All	Both Sides
38	Boulder Cr	All	East Side
39	Boult Ave	All	West Side
40	Braid Pl	All	Both Sides
41	Bright Ln	All	Both Sides
42	Bristol St	Yorkshire St to 60m W of Yorkshire St	South Side
42	Bristol St	Edinburgh Rd to 55m E of St Arnaud	South Side
42	Bristol St	55m E of St Arnaud St to 60m W of St Arnaud St	Both Sides
42	Bristol St	60m W of St Arnaud St to 35m E of Roland St	South Side
42	Bristol St	35m E of Roland St to Roland St	Both Sides
43	Brock St	All	North Side

Street Count	Street Name	Missing Link Segment	Missing Side
44	Bronwyn Pl	All	Both Sides
45	Brookhaven Ct	All	Both Sides
46	Brown St	All	West Side
47	Brydges Ct	All	South Side
48	Buckthorn Cr	All	East Side
49	Byron Ct	All	Both Sides
50	Caledonia St	Mary St to Dean Ave	Both Sides
51	Callander Dr	Eramosa Rd to Orchard Cr	Both Sides
52	Campbell Rd	All	Both Sides
53	Candlewood Dr	Paisley Rd to 40m S of Paisley Rd	West Side
54	Cardigan St	London Rd E to North End	East Side
55	Carere Cres	All	West Side
56	Carlaw Pl	All	Both Sides
57	Carolyn Ct	All	Both Sides
58	Carroll Cres	All	East Side
59	Cassino Ave	All	South Side
60	Castlebury Drive	All	South Side
61	Cedarvale Ave	Bradson Dr to Bradson Dr	East Side
62	Chad Pl	All	Both Sides
63	Chadwick Ave	St Arnaud St to Alma St	Both Sides
63	Chadwick Ave	Alma St to Beechwood Ave	North Side
64	Chancellors Way	South Ring Rd W to 75m N of South Ring Rd W	East Side
64	Chancellors Way	Stone Rd W to Research Ln	West Side
65	Chelsea Ct	All	Both Sides
66	Cherry Blossom Cir	Beechlawn Blvd to Sprucehaven Ct	South Side
66	Cherry Blossom Cir	Sprucehaven Ct to Village Crossing E	South Side
67	Chestnut Pl	All	Both Sides
68	Cityview Dr N	Cedarview Ave to South End	Both Sides
68	Cityview Dr N	Lee St to Cedarview Ave	East Side
68	Cityview Dr N	Grange Rd to 25m E of Grange Rd	South Side
68	Cityview Dr N	Lee St to 25m E of Grange Rd	Both Sides
69	Cityview Dr S	York Dr to North End	Both Sides
70	Clair Rd E	Hawkins Dr to 45m E of Tolton Dr	South Side
70	Clair Rd E	Kilkenny Pl to Victoria Rd	North Side
71	Clair Rd W	200m W of Clairfields Dr W to Laird Rd	Both Sides
71	Clair Rd W	Laird Rd to Hanlon Rd	Both Sides
72	Clara St	All	Both Sides
73	Clarence St	Dufferin St to 20m E of Dufferin St	South Side
73	Clarence St	20m E of Dufferin St to East End	Both Sides
74	Clearview St	All	Both Sides
75	Clough Cr	All	West Side
76	Clyth Creek Dr	All	West Side
77	Colborn St	All	Both Sides
78	College Ave W	Victoria St to Dundas Ln	Both Sides
78	College Ave W	Dundas Ln to 60m W of Dundas Ln	North Side
79	Conrad Ct	All	Both Sides
80	Cooper Dr	All	Both Sides
81	Coopers Ct	All	Both Sides
82	Cope Ct	All	Both Sides
83	Corporate Ct	All	Both Sides
84	Cote Dr	All	South Side
85	Couling Cr	Watson Pkwy to Severn Dr	South Side

Street Count	Street Name	Missing Link Segment	Missing Side
86	Coutts Ct	All	West Side
87	Cowan Pl	All	Both Sides
88	Cox Ct	Sweeney Dr to South End	Both Sides
89	Crane Ave	Hanlon Rd to 90m W of Knevitt Pl	Both Sides
90	Crawley Rd	Clair Rd to South Boundary	Both Sides
91	Creighton Ave	All	One Side
92	Cummings Ct	All	Both Sides
93	Curtis Dr	All	Both Sides
94	Cutten Pl	All	Both Sides
95	Danwood Pl	All	Both Sides
96	Darling Cr	All	South Side
97	Darnell Rd	All	South Side
98	Dawn Ave	All	West Side
99	Dawson Rd	Woodlawn Rd W to Speedvale Ave	Both Sides
100	Dean Ave	Edinburgh Rd to Talbot St	South Side
100	Dean Ave	Talbot St to Gordon St	North Side
101	Deerchase Ct	All	Both Sides
102	Deerpath Dr	125m E of Castlebury Dr to 233m E of Lois Ln	East Side
103	Delhi St	Paul Ave to Peter Ave	West Side
104	Denver Rd	All	West Side
105	Dodds Ave	Balsarroch Pl to Bell Ave	West Side
106	Dominion Dr	Hall Ave to North End	Both Sides
106	Dominion Dr	Goodwin Dr to Hall Ave	West Side
107	Dooley Pl	All	Both Sides
108	Dormie Ln	All	Both Sides
109	Dougall St	All	East Side
110	Downey Rd	105m S of Teal Dr to Hanlon Creek Blvd	West Side
110	Downey Rd	Hanlon Creek Blvd to South Boundary	Both Sides
110	Downey Rd	Hanlon Pkwy to Woodland Glen Dr	South Side
111	Driftwood Dr	All	West Side
112	Driscoll Ct	All	Both Sides
113	Drohan Dr	All	North Side
114	Dublin St	London Rd to McTague St	West Side
115	Duck Ln	All	South Side
116	Dufferin St	Mac Ave to Earl St	Both Sides
117	Duke St	All	West Side
118	Dunlop Dr	All	Both Sides
119	Earl St	Dufferin St to East End	Both Sides
120	Eastview Rd	Starwood Dr to Summit Ridge Drive	North Side
120	Eastview Rd	Summit Ridge Dr to Watson Pkwy	Both Sides
121	Echo Dr	All	Both Sides
122	Eden St	All	Both Sides
123	Edgehill Dr	Division St to South End	West Side
124	Edinburgh Rd N	Burns Dr to Lionsdale Dr	West Side
124	Edinburgh Rd N	Lionsdale Dr to Speedvale Ave	Both Sides
124	Edinburgh Rd N	Woodlawn Rd W to Burns Dr	Both Sides
124	Edinburgh Rd N	Speedvale Ave to Willow Rd	West Side
124	Edinburgh Rd N	Willow Rd to London Rd W	West Side
125	Edwards St	All	North Side
126	Eliot Pl	All	Both Sides
127	Elizabeth St	Victoria St to Industrial Ave	South Side
127	Elizabeth St	Industrial Ave to York Rd	Both Sides

