Regional Municipality of Waterloo
Planning and Works Committee
Agenda

Date:	Tuesday, June 7, 2022
Regular Session:	1:30 p.m.
Location:	Meeting to be held electronically 150 Frederick Street, Kitchener, Ontario

Should you require an alternative format please contact the Regional Clerk at Tel.: 519-575-4400, TTY: 519-575-4605, or regionalclerk@regionofwaterloo.ca

---

Pages

1. **Call to Order**
2. **Land Acknowledgement**
3. **Declarations of Pecuniary Interest under the "Municipal Conflict of Interest Act"**
4. **Presentations**
5. **Delegations**
6. **Consent Agenda Items**
   Items on the Consent Agenda can be approved in one motion of Committee to save time. Prior to the motion being voted on, any member of Committee may request that one or more of the items be removed from the Consent Agenda and voted on separately.
7. **Request to Remove Items from Consent Agenda**
8. **Motion to Approve Items or Receive for Information**

   Recommended Motion:

   That the Consent Agenda items be received for information and approved.

   8.1. Strategic Focus - Thriving Economy

   8.1.1. PDL-CPL-22-14, Year-End 2021 Population and Household Estimates for Waterloo Region — 7
   For information.

   8.2. Strategic Focus - Sustainable Transportation

   8.2.1. PDL-CPL-22-13, 2021 Annual Report of the Kissing Bridge Trailway Advisory Board — 15
   For information.

   8.2.2. TES-DCS-22-17, Public Consultation Information Package Lancaster Street Reconstruction, Wellington Street to Bridgeport Road, City of Kitchener — 23

For information.

8.2.3. TES-DCS-22-19, C2022-10: Consultant Selection for Elmira By-Pass and Arthur Street Widening Corridor Study (Regional Road 85), from the King Street overpass at Hwy 85 to Listowel Road, Township of Woolwich 41

Recommended Motion:

That the Regional Municipality of Waterloo enter into a Consulting Services Agreement with Associated Engineering (Ont.) Ltd for the Elmira By-Pass and Arthur Street Widening Corridor Study (Regional Road 85), from approximately 900m north of the King Street overpass at Hwy 85 to Listowel Road, and a new Elmira By-Pass road corridor between Arthur Street at Listowel Road northerly to Arthur Street North (Regional Road 21) north of Elmira, in the Township of Woolwich, in the amount of $1,371,957 plus all applicable taxes, as outlined in report TES-DCS-22-19, dated June 7, 2022.

8.2.4. TES-DCS-22-20, Notice of Virtual Public Consultation, King Street and Coronation Boulevard Improvements, Bishop Street to Water Street, City of Cambridge 47

For information.

8.2.5. TES-DCS-22-22, Public Consultation No. 2 Information Package Fairway Road Improvements, Lackner Boulevard to King Street East in the City of Kitchener 66

For information.

8.2.6. TES-DCS-22-24, C2022-08: Consultant Selection for Preliminary Design, Public Consultation, Detailed Design, Contract Administration & Construction Inspection Services for Schneider's Creek Multi-Use Trail from Block Line Road to Manitou Drive, City of Kitchener 105

Recommended Motion:

That the Regional Municipality of Waterloo enter into a Consulting Services Agreement with IBI Group for the Preliminary Design, Public Consultation, and Detailed Design for Schneider's Creek Multi-Use Trail from Block Line Road to Manitou Drive, in the City of Kitchener, in the amount of $522,600 plus all applicable taxes, with additional contract administration and construction inspection services, estimated at $339,400 plus all applicable taxes to be paid on a time basis, as outlined in report TES-DCS-22-24, dated June 7, 2022.

8.2.7. TES-DCS-22-25, Notice of Virtual Public Consultation Centre #2 - West Montrose Covered Bridge Rehabilitation 111

For information.

8.3. Strategic Focus - Environmental and Climate Action

8.3.1. PDL-CPL-22-15, Summary Report of Development Application Activity for 2021 165
For information.

8.3.2. TES-DCS-22-21, C2021-30 - Consultant Selection for Kitchener Wastewater Treatment Plant New SCADA Control, Operations and Regional Laboratory Building 181
Recommended Motion:
That the Regional Municipality of Waterloo enter into an Agreement for Professional Consulting Services with R.V. Anderson Associates Limited, for the detailed design and services during construction for the Kitchener Wastewater Treatment Plant New SCADA Control, Operations and Regional Laboratory Building in the amount of $3,210,645.00 plus all applicable taxes, as described in report TES-DCS-22-21, dated June 7, 2022.

8.3.3. TES-DCS-22-23, Amendment to Consultant Engineering Services Agreement for Galt Wastewater Treatment Plant Upgrades - Contract 1 186
Recommended Motion:
That the Regional Municipality of Waterloo approve an amendment to the existing Consulting Services Agreement with CH2M HILL Canada Limited, for the detailed design and services during construction for the Galt Wastewater Treatment Plant Upgrades – Contract 1, City of Cambridge, in the amount of $468,300.00 for a total contract price of $2,466,331.00 plus all applicable taxes, as outlined in report TES-DCS-22-23 dated June 7, 2022.

8.3.4. TES-WAS-22-08, Notice of Second Virtual Public Consultation Centre for the Heidelberg Water Supply System Optimization – Class EA and Conceptual Design 190
For information.

8.3.5. TES-WAS-22-09, Notice of Third Virtual Public Consultation Centre for the Baden-New Hamburg Water and Wastewater System Servicing Review 206
For information.

8.3.6. TES-WAS-22-10, Acknowledging 20 Years of Research on the Grand River 226
For information.

9. Regular Agenda Items

9.1. Strategic Focus - Thriving Economy

9.1.1. PDL-ECD-22-08, 15 Charles Street West, Kitchener: Terminal Lands Visioning and Re-development Process Update 233
For information.

9.1.2. PDL-CPL-22-17, Approval of the Township of Woolwich Proposed New Official Plan 243

Recommended Motion:

a) That the Regional Municipality of Waterloo approve, in part, with modifications, the Official Plan of the Township of Woolwich, and that the Decision contained in Attachment A to Report PDL-CPL-22-17, dated June 7, 2022, be included in the approval document;

b) The repeal of the Township of Woolwich Official Plan, as adopted by the Township of Woolwich By-law 75-2000 and all amendments thereto, is hereby approved in accordance with the provisions of Sections 17 and 21 of the *Planning Act*, R.S.O. 1990, Chap. P.13, as amended, only insofar as it is replaced by the new Official Plan through this approval;

c) That no decision be made at this time with respect to:

i) Any item deferred by the Council of the Township of Woolwich in Paragraph 1, By-law 55-2021 (Deferral 1);

ii) In Policy 6.5.3.5, the words “or a small-scale school, place of worship and associated cemetery established in accordance with Policy 6.3.5.2” (Deferral 2);

iii) the second sentence of Policy 8.4.3 (Deferral 3); and

iv) In Chapter 20, the definitions for “Category 1 and 2 Specific Retail Store” and “Complementary Commercial Uses” (Deferral 4).

9.2. Strategic Focus - Sustainable Transportation

9.2.1. TES-TRS-22-09, September 2022 Transit Service Plan 284

Recommended Motion:

That the Regional Municipality of Waterloo approve the following as described in report TES-TRS-22-09 dated June 7, 2022:

a) Restore university and college oriented transit services beginning on Monday September 5, 2022;

b) Restore iXpress Routes 201 and 202 frequency to every 10 minutes in the peak period beginning by Monday January 2, 2023; contingency plans will consider adding key service in the fall of 2022 as resources become available; and

c) Defer the implementation of the Cambridge network

redesign to Monday, April 23, 2023, subject to 2023 budget approval.

9.2.2. TES-TRP-22-05, Downtown Cambridge Truck Diversion Study 291
For information.

9.2.3. TES-TRP-22-06, Posted Speed Limits in School Zones 295
Recommended Motion:
Please see report.

9.2.4. PDL-LEG-22-32, Approval to Expropriate Lands (2nd Report) for a Roundabout at the Intersection of Line 86 (Regional Road No. 86) and Floradale Road (Regional Road No. 19), in the Township of Woolwich 328
Recommended Motion:
Please see report.

9.2.5. PDL-LEG-22-33, Approval to Expropriate Lands (2nd Report) for Improvements on Dundas Street from Hespeler Road to Franklin Boulevard and on Main Street from Chalmers Street to Franklin Boulevard, in the City of Cambridge 335
Recommended Motion:
Please see report.

9.2.6. PDL-CPL-22-16, Region of Waterloo Climate Action and Energy Transition Progress Report (Staff Presentation) 343
Recommended Motion:
That the Regional Municipality of Waterloo take the following action with respect to PDL-CPL-22-16 dated June 7, 2022:

a) continue with time sensitive corporate climate and energy transition work as outlined in PDL-CPL-22-16 (dated June 7, 2022), while work to develop the corporate carbon budget and transition strategy continues; and

b) include, to the extent possible, initial estimates of the investments required to meet the Region's climate action goals in the preliminary 2023-2032 Capital Plan.

9.3. Strategic Focus - Environmental and Climate Action

9.3.1. TES-WMS-22-05, Green Bin Organics Processing Strategy 363
Recommended Motion:
That the Regional Municipality of Waterloo extend Contract T2009-169 with the City of Guelph (City) for the Processing of Green Bin waste for up to two (2), five-year periods, with the first five-year extension being from October 1, 2023 to September 30, 2028, under the same terms and conditions as approved by Council in Report TES-WMS-E-10-020, on April 14, 2010, for processing of 20,000 metric tonnes per year; and,

That the Regional Municipality of Waterloo negotiate and finalize the contract extension with the City of Guelph, subject to the satisfaction of the Director, Waste Management Services and Director, Legal ;

That a tender be developed to solicit bids from other 3rd party processors for the additional tonnage collected under the Green Bin Organics Program above the 20,000 tonne commitment to the City, with the contract timeline of this tender aligning with the above contract extension with the City, as described in report TES-WMS-22-05 dated June 7, 2022.

10. Information/Correspondence

11. Other Business

12. Next Meeting- August 9, 2022

13. Motion to go into Closed Session

Recommended Motion:

That a closed meeting of the Planning and Works, Community Services, and Administration and Finance Committees be held on Tuesday, June 7, 2022 immediately following the Special Council meeting electronically, in accordance with Section 239 of the “Municipal Act, 2001”, for the purposes of considering the following subject matters:

1. Receiving advice that is subject to solicitor-client privilege related to a proposed acquisition of lands;
2. Receiving advice that is subject to solicitor-client privilege related to a proposed acquisition of lands;
3. Receiving advice that is subject to solicitor-client privilege related to a proposed acquisition of lands;
4. Receiving advice that is subject to solicitor-client privilege;
5. Labour relations;
6. Labour relations;
7. Labour relations;
8. Labour relations;
9. Receiving advice that is subject to solicitor-client privilege related to proposed acquisition of lands; and
10. Receiving advice that is subject to solicitor-client privilege related to potential litigation.