Street Count	Street Name	Missing Link Segment	Missing Side
128	Elm Dr	All	North Side
129	Elmira Rd N	North Boundary to 100m S of Speedvale Ave	Both Sides
129	Elmira Rd N	Tovell Dr to 80m N of Tovell Dr	East Side
130	Elsegood Ct	All	Both Sides
131	Emma St	All	South Side
132	Empire St	All	North Side
133	Eramosa Rd	Brant Ave to Montgomery St	East Side
133	Eramosa Rd	Speedvale Ave E to Montgomery St	East Side
133	Eramosa Rd	East Boundary to Brant Ave	Both Sides
134	Erie St	All	Both Sides
135	Esker Run	All	East Side
136	Esmilie St	40m W of Yorkshire St to 50m E of McGee St	South Side
137	Eugene Dr	All	South Side
138	Evans Dr		East Side
139	Evergreen Dr	All	Both Sides
140	Exhibition St	125m S of Division St to Powell St W	West Side
140	Exhibition St	Powell St W to Mont St	West Side
141	Extra St	Central St to 40m E of Central St	North Side
142	Fair Rd	All	Both Sides
143	Fairview Blvd	Mary St to 55m W of Martin Ave	Both Sides
144	Falcon Cir	All	Both Sides
145	Fife Rd	West Boundary to Whitelaw Rd	Both Sides
146	Fischer Dr	All	Both Sides
147	Fleming Rd	Severn Dr to East End	Both Sides
148	Fletcher Ct	All	North Side
149	Floral Dr	All	Both Sides
150	Forbes Ave	Mary St to 25m E of Mary St	South Side
151	Forest Hill Dr	Forest St to James St	East Side
152	Forestell Rd	West Boundary to East End	Both Sides
153	Freeman Ave	50m E of Beattie St to Bailey Ave	South Side
154	Fuller Dr	All	North Side
155	Galt St	Meadowview Ave to 60m E of Meadowview Ave	South Side
156	Gardenview Ct	All	Both Sides
157	Garibaldi St	All	Both Sides
158	Geddes Cr	All	West Side
159	Gemmel Ln	All	Both Sides
160	George St	Dufferin St to East End	North Side
161	Ginger Ct	All	West Side
162	Glenburnie Dr	55m E of Cheltonwood Ave to East End	Both Sides
163	Glenda Ct	All	Both Sides
164	Glenhill Pl	All	Both Sides
165	Glenholm Dr	All	Both Sides
166	Goldie Ave	Memorial Cres to 75m E of Memorial Cres	Both Sides
167	Gombas Pl	All	Both Sides
168	Governors Rd	All	Both Sides
169	Grange Rd	60 m E of Auden Rd to 54 m W of Bradson Dr	North Side
169	Grange Rd	Auden Rd to 60m E of Auden Rd	North Side
170	Grange St	Metcalf St to Regent St	North Side
170	Grange St	Regent St to Queen St	South Side
171	Grey Oak Dr	All	North Side
172	Grey St	All	West Side
173	Grouse Tr	All	Both Sides

Street Count	Street Name	Missing Link Segment	Missing Side
174	Grove St	Stevenson St to 260m W of Stevenson St	Both Sides
174	Grove St	260m W of Stevenson St to 195m E of Metcalfe St	South Side
174	Grove St	Regent St to 255m E of Regent St	North Side
175	Gryphon Pl	All	Both Sides
176	Hagan Ave	All	North Side
177	Hales Cr	All	Both Sides
178	Hall Ave	All	East Side
179	Hanlon Creek Blvd	Downey rd to Laird Rd	North Side
180	Hanlon Rd	Flanders Rd to South End	Both Sides
180	Hanlon Rd	Crane Ave to Flanders Rd	East Side
180	Hanlon Rd	Clair Rd to North End	Both Sides
180	Hanlon Rd	College Ave W to Crane Ave	Both Sides
181	Harcourt Dr	All	Both Sides
182	Hardy St	65m S of Grange St to South End	Both Sides
182	Hardy St	Grange St to 65m S of Grange St	West Side
183	Harrison Ave	Syndeham St to Robinson Ave	West Side
184	Harrow Ct	All	Both Sides
185	Hartwood Ct	All	Both Sides
186	Hasler Cr	All	North Side
187	Hawkins Dr	All	East Side
188	Hayes Ave	York Rd to Beverly St	Both Sides
189	Hayward Cr	All	East Side
190	Hazelwood Dr	Quail Creek Dr to East End	South Side
191	Heather Ave	Heather Ave to North End	Both Sides
191	Heather Ave	Rodney St to Heather Ave	South Side
191	Heather Ave	Floral Dr to Heather Ave	Both Sides
192	Hebert St	All	West Side
193	Henry Ct	Valleyhaven Ln to South End	Both Sides
193	Henry Ct	Cedarvale Ave to Valleyhaven Ln	East Side
194	Hewitt Ln	All	South Side
195	Hickory St	All	Both Sides
196	Hill Tr	All	South Side
197	Hilltop Rd	Wilton Rd to Wilton Rd	South Side
198	Hodgson Dr	All	North Side
199	Holiday St	Briston St to 40m S of Bristol St	Both Sides
199	Holiday St	Raymond St to 35m N of Raymond St	East Side
200	Holly Ct	All	Both Sides
201	Hollyberry Pl	All	Both Sides
202	Honey Cr	All	North Side
203	Honeysuckle Dr	All	North Side
204	Hood St	All	East Side
205	Hosking Pl	All	Both Sides
206	Howitt St	All	North Side
207	Hunt St	All	East Side
208	Huntington Pl	All	Both Sides
209	Huron St	Ontario St to Alice St	East Side
210	Hyland Rd	130m E of Eleanor Ct to East End	Both Sides
211	Imperial Rd N	Woodlawn Rd W to Speedvale Ave	Both Sides
211	Imperial Rd N	180m N of Woodlawn Rd W to Curtis Rd	Both Sides
211	Imperial Rd N	Woodlawn Rd W to 180m N of Woodlawn Rd W	East Side
211	Imperial Rd N	Speevale Ave W to 100m S of Speedvale Ave W	Both Sides
212	Independence Pl	Elmira Rd N to 240m W of Elmira Rd N	Both Sides

Street Count	Street Name	Missing Link Segment	Missing Side
212	Independence Pl	240m W of Elmira Rd N to West End	South Side
213	Industrial Ave	All	Both Sides
214	Ingram Dr	Wilton Rd to Simmonds Dr	West Side
215	Inkerman St	140m W of Alma to South End	East Side
215	Inkerman St	Alma St to 140m W of Alma St	North Side
216	Ireland Pl	All	South Side
217	Irving Ct	All	South Side
218	James St E	All	North Side
219	James St W	Mary St to Forest Hill Dr	North Side
220	Jean Anderson Cr	All	Both Sides
221	Jodi Pl	All	Both Sides
222	Joseph St	145m W of Victoria Rd to End	Both Sides
223	Joyce Pl	All	Both Sides
224	Karen Ave	All	Both Sides
225	Kathleen St	Speedvale Avenue West to 80 m south of Division Street	East Side
225	Kathleen St	80 m south of Division Street to 210 m south of Division Street	East Side
225	Kathleen St	210 m south of Division Street to London Rd W	East Side
226	Kearney St	Lee St to Raspberry Ln	South Side
227	Kelly Ct	All	Both Sides
228	Kemp Cres	All	West Side
229	Kendrik Ave	Hanlon Rd to 70m W of Knevitt Pl	Both Sides
230	Keys Cr	All	South Side
231	Kilkenny Pl	All	Both Sides
232	King Edward Pl	All	Both Sides
233	Kingsmill Ave	York Rd to Beverly St	East Side
234	Kingswood Gate	All	Both Sides
235	Kinlock St	All	East Side
236	Kirkby Ct	All	Both Sides
237	Knevitt Pl	All	Both Sides
238	Kortright Rd W	100m W of Gordon St to Rickson Ave	South Side
239	Laird Rd	Downey Rd to Hanlon Creek Blvd	Both Sides
239	Laird Rd	Hanlon Creek Blvd to South End	Both Sides
239	Laird Rd	Hanlon Pkwy to Clair Rd	Both Sides
240	Lane St	Erin Ave to Cassino Ave	West Side
240	Lane St	Cassino Ave to Palmer St	East Side
241	Lansdown Dr	All	East Side
242	Latenda Pl	All	Both Sides
243	Laughland Ln	All	South Side
244	Laurelwood Ct	All	Both Sides
245	Law Dr	Fleming Rd to 100m W of Clythe Creek Dr	South Side
245	Law Dr	Starwood Dr to 50m N of O Connor Ln	East Side
246	Lee St	Breese garden Ln to 30m N of Kerney St	South Side
246	Lee St	Cityview Dr N to Breese garden Ln	Both Sides
247	Lemon St	Metcalfe St to Franklin Ave	North Side
247	Lemon St	Franklin Ave to Winston Cres	Both Sides
248	Lewis Rd	All	Both Sides
249	Lisa Ln	All	Both Sides
250	Liverpool St	Edinburgh Rd to 70m E of Edinburgh (Railroad Tracks)	South Side
251	Lockyer Rd	All	Both Sides
252	Lois Ln	All	East Side
253	Lowes Rd W	All	North Side
254	Lynch Cir	All	South Side

Street Count	Street Name	Missing Link Segment	Missing Side
255	Lynwood Ave	All	Both Sides
256	Lynwood Pl	All	Both Sides
257	Lyon Ave	30m N of Campion Ave to North End	Both Sides
258	MacDonald St	All	Both Sides
259	Mackay St	All	East Side
260	Magnolia Ln	All	East Side
261	Malcolm Rd	All	Both Sides
262	Maltby Rd E	Gordon St to Victoria Rd	Both Sides
263	Maltby Rd W	Gordon to Hanlon Pkwy	Both Sides
264	Malvern Cr	All	Both Sides
265	Manor Park Cr	All	East Side
266	Maple St	Forest St to South End	Both Sides
266	Maple St	Water St to Forest St	West Side
267	Maplewood Dr	All	Both Sides
268	Marigold Dr	All	South Side
269	Marilyn Dr	All	North Side
270	Marlborough Rd	Delhi St to Clive Ave	Both Sides
271	Marsh Cr	All	West Side
272	Marshall Dr	All	West Side
273	Marsland Ct	All	Both Sides
274	Mary St	Water St to James St	East Side
274	Mary St	Forest St to Harcourt Dr	Both Sides
275	Massey Rd	All	Both Sides
276	Mayfield Ave	All	Both Sides
277	McArthur Cr	All	South Side
278	McArthur Dr	All	West Side
279	McCall Cres	All	North Side
280	McCorkindale Pl	All	Both Sides
281	McCurdy Rd	All	South Side
282	McGarr Ct		West Side
283	McGarr Dr		North Side
284	McNulty Ln	All	North Side
285	McTague St	Exhibition St to Dublin St	South Side
286	McWilliams Rd	45m W of Milson Cres to Bett Ct	Both Sides
287	Megan Pl	All	Both Sides
288	Melrose Pl	All	North Side
289	Metcalfe St	100m S of Grange St to Grove St	West Side
290	Michener Rd	All	Both Sides
291	Miller St	All	North Side
292	Minto Rd	All	Both Sides
293	Moffatt Ln	All	Both Sides
294	Mollison Ct	All	Both Sides
295	Monarch Rd	All	Both Sides
296	Montgomery St	All	Both Sides
297	Monticello Cr	Gordon St to 90m E of Colborn St	Both Sides
298	Moore Ave	All	Both Sides
299	Morris St	Alice St to 35m S of Beverly St	West Side
300	Municipal St	Edinburgh Rd to 105m E of Denver Rd	South Side
301	Mussen St	All	East Side
302	Nelson Rd	All	Both Sides
303	Newstead St	All	Both Sides
304	Nicklin Rd	90m N of Burns Dr to 40m N of Brentwood Dr	East Side

Street Count	Street Name	Missing Link Segment	Missing Side
304	Nicklin Rd	Woodlawn Rd W to 90m N of Burns Dr	Both Sides
305	Niska Rd	Downey Rd to Tanager Dr	North Side
305	Niska Rd	Tanager Dr to 100m W of Tanager Dr	Both Sides
305	Niska Rd	100m W of Tanager Dr to 60m W of Ptarmigan Dr	South Side
305	Niska Rd	60m W of Ptarmigan Dr to West Boundary	Both Sides
306	Norfolk St	Macdonell St and Wilson St	East Side
307	Normany Dr	95m E of William St to Del Mar St	South Side
308	Oak St	Gordon St to 100m W of Gordon St	South Side
308	Oak St	100m W of Gordon St to Tickson ave	Both Sides
309	Oakes Cres	All	East Side
310	Old Stone Ct	All	Both Sides
311	Oliver St	Huron to 235m W of Huron St	South Side
312	Orchard Cr	All	Both Sides
313	Oriole Cr	All	Both Sides
314	Paddison Ct	All	Both Sides
315	Paisley Rd	West Boundary to Elmira Rd	Both Sides
315	Paisley Rd	Hewitt Ln to Hewitt Ln	North Side
316	Palmer St	Metcalf St to Jackson St	South Side
316	Palmer St	Jane St to 30m W of Stevenson St	South Side
316	Palmer St	Queen St to Metcalf St	North Side
317	Pamela Pl	All	Both Sides
318	Parkside Dr	Basswood Dr to East End	Both Sides
318	Parkside Dr	Beechlawn Blvd to Basswood Dr	North Side
319	Paul Ave	All	North Side
320	Pauline Pl	All	Both Sides
321	Paulstown Cr	All	North Side
322	Pearson St	All	West Side
323	Peer Dr	All	East Side
324	Penni Pl	All	Both Sides
325	Phenlan Ct	All	Both Sides
326	Pickwick Pl	All	Both Sides
327	Pillet Pl	All	Both Sides
328	Pintail Ct	All	Both Sides
329	Pioneer Tr	All	Both Sides
330	Popham Dr	All	North Side
331	Poppy Dr E	All	South Side
332	Preston St	Yorkshire St to 80m W of Glasgow St	Both Sides
332	Preston St	Glasgow St to 80m W of Glasgow St	South Side
333	Price St	All	North Side
334	Princess St	Division St to 25m S of Division St	East Side
334	Princess St	25m S of Division St to Clarke St	Both Sides
335	Ptarmigan Dr	Niska Rd to 30m S of Niska Rd	East Side
336	Quaiser Ct	All	Both Sides
337	Quarterman Rd	All	Both Sides
338	Queen St	Eramosa Rd to 55m N of Eramosa Rd	East Side
338	Queen St	Lemon St to Palmer St	West Side
338	Queen St	Palmer St to Arthur St	East Side
339	Ralston Dr	All	East Side
340	Raspberry Lane	All	East Side
341	Ray Cr	All	South Side
342	Raymond St	All	South Side
343	Regal Rd	All	Both Sides