14. Adjourn

Region of Waterloo

Planning, Development and Legislative Services

Community Planning

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Year-End 2021 Population and Household Estimates for Waterloo Region

---

1. Recommendation:

For information

2. Purpose / Issue:

This report provides estimates of Waterloo Region's population and household growth and how recent growth compares to long-term trends. The total year-end population and household estimates are used to plan for growth, support infrastructure and service programs, develop municipal benchmarks and performance indicators, calculate service costs per resident, assess housing need and track population-related trends.

3. Strategic Plan:

Tracking and reporting population and household growth contributes to Strategic Focus Area 1: Thriving Economy. However, many of the objectives and actions contained throughout all five Focus Areas in the Corporate Strategic Plan rely on estimates of population and households.

4. Key Considerations:

The population and household numbers have been adjusted to align with the latest census release from February, 2022 based on the census completed May 11, 2022 which included mid-year 2021 census population and total households by municipality. The population and household figures contained in this report represent year-end estimates and include additional population which that are not counted by the Census such as post-secondary students.

The total population of Waterloo Region is estimated at 632,230 as of year-end 2021, including university and college students who would normally be residing in the Region while they study at our local institutions. This is an increase of 8,960 people (1.4 per cent) from year-end 2020.

The number of households is estimated at 227,420 which is an increase of 5,120 new households occupied since 2020, a growth rate of 2.3 per cent.

Student populations rebounded following the shift to online learning in 2020. Student enrollment and the corresponding number of students living in the region has rebounded to similar levels as seen in year-end 2019. At year-end 2021, the total number of post-secondary students which called the Waterloo Region home was 32,630, with the majority of those students residing in the City of Waterloo.

Year-end 2021 Population and Household Estimates for Waterloo Region

	Region of Waterloo**	Cambridge	Kitchener	North Dumfries	Waterloo	Wellesley	Wilmot	Woolwich
Total Population Year-end 2021*	632,880	142,510	270,840	10,930	147,520	11,490	21,880	27,710
Population in Regular Households	614,450	139,880	266,140	10,780	137,650	11,430	21,530	27,030
Population in Collective Dwellings***	18,440	2,630	4,700	150	9,870	50	360	680
Total Population Year-end 2020*	623,930	140,850	263,770	10,790	147,350	11,650	22,050	27,470
Additional Population	8,960	1,660	7,070	140	170	(170)	(170)	#NUM!
Population Change 2020-2021 (%)	1.43%	1.2%	2.7%	1.3%	0.1%	-1.4%	-0.8%	0.9%
Households Year-end 2021*	227,420	51,460	101,100	3,720	50,380	3,380	7,920	9,450
Households Year-end 2020*	222,300	51,140	100,440	3,720	46,180	3,450	7,930	9,450
Additional Households	5,120	320	660	-	4,200	(60)	(10)	-
Household Change 2020-2021 (%)	2.30%	0.6%	0.7%	0.0%	9.1%	-2.0%	-0.1%	0.0%
Persons per Unit+	2.70	2.72	2.63	2.90	2.73	3.38	2.72	2.86
Temporary Student Population (included above)	32,630	660	3,900	10	28,390	(30)	(160)	(130)
Students Arriving	40,640	2,500	7,740	160	29,990	50	80	130
Living in Student Residences	8,450	-	530	-	7,920	-	-	-
Living in Other Accommodations	32,190	2,500	7,200	160	22,070	50	80	130
Students Leaving++	(8,010)	(1,850)	(3,840)	(150)	(1,590)	(90)	(240)	(260)

* Based on avaliable data from the 2016 Census and 2021 Census, includes adjustments for recent residential development, students and other foreign/temporary residents, net Census undercount, and vacancy rates. Due various corrections and adjustments, direct comparison to previous years estimates are not valid.

** Municipal totals may not add due to independent rounding.

*** Collective dwellings include student residences, nursing homes, group homes, hospitals, larger lodging houses, etc.

+ 'Persons per Unit' (PPU) calculation is based on the 'Population in Regular Households', not on 'Total Population'.

++ These are students who leave home to attend school. They represent the reverse flow of the temporary students arriving in the Region from elsewhere.

5. Background:

This report aligns where possible with the latest census information released in February 2022. Previous population and household estimates were adjusted to align with the newest information. These adjustments often highlight instances where previous estimates were either too high or too low. As a result, comparisons to previous estimates may not yield accurate results of actual growth.

6. Area Municipality Communication and Public/Stakeholder Engagement:

This report has been circulated to all Area Municipalities.

7. Financial Implications:

Nil

8. Conclusion / Next Steps:

Staff will continue to monitor population growth.

9. Attachments / Links:

Appendix A: 2021 Population and Households Estimates for Waterloo Region (Docs#4004998)

Prepared By: **Ryan Pogrzeba**, Planning Information Specialist

Reviewed by: **Brenna MacKinnon,** Manager, Development Planning

Danielle De Fields, Director, Community Planning

Approved by: **Rod Regier**, Commissioner, Planning, Development, and Legislative Services

Region of Waterloo

Planning Information Bulletin

Date: June 7, 2022

Subject: 2021 POPULATION AND HOUSEHOLDS ESTIMATES FOR WATERLOO REGION

Background:

This bulletin highlights key aspects of Waterloo Region's population and household growth and how recent growth compares to long term trends. The total year-end population and household estimates are used by many Regional and Area Municipal departments, agencies, boards and community groups to plan for growth, support infrastructure and service programs, develop municipal benchmarks and performance indicators, calculate service costs per resident, assess housing need and track population-related trends.

Population and Household Estimates

The Waterloo Region total population as of year end 2021 is estimated at 632,230 people, including university and college students temporarily residing in the Region. Waterloo Region continues to grow at a steady pace, reflecting the diversity of the local economy and the community's desirability as a place to live. In 2021, the population grew by 8,960 people, a growth rate of 1.4%. The estimated number of households is 227,420 representing a growth rate of 2.3% or 5,120 more than 2020.

The overall persons per unit (PPU) had tapered from 2.75 people per unit in 2006 to 2.70 in 2016, and is currently estimated to be 2.70 in 2021. The change in PPU trend is a result of a number of factors. Increasing proportions of non-permanent residents (including international students and visa-holding workers) requiring housing, together with increasing housing costs is resulting in denser living arrangements. Recent population growth has also occurred from migration from GTHA municipalities, largely concentrated in those aged 25-39. That age group has the highest rate of family formation. As Waterloo attracts families, the average occupancy overall increases as a result. While historical declines in PPUs was largely attributed to the aging of the population, the increases in student enrollment mixed with larger proportions of those aged 25-39 moving to Waterloo Region is believed to have balanced out the overall PPU in the Region.

	Region of Waterloo**	Cambridge	Kitchener	North Dumfries	Waterloo	Wellesley	Wilmot	Woolwich
Total Population Year-end 2021*	632,880	142,510	270,840	10,930	147,520	11,490	21,880	27,710
Population in Regular Households	614,450	139,880	266,140	10,780	137,650	11,430	21,530	27,030
Population in Collective Dwellings***	18,440	2,630	4,700	150	9,870	50	360	680
Total Population Year-end 2020*	623,930	140,850	263,770	10,790	147,350	11,650	22,050	27,470
Additional Population	8,960	1,660	7,070	140	170	(170)	(170)	#NUM!
Population Change 2020-2021 (%)	1.43%	1.2%	2.7%	1.3%	0.1%	-1.4%	-0.8%	0.9%
Households Year-end 2021*	227,420	51,460	101,100	3,720	50,380	3,380	7,920	9,450
Households Year-end 2020*	222,300	51,140	100,440	3,720	46,180	3,450	7,930	9,450
Additional Households	5,120	320	660	-	4,200	(60)	(10)	-
Household Change 2020-2021 (%)	2.30%	0.6%	0.7%	0.0%	9.1%	-2.0%	-0.1%	0.0%
Persons per Unit+	2.70	2.72	2.63	2.90	2.73	3.38	2.72	2.86
Temporary Student Population (included above)	32,630	660	3,900	10	28,390	(30)	(160)	(130)
Students Arriving	40,640	2,500	7,740	160	29,990	50	80	130
Living in Student Residences	8,450	-	530	-	7,920	-	-	-
Living in Other Accommodations	32,190	2,500	7,200	160	22,070	50	80	130
Students Leaving++	(8,010)	(1,850)	(3,840)	(150)	(1,590)	(90)	(240)	(260)

* Based on avaliable data from the 2016 Census and 2021 Census, includes adjustments for recent residential development, students and other foreign/temporary residents, net Census undercount, and vacancy rates. Due various corrections and adjustments, direct comparison to previous years estimates are not valid.

** Municipal totals may not add due to independent rounding.

*** Collective dwellings include student residences, nursing homes, group homes, hospitals, larger lodging houses, etc.

+ 'Persons per Unit' (PPU) calculation is based on the 'Population in Regular Households', not on 'Total Population'.

++ These are students who leave home to attend school. They represent the reverse flow of the temporary students arriving in the Region from elsewhere.

The Region of Waterloo's 2021 total year-end population and household estimates are based on population and dwelling counts produced by Statistics Canada from the Census of Canada, conducted on May 11, 2021, however they also include an undercoverage rate (4 per cent), an estimate of students who are living in the Region while they study at our post-secondary institutions, and reflect year-end rather than mid-year. As such, the Region's total year-end population is recommended for purposes of estimating the number of people consuming services in the Region, such as water, wastewater, police, and ambulance.

This report has aligns where possible with the latest census information released in February 2022 from the Census conducted on May 11, 2021. Population and household estimates are adjusted to align with the newest information. These adjustments often highlight instances where previous estimates were either too high or too low. As a result, comparisons to previous estimates may not yield accurate results of actual growth.