Street Count	Street Name	Missing Link Segment	Missing Side
344	Renfew Pl	All	Both Sides
345	Research Ln	All	Both Sides
346	Revell Dr	All	West Side
347	Richardson St	Margaret St to West End	North Side
348	Rickson Ave	Hickory St to Columbus Cres	West Side
349	Ridgeway Ave	All	Both Sides
350	Riverview Dr	All	West Side
351	Robinson Ave	Edinburgh Rd to Harrison Ave	North Side
352	Rodgers Rd	All	West Side
353	Rodney Blvd	College Ave to Heather Ave	Both Sides
353	Rodney Blvd	Heather Ave to Yonge ST	East Side
353	Rodney Blvd	Yonge St to Dean Ave	Both Sides
354	Roehampton Cr	All	Outside
355	Roland St	All	Both Sides
356	Royal Rd	All	Both Sides
357	Rutherford Ct	All	Both Sides
358	Ryde Rd	Paisley Rd to 65m S of Paisley Rd	East Side
359	Samantha Ct	All	Both Sides
360	Schroder Cres	Grange Rd to 50m S of Grange Rd	West Side
361	Schuurman Ct	All	Both Sides
362	Scott Ct	All	Both Sides
363	Serena Ln	All	Both Sides
364	Severn Dr	125m N of Marshall Dr to Marshall Dr (S)	East Side
365	Shallmar Ct	All	Both Sides
366	Sharon Pl	All	Both Sides
367	Sheehy Ct	All	Both Sides
368	Shelby Pl	All	Both Sides
369	Shelldale Cr	All	North Side
370	Silurian Dr	Starwood Dr to 85m S of Starwood Dr	Both Sides
370	Silurian Dr	Chesterton Ln to Grange Rd	South Side
371	Silvercreek Pkwy	75m N of Eden to 120m S of Paisley Rd	Both Sides
371	Silvercreek Pkwy	120m S of Paisley Rd to Paisley Rd	Both Sides
371	Silvercreek Pkwy	Waterloo Ave to 75m N of Eden St	West Side
371	Silvercreek Pkwy	Woodlawn to Speedvale Ave W	Both Sides
371	Silvercreek Pkwy	North Boundary to Woodlawn	Both Sides
372	Simmonds Dr	Ingram Dr to Ingram Dr	East Side
373	Sinclair St	All	West Side
374	Skov Cr	All	East Side
375	Sloan Ave	All	Both Sides
376	Smith Ave	All	Both Sides
377	Somerset Glen	All	East Side
378	South Ring Rd W	Chancellors Way to South Ring Rd W	North Side
379	Southgate Dr	All	Both Sides
379	Southgate Dr	All	Both Sides
380	Sparling Ct	All	Both Sides
381	Speedvale Ave E	East Boundary to Eramosa Rd	Both Sides
382	Speedvale Ave W	Marksam Rd to Hanlon	North Side
382	Speedvale Ave W	West Boundary to Imperial Rd N	Both Sides
382	Speedvale Ave W	Hanlon to Edinburgh Rd N	North Side
382	Speedvale Ave W	Imperial Rd N to Royal Rd	North Side
383	Spencer Cr	All	Outside
384	Spring St	Arthur St to 50m E of Arthur St	North Side

Street Count	Street Name	Missing Link Segment	Missing Side
384	Spring St	Delhi St to 35m W of Havelock St	North Side
384	Spring St	35m W of Havelock St to King St	Both Sides
385	Sprucehaven Ct	All	Both Sides
386	St Andrew St	All	Both Sides
387	St Arnaud St	Waterloo Ave to Bristol St	Both Sides
387	St Arnaud St	Inkerman St to Chadwick Ave	West Side
388	Starwood Dr	Watson Pkwy to 65m W of Frasson Dr	South Side
389	Stevenson St N	Lilac Pl to Gladstone Ave	West Side
390	Stone Rd	East Boundary to Victoria Rd	Both Sides
391	Stone Rd E	Victoria St to Oakdale Dr	Both Sides
391	Stone Rd E	Oakdale Dr to Colborn St	North Side
391	Stone Rd E	Colborn St to Gordon St=t	North Side
392	Stone Rd W	Hanlon Pkwy to College Ave W	South Side
393	Stuart St	Grange St to Palmer St	West Side
394	Suburban Ave	All	Both Sides
395	Sugarbush Pl	All	West Side
396	Sullivan Cres	All	South Side
397	Summerfield Dr	Arkell to 75m S of Arkell	West Side
398	Swift Cr	All	South Side
399	Taggart St	All	Both Sides
400	Talbot St	Dean Ave to University Ave W	Both Sides
401	Tanner St	All	West Side
402	Terrance Ln	All	Both Sides
403	Terraview Cr	All	South Side
404	Thornberry Ct	All	Both Sides
405	Torch Ln	All	North Side
406	Tovell Dr	Willow Rd to N End of Street	East Side
406	Tovell Dr	Elmira Rd to 40m E of Curzon Cr	South Side
407	Trailbrook Ln	All	South Side
408	Trilium Ct	All	Both Sides
409	Trimble Cr	All	North Side
410	Truesdale Cres	All	West Side
411	University Ave E	Braid Pl to 50m E of Braid Pl	South Side
411	University Ave E	50m E of Braid Pl to East End	Both Sides
412	University Ave W	College Ave W to Caledonia St	Both Sides
413	Valeriete Pl	All	Both Sides
414	Valley Rd	All	Both Sides
415	Valleyhaven Ln	All	North Side
416	Vardon Dr	All	Both Sides
417	Vaughan St	All	West Side
418	Victoria Rd N	Ingram Dr to Mussen St	West Side
418	Victoria Rd N	Mussen St to North Boundary	Both Sides
419	Victoria Rd S	Stone Rd E to 700m N of Arkell Rd	East Side
419	Victoria Rd S	Stone Rd to Clair Rd E	East Side
419	Victoria Rd S	Clair Rd E to South Boundary	Both Sides
419	Victoria Rd S	Eramosa River Bridge to Stone Rd E	Both Sides
419	Victoria Rd S	Elizabeth St to York Rd	East Side
419	Victoria Rd S	Florence Ln to 80m S of Florence Ln	East Side
420	Village Crossing	Cherry Blossom Cir to Cherry Blossom Cir	North Side
421	Vipond St	All	West Side
422	Walker Way	All	West Side
423	Washburn Dr	All	West Side