Population and Household Trends

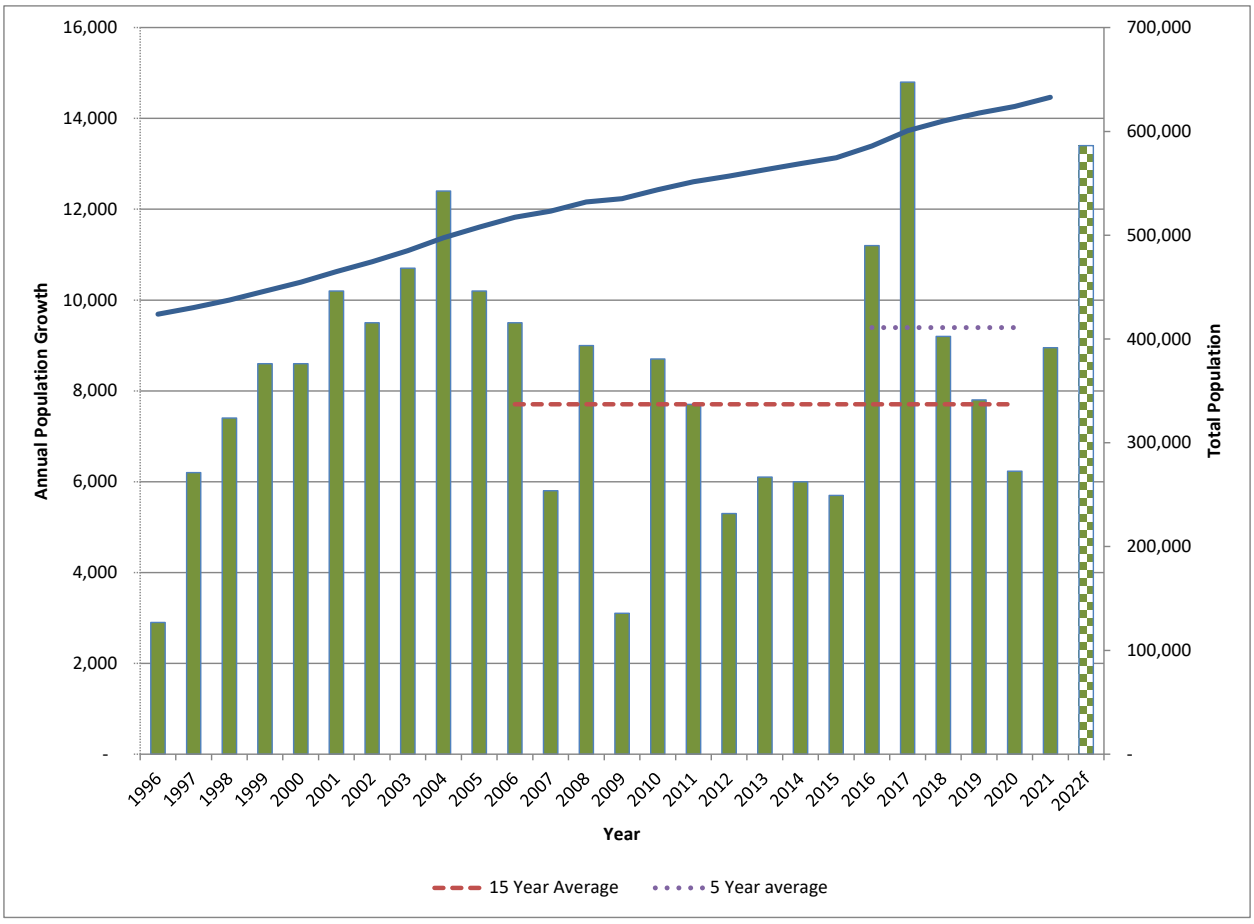
Recent population estimates supplied by Statistics Canada in their annual components of growth estimates has shown a steady growth of population in Waterloo Region

primarily through intra-provincial migrations, as well as growth in non-permanent residents[1]. Intra-provincial growth represents individuals who move to Waterloo Region from within Ontario. Non-permanent residents are individuals who reside in Waterloo Region on a work or study permit.

A forecast of growth for 2022 anticipates the Region's population to grow to 646,000 people by 2022 year end, a growth of 13,000 people. Through 2021, building permits were issued for around 6,000 units. The time from building permit to construction completion and occupancy varies by project, but that figure provides an indication of how many housing units may be occupied in the near future.

Figure 1 Population Growth for Waterloo Region, 19960 - 2021

populat



.

[1] https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1710013601

Table 2 Long-term Trends in Population and Households: Waterloo Region

Year-end	Population			Households		
	Total Population	**Annual Growth**	**Change %**	**total Households**	**Annual Growth**	**Change %**
1996	**424,000**	**2,900**	0.69%	**149,640**	**1,560**	1.05%
1997	**430,200**	**6,200**	1.46%	**152,010**	**2,370**	1.58%
1998	**437,600**	**7,400**	1.72%	**154,950**	**2,940**	1.93%
1999	**446,200**	**8,600**	1.97%	**158,270**	**3,320**	2.14%
2000	**454,800**	**8,600**	1.93%	**161,590**	**3,320**	2.10%
2001	**465,000**	**10,200**	2.24%	**164,600**	**3,010**	1.86%
2002	**474,500**	**9,500**	2.04%	**167,530**	**2,930**	1.78%
2003	**485,200**	**10,700**	2.26%	**170,820**	**3,290**	1.96%
2004	**497,600**	**12,400**	2.56%	**175,080**	**4,260**	2.49%
2005	**507,800**	**10,200**	2.05%	**178,780**	**3,700**	2.11%
2006	**517,300**	**9,500**	1.87%	**182,200**	**3,420**	1.91%
2007	**523,100**	**5,800**	1.12%	**185,130**	**2,930**	1.61%
2008	**532,100**	**9,000**	1.72%	**188,800**	**3,670**	1.98%
2009	**535,200**	**3,100**	0.58%	**189,820**	**1,020**	0.54%
2010	**543,900**	**8,700**	1.63%	**193,230**	**3,410**	1.80%
2011	**551,600**	**7,700**	1.42%	**196,490**	**3,260**	1.69%
2012	**556,900**	**5,300**	0.96%	**198,480**	**1,990**	1.01%
2013	**563,000**	**6,100**	1.10%	**200,830**	**2,350**	1.18%
2014	**569,000**	**6,000**	1.07%	**203,660**	**2,830**	1.41%
2015	**574,700**	**5,700**	1.00%	**205,990**	**2,330**	1.14%
2016	**585,900**	**11,200**	1.95%	**209,240**	**3,250**	1.58%
2017	**600,700**	**14,800**	2.53%	**213,220**	**3,980**	1.90%
2018	**609,900**	**9,200**	1.53%	**216,220**	**3,000**	1.41%
2019	**617,700**	**7,800**	1.28%	**218,900**	**2,680**	1.24%
2020	**623,930**	**6,230**	1.01%	**222,300**	**3,400**	1.55%
2021	**632,880**	**8,950**	1.43%	**227,420**	**5,120**	2.30%
2022f	**646,280**	**13,400**	2.12%	**233,571**	**6,151**	2.70%
5-year average		9,396	1.66%		3,262	1.54%
15-year average		7,705	1.43%		2,901	1.50%

f - Forecast

Estimates of Post-Secondary Students

The temporary student population contributes substantially to the total population of Waterloo Region. Estimates of the post-secondary student population and housing is based on recent data acquired from the University of Waterloo, Wilfrid Laurier University and Conestoga College.

As of November 2021, there were 76,200 post-secondary students enrolled in full-time programs of Conestoga College, the University of Waterloo, and Wilfrid Laurier University, on the campuses that are located in Waterloo Region (Figure 2).

Prior to 2016, growth in international student enrollment was minimal. Between 2016 and 2021, the percentage of international students increased as a proportion of the total

enrollment. The increase in the number of international students has an effect on Waterloo Region's population since most require housing within the Region, compared to domestic students, many of whom commute from other jurisdictions or already live within the Region. Overall enrollment in 2021 was generally consistent with enrollment in previous years. Of the full-time students studying on local campuses, it is estimated that in a typical year over 61,800 would reside in Waterloo Region, and the remaining 14,400 students live outside the Region.

Table 3: University and College Enrollment by Institution (Fall 2020)

	Conestoga	Waterloo	Laurier	Total
Full-time Local Enrolment	23,400	38,300	14,500	76,200
Commuters, co-op work term, etc.	6,500	7,300	600	14,400
Resident in Region	16,800	31,100	13,900	61,800

The Region would have a net increase in population of 32,630 based on the usual influx of students, in addition to those already living here. Figure 3a shows the temporary student population by municipality, net of those student who live in the Region and move elsewhere to study.

Table 4 Temporary Student Population Estimates for Waterloo Region (business as usual)

	Region of Waterloo**	Cambridge	Kitchener	North Dumfries	Waterloo	Wellesley	Wilmot	Woolwich
Temporary Student Population (included above)	32,630	660	3,900	10	28,390	(30)	(160)	(130)
Students Arriving	40,640	2,500	7,740	160	29,990	50	80	130
Living in Student Residences	8,450	-	530	-	7,920	-	-	-
Living in Other Accommodations	32,190	2,500	7,200	160	22,070	50	80	130
Students Leaving++	(8,010)	(1,850)	(3,840)	(150)	(1,590)	(90)	(240)	(260)

++ These are students who leave home to attend school. They represent the reverse flow of the temporary students arriving in the Region from elsewhere.

Region of Waterloo

Planning, Development and Legislative Service

Community Planning

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	2021 Annual Report of the Kissing Bridge Trailway Advisory Board

---

1. Recommendation:

For information.

2. Purpose / Issue:

The attached 2021 Annual Report is submitted to Regional Council to fulfill the Kissing Bridge Trailway Advisory Board annual reporting requirement.

3. Strategic Plan:

Regional support for the Kissing Bridge Trailway addresses Item 2.3 of the Strategic Plan: Increase participation in active forms of transportation (cycling and walking).

4. Key Considerations:

a. The Kissing Bridge Trailway (KBT) is a popular recreation destination for local residents and tourists exploring the region on foot or by bicycle. It comprises the eastern part of the 127 km Guelph to Goderich (G2G) Rail Trail and is part of the Trans Canada Trail (The Great Trail).

b. The KBT is a joint venture between the Region of Waterloo and Wellington County. It is governed by the Kissing Bridge Trailway Advisory Board. The board includes representatives from local steward groups, property owners, the G2G Board and trail users.

c. Highlights from the 2021 report include welcoming a representative of the G2G (Guelph to Goderich) Rail Trail as an official Advisory Group member; trail maintenance; improved access at Katherine St. near West Montrose by means of constructing a sloped trail down to the trailway; and exploring options for bridges over the Conestogo and Grand Rivers.

d. The increase in recreational trail use during the COVID19 pandemic continued through 2021 and into 2022. As a result, the G2G Rail Trail is

working to raise awareness of the (mostly) off-road trail connection between Guelph and Goderich as a provincially-significant tourism destination.

5. Background:

In September 1997, the County of Wellington and the Region of Waterloo jointly leased a 44.5 kilometre stretch of abandoned rail right-of-way from the Province for a multi-use recreational trail between the City of Guelph and the Village of Millbank. In 1998, the County and Region concluded Trailway Steward agreements with five community groups to develop and operate sections of the Trailway.

In May 1998, the County and Region jointly approved Terms of Reference for the KBT Advisory Board, and appointed fifteen persons and four alternate representatives to the Board. Section 1.8 of the Terms of Reference states that the Board "will prepare an annual report to the Councils of the County of Wellington and Regional Municipality of Waterloo on its activities, initiatives, and proposals for the coming year." The twenty-fourth annual report covers the year 2021.

6. Area Municipality Communication and Public/Stakeholder Engagement:

The Kissing Bridge Trailway is an ongoing collaboration among five community groups, the Region of Waterloo, the County of Wellington, the Guelph to Goderich (G2G) Rail Trail Foundation and the Ontario Realty Corporation. The Trans Canada Trail Foundation and the Ontario Trails Foundation are occasional participants on matters that are specific to their foundations.

County and Regional staff liaise with the Townships of Wellesley and Woolwich staff as required. The Township of Woolwich Trails Coordinator attends Trailway Advisory Board meetings on a regular basis, and the Mayor of Woolwich is the Regional representative on the Board. A copy of the annual report is circulated to Wilmot and Wellesley Township staff.

7. Financial Implications:

There is no Regional Budget allocation to the Kissing Bridge Trailway. The Region provides in-kind staff support to the Kissing Bridge Trailway Advisory Board.

8. Conclusion / Next Steps:

No action is required by Regional Council other than ongoing support of this multi-jurisdictional community project.