Street Count	Street Name	Missing Link Segment	Missing Side
424	Water St	McCrae Blvd to Gordon St	North Side
425	Waterworks Pl	All	Both Sides
426	Watson Pkwy	Dunlop Dr to South Boundary	Both Sides
426	Watson Pkwy	Eastview Rd to 200m S of Eastview Rd	Both Sides
426	Watson Pkwy	50m N of Couling Cr to Couling Cr	West Side
426	Watson Pkwy	200m S of Eastview Rd to Grange	West Side
426	Watson Pkwy	Speedvale Ave to 50m N of Couling Cr	Both Sides
426	Watson Pkwy	40m S of Fuller Dr to Watson Rd N	West Side
426	Watson Pkwy	York Rd to Dunlop Dr	Both Sides
426	Watson Pkwy	130m S of Couling Cr to Eastview Rd	West Side
426	Watson Pkwy	85m N of Starwood Dr to Starwood Dr	East Side
426	Watson Pkwy	Couling Cr to 130m S of Couling Cr	Both Sides
426	Watson Pkwy	Watson Rd N to 85m N of Starwood Dr	Both Sides
426	Watson Pkwy	Starwood Dr to 130m N of York Rd	Both Sides
427	Watson Rd N	Watson Pkwy to 90m S of Watson Pkwy	West Side
427	Watson Rd N	90m S of Watson Pkwy to York Rd	Both Sides
428	Watson Rd S	All	Both Sides
429	Webster St	All	West Side
430	Wellington St	400m E of Hwy 6 NB Ramp to McCrae Blvd	Both Sides
431	Wellington St W	Hanlon Pkwy to 350m W of Hanlon Pkwy	South Side
431	Wellington St W	South Boundary to Fife Road	Both Sides
431	Wellington St W	Fife Rd to Imperial Rd	South Side
432	Wells St	All	Both Sides
433	Westgate Dr	All	West Side
434	Westwind Cir	All	West Side
435	Westwood Rd	Imperial Rd N to Bond Crt	South Side
436	White Pine Way	Beechlawn Blvd to 75m W of Cherry Blossom Cir	South Side
436	White Pine Way	Cherry Blossom Cir to 75m W of Cherry Blossom Cir	Both Sides
437	White St	All	Both Sides
438	Whitelaw Rd	Paisley Rd to 45m N of Shoemaker Cr	Both Sides
438	Whitelaw Rd	South Boundary to Fife Road	West Side
439	Whitetail Ct	All	Both Sides
440	Wilbert St	All	Both Sides
441	Wildwood Pl	All	Both Sides
442	Wilkie Cr	All	South Side
443	Willow Rd	Elmira Rd to 100m E of Elmira Rd	North Side
444	Wilton Rd	Simmonds Dr to Inverness Dr	West Side
445	Wimbledon Rd	All	Both Sides
446	Winston Cres	Metcalfe St to Lemon St	West Side
447	Winterberry Ln	All	West Side
448	Wolfond Cr	All	Both Sides
449	Wolseley Rd	All	Both Sides
450	Woodborough Rd	Woodborough Rd to East End	Both Sides
451	Woodlawn Rd E	50m E of Muskoka Dr to Guelph Lake Sports Fields	Both Sides
452	Woodlawn Rd W	320m W of Imperial Rd to Elmira Rd	Both Sides
452	Woodlawn Rd W	Imperial Rd to 320m W of Imperial Rd	South Side
452	Woodlawn Rd W	Silvercreek Pkwy to Arrow Rd	South Side
452	Woodlawn Rd W	Arrow Rd to 160 m E of Arrow Rd	Both Sides
452	Woodlawn Rd W	Elmira Rd to West Boundary	Both Sides
452	Woodlawn Rd W	Imperial Rd to Silvercreek Pkwy	Both Sides
452	Woodlawn Rd W	160 m E of Arrow Rd to 90m W of Nicklin Rd	Both Sides
453	Woodside Rd	All	Both Sides

Street Count	Street Name	Missing Link Segment	Missing Side
454	Woodycrest Dr	McCall Cres to North End	Both Sides
454	Woodycrest Dr	Waterloo Ave to McCall Cres	West Side
455	Woolwich St	50m N of Smartcentres Entrance to Smartcentres Entrance	West Side
455	Woolwich St	North Boundary to 50m N of Smartcentres Entrance	Both Sides
456	Wright Cres	All	Both Sides
457	Yeadon Dr	All	Both Sides
458	Yeats Ct	All	Both Sides
459	Yewholme Dr	Oak St to 50m S of Karen St	Both Sides
460	Yonge St	All	Both Sides
461	York Rd	35m W of Neeve St to West End	South Side
461	York Rd	East Boundary to 100m E of Victoria Rd	Both Sides
462	Zaduk Pl	Sweeney Dr to West End	Both Sides
462	Zaduk Pl	sections btwn MacAlister and Sweeney	Both Sides
463	Zess Ct	All	North Side