9. Attachments / Links:

Attachment 1: 24th Annual Report of the Kissing Bridge Trailway Advisory Board for 2021 (DOCS#4066558)

Prepared By: **Albert Hovingh**, Principal Planner

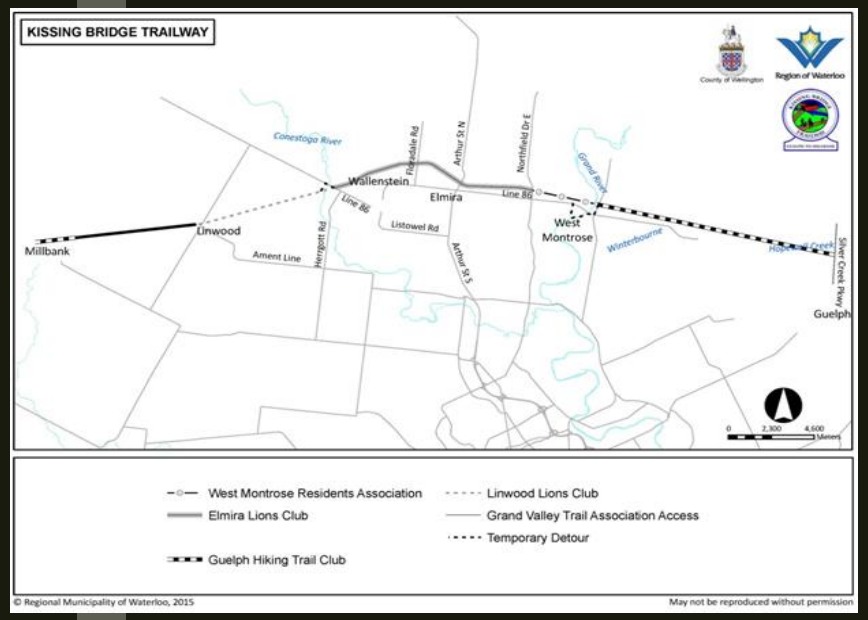
Kate Hagerman, Manager, Environmental Planning and Sustainability

Reviewed By: **Danielle De Fields**, Director, Community Planning

Approved By: **Rod Regier**, Commissioner, Planning, Development and Legislative Services

TWENTY-FOURTH ANNUAL REPORT OF THE KISSING BRIDGE TRAILWAY ADVISORY BOARD FOR THE YEAR 2021

Submitted to the Councils of The County of Wellington and The Regional Municipality of Waterloo: May 2022



In September 1997, the County of Wellington and the Region of Waterloo jointly leased a 44.5 kilometre stretch of abandoned rail right-of-way from the Province for development as a multi-use recreational trail between the outskirts of the City of Guelph and the Village of Millbank. During the winter and spring of 1998, the County and Region concluded Trailway Steward agreements with five community groups to develop and operate sections of the Trailway.

In May 1998, the County and Region jointly approved Terms of Reference for the Trailway Advisory Board, and appointed fifteen persons and four alternate representatives to the Board. Section 1.8 of the Terms of Reference states that the Board "will prepare an annual report to the Councils of the County of Wellington and Regional Municipality of Waterloo on its activities, initiatives, and proposals for the coming year."

The twenty-fourth annual report covers the year 2021.

KISSING BRIDGE TRAILWAY
EST. 1998
GUELPH TO MILLBANK

Trailway Advisory Board

The Trailway Advisory Board is made up of representatives of the various steward groups, adjacent non-farm landowners, a business community business representative and representatives of the agricultural community.

Mike Curtis, representative of the Guelph Hiking Trail Club was re-elected Chair of the Advisory Board for 2021 and Wayne Brabazon of the West Montose Residents' Association was elected as vice-chair.

The Trailway Advisory Board met three times in 2021. Because of the COVID19 pandemic, all meetings were held virtually.

At each meeting, representatives of the steward groups reported on the ongoing activities in each section and provided updates regarding trail use and issues that arose.

The G2G Rail Trail Inc. representative gave reports on the activities along the entire length of the trail and provided updates from the G2G Board.

Finances & Funding

The cost of developing recreational trails can be high. When the Kissing Bridge Trailway was established, it was intended that most of the cost would be borne by the community groups who are jointly developing the Trailway through fundraising and private donations.

In recent years, the G2G Rail Trail Inc. has provided funding for various initiatives in order to provide continuity across the entire length of the G2G Rail Trail.

The G2G Rail Trail Inc. and the G2G Foundation continue to look for opportunities to provide pedestrian bridge crossings over the Grand River near West Montrose and the Conestogo River in Wallenstein.

Regional and County staff provide assistance in a variety of ways to the steward groups including brochure and signage development, clerical support and technical expertise.

Trailway Steward Groups

Guelph Hiking Trail Club

- *Guelph (Silver Creek Parkway) to Grand River*
- *Perth Road 116 to Perth Road 121 (Millbank)*

West Montrose Residents' Association

- *Grand River to Northfield Drive*

Lions Club of Elmira

- *Northfield Drive to Wallenstein*

Linwood & District Lions Club

- *Wallenstein to Perth Road 116*

During 2021 the steward groups all took part in routine trail maintenance activities including application of stone dust, tree planting, bench installation, grass cutting and generally improving the overall appearance of the Trailway.

Access was improved by creating a sloped trail at the Katherine St entrance near West Montrose as an alternative to using the stairs. A new gate was also installed to deter motorized vehicles.