Appendix B

Highest 100 (plus ties) Ranking Missing Link Segments



Street Name	Segment	Scoring								
		Road Type	Existing Sidewalks	School	Transit	Land Use	Beaten Path	Active Transportation Network	Pedestrian Generator	Total
Willow Rd	Elmira Rd to 100m east of Elmira Rd	10	0.5	10	10	2	5	4	0	36
Grange Rd	Auden Rd to 60m east of Auden Rd	10	0.5	8	10	2	5	4	0	34
Grange Rd	60 m east of Auden Rd to 54 m west of Bradson Dr	10	0.5	8	10	2	5	4	0	34
Stone Rd E	Colborn St to Gordon St	10	0.5	7	10	2	5	4	0	33
Woodlawn Rd W	Elmira Rd to West Boundary	10	1	0	10	4	5	4	0	33
Woodlawn Rd W	Imperial Rd to Silvercreek Pkwy	10	1	0	10	4	5	4	0	33
Woodlawn Rd W	160 m east of Arrow Rd to 90m west of Nicklin Rd	10	1	0	10	4	5	4	0	33
Ptarmigan Dr	Niska Rd to 30m south of Niska Rd	8	0.5	10	10	2	5	0	0	31
Woodlawn Rd W	Silvercreek Pkwy to Arrow Rd	10	0.5	0	10	6	5	4	1	31
Woodlawn Rd W	Arrow Rd to 160 m east of Arrow Rd	10	1	0	10	6	0	4	1	31
Edinburgh Rd N	Willow Rd to London Rd W	10	0.5	8	10	3	0	4	0	30
Elmira Rd N	Tovell Dr to 80m north of Tovell Dr	10	0.5	10	10	0	5	0	0	30
Exhibition St	125m south of Division St to Powell St W	5	0.5	10	0	2	5	4	6	29.5
Kathleen St	80 m south of Division Street to 210 m south of Division Street	5	0.5	10	0	2	5	4	6	29.5
Imperial Rd N	Speevale Ave W to 100m S of Speedvale Ave W	8	1	0	10	4	5	0	0	27
Edinburgh Rd N	Speedvale Ave to Willow Rd	10	0.5	8	0	3	0	4	6	26
Speedvale Ave W	Imperial Rd N to Royal Rd	10	0.5	7	10	4	0	0	0	26
Stone Rd W	Hanlon Expressway to Scottsdale Drive	10	0.5	0	10	2	5	4	0	26
Watson Pkwy	Watson Rd N to 85m N of Starwood Dr	10	1	0	10	0	5	0	0	25
Watson Pkwy	Starwood Dr to 130m N of York Rd	10	1	0	10	0	5	0	0	25
Watson Pkwy	Couling Cr to 130m S of Couling Cr	3	1	10	0	2	0	4	6	25
Exhibition St	Powell St W to Mont St	5	0.5	10	0	2	0	4	6	24.5
Hall Ave	All	5	0.5	10	0	2	0	4	6	24.5
Stone Rd E	Oakdale Dr to Colborn St	3	0.5	7	10	2	0	4	0	24.5
Speedvale Ave W	West Boundary to Imperial Rd N	10	1	0	10	4	0	0	0	24
Speedvale Ave W	Hanlon to Edinburgh Rd N	10	0.5	5	10	4	0	0	0	24
Victoria Rd S	Florence Ln to 80m S of Florence Ln	10	0.5	0	10	4	5	0	0	24
Watson Pkwy	85m N of Starwood Dr to Starwood Dr	10	0.5	0	10	0	5	0	4	24
Downey Rd	Hanlon Pkwy to Woodland Glen Dr	10	0.5	0	10	0	0	4	4	23
Goldie Ave	Memorial Cres to 75m E of Memorial Cres	5	1	10	0	2	0	0	6	23
Nicklin Rd	Woodlawn Rd W to 90m N of Burns Dr	5	1	0	10	4	0	4	0	23
Woodlawn Rd W	Imperial Rd to 320m W of Imperial Rd	10	0.5	0	10	4	0	4	0	23
Woodlawn Rd W	320m W of Imperial Rd to Elmira Rd	10	1	0	0	4	5	4	0	23
Eastview Rd	Summit Ridge Dr to Watson Pkwy	2	1	0	10	0	0	4	6	22
Rickson Ave	Hickory St to Columbus Cres	8	0.5	10	0	2	0	0	6	22
Silvercreek Pkwy	Woodlawn to Speedvale Ave W	3	1	0	10	4	5	0	0	22
Princess St	25m S of Division St to Clarke St	5	1	10	0	2	0	4	0	21
Municipal St	Edinburgh Rd to 105m E of Denver Rd	5	0.5	10	0	4	0	4	0	20.5
Norfolk St	Macdonell St and Wilson St	10	0.5	0	0	6	5	0	4	20
Nicklin Rd	90m N of Burns Dr to 40m N of Brentwood Dr	5	0.5	0	10	3	0	4	0	19.5
Edinburgh Rd N	Woodlawn Rd W to Burns Dr	10	1	0	0	4	0	4	1	19
Speedvale Ave W	Marksam Rd to Hanlon	10	0.5	0	10	4	0	0	0	19
Royal Road	All	1	1	0	10	4	0	4	0	19
Woolwich St	North Boundary to 50m N of Smartcentres Entrance	10	1	0	0	0	5	0	4	19

Street Name	Segment	Scoring								
		Road Type	Existing Sidewalks	School	Transit	Land Use	Beaten Path	Active Transportation Network	Pedestrian Generator	Total
York Rd	East Boundary to 100m E of Victoria Rd	3	1	0	10	0	0	0	6	19
Bailey Ave	30m E of Beattie St to Freeman Ave	5	0.5	0	10	2	0	0	4	18.5
Maple St	Water St to Forest St	5	0.5	10	0	2	0	4	0	18.5
Palmer St	Queen St to Metcalf St	5	0.5	10	0	2	0	4	0	18.5
Princess St	Division St to 25m S of Division St	5	0.5	10	0	2	0	4	0	18.5
Watson Pkwy	130m S of Couling Cr to Eastview Rd	3	0.5	10	0	6	0	0	1	18.5
Imperial Rd N	Woodlawn Rd W to 180m N of Woodlawn Rd W	2	0.5	0	10	6	0	0	1	18
Arkell Rd	Gordon St to Summerfield Dr	10	0.5	0	10	2	0	0	0	17
Cityview Dr N	Lee St to 25m E of Grange Rd	5	1	10	0	2	0	0	0	17
Clair Rd W	200m W of Clairfields Dr W to Laird Rd	3	1	0	10	4	0	0	0	17
Clair Rd W	Laird Rd to Hanlon Rd	3	1	0	10	4	0	0	0	17
Elmira Rd N	North Boundary to 100m S of Speedvale Ave	3	1	0	10	4	0	0	0	17
Kortright Rd W	100m W of Gordon St to Rickson Ave	10	0.5	0	10	2	0	0	0	17
Laird Rd	Hanlon Pkwy to Clair Rd	3	1	0	10	4	0	0	0	17
Lee St	Cityview Dr N to Breesegarden Ln	5	1	10	0	2	0	0	0	17
Lemon St	Franklin Ave to Winston Cres	5	1	10	0	2	0	0	0	17
Lynwood Ave	All	1	1	10	0	2	0	4	0	17
Paisley Rd	Hewitt Ln to Hewitt Ln	10	0.5	0	10	2	0	0	0	17
Silvercreek Pkwy	North Boundary to Woodlawn	3	1	0	10	4	0	0	0	17
Watson Pkwy	40m S of Fuller Dr to Watson Rd N	10	0.5	0	10	2	0	0	0	17
Watson Pkwy	York Rd to Dunlop Dr	3	1	0	10	4	0	0	0	17
York Rd	35m W of Neeve St to West End	10	0.5	0	0	2	0	4	6	17
Buckthorn Cr	All	1	0.5	10	0	2	0	4	0	16.5
Esker Run	All	1	0.5	10	0	2	0	4	0	16.5
Hill Tr	All	1	0.5	10	0	2	0	4	0	16.5
Honey Cr	All	1	0.5	10	0	2	0	4	0	16.5
Huron St	Ontario St to Alice St	5	0.5	10	0	4	0	0	0	16.5
Brydges Ct	All	0	0.5	10	0	2	0	4	0	16
Imperial Rd N	Woodlawn Rd W to Speedvale Ave	2	1	0	10	4	0	0	0	16
Imperial Rd N	180m N of Woodlawn Rd W to Curtis Rd	2	1	0	10	4	0	0	0	16
Ireland Pl	All	0	0.5	10	0	2	0	4	0	16
Victoria Rd S	Elizabeth St to York Rd	10	0.5	0	0	6	5	0	0	16
Water St	McCrae Blvd to Gordon St	8	0.5	0	0	2	0	4	6	16
Cassino Ave	All	5	0.5	10	0	2	0	0	0	14.5
Cityview Dr N	Lee St to Cedarview Ave	5	0.5	10	0	2	0	0	0	14.5
Cityview Dr N	Grange Rd to 25m E of Grange Rd	5	0.5	10	0	2	0	0	0	14.5
Couling Cr	Watson Pkwy to Severn Dr	5	0.5	10	0	2	0	0	0	14.5
Darnell Rd	All	5	0.5	10	0	2	0	0	0	14.5
Freeman Ave	50m E of Beattie St to Bailey Ave	5	0.5	0	10	2	0	0	0	14.5
Fuller Dr	All	5	0.5	10	0	2	0	0	0	14.5
Kathleen St	Speedvale Avenue West to 80 m south of Division Street	5	0.5	0	0	2	0	4	6	14.5
Kathleen St	210 m south of Division Street to London Rd W	5	0.5	0	0	2	0	4	6	14.5
Kearney St	Lee St to Raspberry Ln	5	0.5	10	0	2	0	0	0	14.5
Lane St	Erin Ave to Cassino Ave	5	0.5	10	0	2	0	0	0	14.5

Street Name	Segment	Scoring								
		Road Type	Existing Sidewalks	School	Transit	Land Use	Beaten Path	Active Transportation Network	Pedestrian Generator	Total
Lane St	Cassino Ave to Palmer St	5	0.5	10	0	2	0	0	0	14.5
Lee St	Breese garden Ln to 30m N of Kerney St	5	0.5	10	0	2	0	0	0	14.5
Lemon St	Metcalfe St to Franklin Ave	5	0.5	10	0	2	0	0	0	14.5
McCurdy Rd	All	5	0.5	10	0	2	0	0	0	14.5
Oliver St	Huron to 235m W of Huron St	5	0.5	10	0	2	0	0	0	14.5
Palmer St	Metcalf St to Jackson St	5	0.5	10	0	2	0	0	0	14.5
Palmer St	Jane St to 30m W of Stevenson St	5	0.5	10	0	2	0	0	0	14.5
Swift Cr	All	5	0.5	10	0	2	0	0	0	14.5
Winston Cres	Metcalfe St to Lemon St	5	0.5	10	0	2	0	0	0	14.5
Zaduk Pl	sections btwn MacAlister and Sweeney	5	0.5	10	0	2	0	0	0	14.5
Edinburgh Rd N	Lionsdale Dr to Speedvale Ave	10	1	0	0	4	0	0	0	14
Eramosa Rd	East Boundary to Brant Ave	10	1	0	0	4	0	0	0	14
Shelldale Cr	All	0	0.5	10	0	4	0	0	0	14

Appendix C

Community Engagement Feedback Samples





Topic Name: Sidewalk Needs Assessment Study - Part 2

Idea Title: Access between sidewalk and Boulevard

Idea Detail: When there are sidewalk shortcuts or bike paths, they should not terminate at an intersecting sidewalk, rather they should be connected to the road. This avoids problems with homeowners and makes paths safer in winter. In the example the home owner has created a hazard by placing planters directly adjacent to the sidewalk. Grierson homeowner presents a much more dangerous access with a rail fence and large rocks.

Idea Author: Al D

Number of Stars 7

Number of Comments 0

Idea Title: Elmira Rd & Massey Rd

Idea Detail: The area around Elmira Rd and Massey Rd is a high-traffic area with many workplaces, multiple bus stops and heavy truck traffic (Linamar Transportation, Purolator, etc). Pedestrians who bus to work must walk in the muddy ditch from their bus stop to get to work, and in dark winter conditions it is dangerous. A sidewalk along this area would help workers.

Idea Author: Nathan D

Number of Stars 6

Number of Comments 2

Comment 1: Agree strongly with this suggestion. Many times I have seen people trudging through snow or mud trying to get to their buses while trying to avoid ditches on on side and big trucks and traffic on the other side. | By Marnie E

Comment 2: The buses go a lot of these places but then there are no sidewalks to walk safely along on these roads. Same goes for Woodlawn and Imperial in this area (northwest). The multi-use path being built now is amazing but doesn't quite reach as far as would be helpful. | By Laura M

Idea Title: Make Active transportation Map in 2 or more pages to make

Idea Detail: it more readable and enable more details to be added such as destinations like



schools ,grocery ,recreation areas etc.The city of London Ont provides a free map that is plastic coated and folding.However it is also on one page .Perhaps N and S could be on either side of map?

Idea Author: Mike D

Number of Stars 5

Number of Comments 0

Idea Title: The West Side of Town

Idea Detail: If I read the map correctly, it seems there are no proposed sidewalks around Elmira and Paisley near the Zehrs and Costco etc. While most people drive in this area of town, there are new condos being built and it would encourage local commerce and walking if there were sidewalks there as well.

Idea Author: Aphra Z

Number of Stars 3

Number of Comments 0

Idea Title: Stone Road between Scottsdale and Hanlon South

Idea Detail: Stone Road between Scottsdale and Hanlon Rd.
The south side needs sidewalks

Idea Author: Al D

Number of Stars 3

Number of Comments 0

Idea Title: York Road is in rough condition

Idea Detail: Needs an overhaul on York Road

Idea Author: Peter S

Number of Stars 3



Number of Comments 0

Idea Title: Prioritize planned north-south link from Arkell Road

Idea Detail: Urgently need to get recreational/occasional and commuter cyclists a safe north-south alternative to Gordon Street. There is no current alternative other than Victoria Road which is even worse in terms of safety (70km speed limit still; why?). The proposed link south from Bathgate to Arkell Road is an ideal solution (provided it is suitable for cyclists) and should be "fast tracked"!

Idea Author: Doug B

Number of Stars 2

Number of Comments 0

Idea Title: better signage on trails

Idea Detail: When on a trail and approaching a street to cross, unless you are near an roadway intersection, it is impossible to tell which street you are crossing. Also, way finding signage along trails would help immensely(downtown this way or mall this way, with arrows). Interesting facts about the local environment type signage would add to the user experience and turn the trail into an interesting activity vs just a means to get somewhere.

Idea Author: Paul O

Number of Stars 2

Number of Comments 0

Idea Title: No cars downtown Guelph. If they drive they get charged.

Idea Detail: They will be charged \$100 that will be put toward more safe bicycle lanes that are protected from traffic as they have in New York City.

Idea Author: Peter S

Number of Stars 1

Number of Comments 1



Comment 1: See comment above | By Sandy A

Idea Title: Silvercreek Pkwy. N.

Idea Detail: There needs to be a sidewalk on Silvercreek between Speedvale and Woodlawn. Many people take the bus to those factories in the area and walking down the side of the road is brutal, especially in winter and at night. It's just not safe.

Idea Author: Stefania G

Number of Comments 0

Idea Title: Sidewalk extension on North end of Whitelaw Rd.

Idea Detail: The sidewalk(s) on the north end of Whitelaw Rd. need to be extended through to Paisley Rd. The sidewalks on both sides of Whitelaw end just north of Shoemaker Crescent. Pedestrians are then required to walk on narrow sloped soft gravel shoulders to continue through to Paisley Rd. There is a lot of commercial activity (Costco, Zehrs, LCBO, West End Rec cente, Banks) and new housing development and potential new Lowes in the area. The commercial activity in this area has increased vehicle traffic on Whitelaw significantly especially since Costco opened in July 2014. This northern section of Whitelaw is not safe for pedestrians trying to access this commercial hub. Since a large number of trees were removed this past Summer from a very steep embankment on the NorthEast side of Whitelaw it is also not safe for vehicles. Guardrails do not exist except for the very end near the Whitelaw/Paisley intersection. Current road reconstruction and plans do not address the sidewalks or embankment

Idea Author: Dan T

Number of Comments 0

Idea Title: Enforce dog leash bylaws.

Idea Detail: Keeping all dogs on a leash would greatly enhance the enjoyment of parks and trails. Provide sufficient leash free zones so that owners could let their dogs run there. Mark these areas clearly.

Idea Author: Sandy A

Number of Comments 0



Idea Title: More off-leash trails!

Idea Detail: (e.g., Laura Bailey Memorial Trails)

Idea Author: Michelle B

Number of Comments 0

From: g*****@gmail.com
Sent: October-27-15 10:37 AM
To: J*****@guelph.ca
Subject: bike lanes/sidewalk

Follow Up Flag: Follow up
Flag Status: Flagged

Hello

May i suggest instead of putting in new sidewalks and bike lanes lets fix what we have. There is many sidewalks in this city that are speed bumps and impede walking around in this city. And the bike lanes lets maintain what we have before putting in more. This city always likes to put the cart in front of the horse and this kind of thinking has to stop.

Thanks.

This e-mail message (including attachments, if any) is intended for the use of the individual to whom it is addressed and may contain information that is privileged and confidential. If you are not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender and erase this e-mail message immediately.

From: j*****@gmail.com
Sent: November-02-15 10:59 AM
To: J*****@guelph.ca
Subject: Re: RD0321 - Active Transportation

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Justin,

I wanted to connect with the project lead on the Woodlawn project to ask about the potential to tie into the Nicklin Road sidewalk project I mentioned to you earlier - I didn't realize it would be the same project manager as the broader Active Transportation study.

Just wanted to try and get the idea in front of anyone who could champion it - it seems an obvious missing connection to the great work planned for Woodlawn. Just 400 m of sidewalk would connect my whole neighbourhood to the new multi-use trail.

Thanks for your time,

Jan



UPPER GRAND DISTRICT SCHOOL BOARD
500 Victoria Road North, Guelph, Ontario N1E 6K2
Phone: (519) 822-4420 Fax: (519) 822-2134

Martha C. Rogers
Director of Education

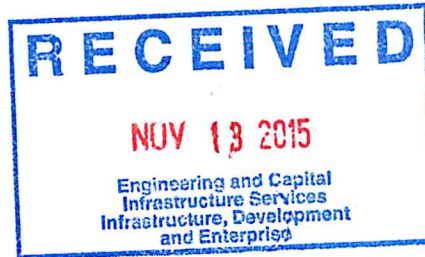
November 9, 2015

PLN: 15-87

File Code: R14

Sent by: mail & email

Justin Hall
TDM Coordinator
City of Guelph
1 Carden Street
Guelph, Ontario N1H 3A1



Dear Mr. Hall;

**Re: Sidewalks and Trail Systems Consultation
City of Guelph**

Planning staff from the Upper Grand District School Board had an opportunity to attend a workshop for technical agencies on June 23, 2015 that included a presentation and roundtable discussion on the City's active transportation network and sidewalk needs assessment. Below are the comments shared by Board staff at the workshop.

Active Transportation Network - Trails

An issue highlighted by Board staff was regarding the maintenance of trail connections throughout the City; specifically trails that link residential streets to elementary and secondary school sites. The City of Guelph has a priority system for clearing snow from sidewalks. Board staff believes that there would be benefit to considering trails within the priority system, acknowledging that there trails with varying degrees of importance to the active transportation network.

We recognize that City prioritizes snow clearing from sidewalks based on pedestrian traffic volume and proximity to high use facilities, such as schools, hospitals, and public buildings. However, across the City of Guelph there are trails that run through municipal parks adjacent to school sites that provide direct pedestrian access to the school site from nearby streets. These trails not only support active transportation objectives but may minimize walking distances for school age children and help with dispersal of traffic around schools. In some locations the trail is part of the key route network to a school. We are suggesting that instead of trails and sidewalks being viewed as two separate entities, the network should be considered as one single entity.

When trails connected to schools are snow covered they are no longer key pedestrian connections for families walking to school. Parents/guardians have raised this as an issue when discussing barriers to walking within school communities. In future, Board staff would be happy to work with City staff in identifying those key connections that provide valuable linkages for students walking to school.

Sidewalk Needs Assessment

With respect to sidewalks throughout the City, Board staff raised the concern that often sidewalk construction does not coincide with road construction in newly developing residential subdivisions. Although the City imposes a condition of subdivision approval requiring developers to install sidewalks, they are often only installed once house construction is complete. Depending upon the location and timing of house construction this can result in missing sidewalk infrastructure.

Recently in a new plan of subdivision, Board staff requested that the City impose a condition on the subdivider that required hard surface walkways be installed coincident with road construction to allow future students to access a school site, and that sufficient securities be provided to the City to ensure their maintenance, including winter clearing. As part of this process, Board staff recommends that in future the City require developers of new residential subdivisions to install and maintain hard surface walkways within 250 metres of schools until such time as permanent sidewalks are installed. Installation of this infrastructure early in a developing community will help reinforce a culture of active transport for the City's youngest residents.

Finally, for the purpose of determining future sidewalk infrastructure needs across the City, Board staff would be pleased to continue discussions with City Staff on this issue.

We appreciate you taking the time to consider our comments. Should you have any questions, please feel free to contact me at (519) 822-4420 ext. 824.

Sincerely,



Heather Imm, MCIP, RPP
Senior Planner