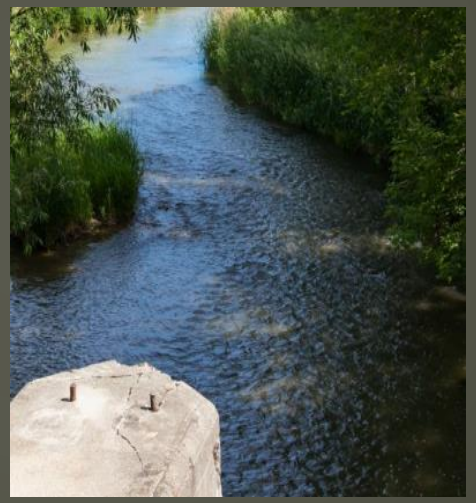



This ongoing work ensures that trail users can use the Trailway safely and maintains the overall aesthetic appearance of the trail. The steward groups also endeavor to maintain good relationships with adjoining landowners in order to address their concerns while at the same time ensuring the convenience and enjoyment of all trail users.

The Trailway Advisory Board anticipates that 2022 will continue as another busy year along the entire length of the Trailway. An inventory of trailway signage will be carried out in 2022 with the intent to replace all faded signs and to combine some of the smaller signs into a standardized format matching G2G trail and wayfinding signage.

The Advisory Board is confident that the work done by the steward groups and volunteers will result in the continued enjoyment of and support for the Kissing Bridge Trailway.

The Advisory Board continues its participation in the ongoing work of the G2G initiative and the promotion of an approximately 124 km, off-road trail connecting a network of communities across a significant portion of the southern Ontario landscape from Goderich to Guelph



Respectfully submitted,

Mike Curtis

Mike Curtis, Chair (2021)
Trailway Advisory Board
May 2022

Region of Waterloo

Transportation and Environmental Services

Design and Construction

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Public Consultation Information Package Lancaster Street Reconstruction, Wellington Street to Bridgeport Road, City of Kitchener

---

1. Recommendation:

For Information**.**

2. Purpose / Issue:

A virtual Public Consultation for the reconstruction of Lancaster Street from Wellington Street to Bridgeport Road will be available on Engage Region of Waterloo from June 10 to July 6, 2022. The purpose of this consultation is to obtain public comment on the preferred design alternative for the project being considered by the Project Team.

3. Strategic Plan:

The reconstruction of Lancaster street between Wellington Street and Bridgeport Road supports the Sustainable Transportation focus area in the 2019-2023 Strategic Plan by increasing participation in active forms of transportation (objective 2.3) and improving road safety for all users (objective 2.4).

4. Key Considerations:

The Project Team has developed three Design Concepts for the reconstruction of Lancaster Street. Each alternative concept includes different configurations of pedestrian and cycling facilities;

- Alternative #1 includes 1.25m wide on-road cycling lanes separated from the motor vehicle lanes by painted lines. New and reconstructed concrete sidewalks are included on both sides of the road.
- Alternative #2 includes 1.25m wide on-road cycle tracks separated from the motor vehicle lanes by flush concrete curbs. New and reconstructed concrete sidewalks are included on both sides of the road.
- Alternative #3 includes 1.50m wide cycle tracks built within the boulevard on both

sides of the road between the curb at the edge of the road and the edge of the right-of-way. The cycle tracks would be built abutting the new and reconstructed concrete sidewalks.

Alternative #1 would be the least expensive to construct and maintain of the three alternatives. Alternative #3 would be the most expensive and would require extensive utility relocation and property acquisition. However this alternative provides the greatest separation between cyclists and motor vehicles. As part of the project the Region will also be replacing key infrastructure including watermains, sanitary sewers and storm sewers.

Based on an evaluation of the alternative Design Concepts and input from the City of Kitchener's Cycling and Trails Advisory Committee and the Regions Active Transportation Advisory Committee, the Project Team's preliminary preference is for Alternative #3, Boulevard Cycle Tracks.

This Public Consultation provides an opportunity for individuals and interested groups to review and provide comments about the preferred design concept.

5. Background:

The pavement structural of Lancaster Street within the study area in poor condition. In addition, a trunk watermain between Louisa Street and Bridgeport Road is in poor condition and subject to on-going maintenance and repair issues. There are currently no cycling facilities on Lancaster Street. The 2018 Transportation Master Plan identifies the need for such facilities within the corridor. Although there is no need to widen the road to accommodate future vehicular traffic volumes, the potential inclusion of cycling facilities in the proposed roadworks will require the acquisition of property abutting the road right-of-way. Reconstruction is currently planned to be completed in phases between 2024 and 2026.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Area Municipality Communication: City of Kitchener staff and Kitchener City Councillor Sarah Marsh are included on the Project Team for this project.

Public/Stakeholder Engagement: The Project Team has met with the City of Kitchener's Cycling and Trails Advisory Committee and the Regions Active Transportation Advisory Committee. Both Committees have expressed a preference for Design Concept Alternative #3 which includes boulevard cycle tracks. A public consultation program will be conducted through the Region's Engage platform during June 2022 to obtain public input on the alternative designs being considered. Input from the Mount Hope Neighbourhood Association will also be sought.

7. Financial Implications:

N/A

8. Conclusion / Next Steps:

The Project Team will consider all feedback provided through the Public Consultation process prior to recommending a Design Concept for the reconstruction of Lancaster Street for approval by Planning and Works Committee.

9. Attachments / Links:

Attachment A: Lancaster Street Reconstruction Public Consultation Information Package (Docs #3213410)

Prepared By: **Peter Linn**, Senior Engineer

Marcos Kroker, Head, Design and Construction

Reviewed By: Phil Bauer, Director, Design and Construction

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services

Region of Waterloo

Lancaster Street Reconstruction
Wellington Street to Bridgeport Road
City of Kitchener
Public Consultation Information Package

What: The Region of Waterloo is undertaking an Environmental Assessment and Preliminary Design Study for the reconstruction of roadworks and municipal services on Lancaster Street (Regional Road 29) in the City of Kitchener.

Where: Lancaster Street from Wellington Street to Bridgeport Road.

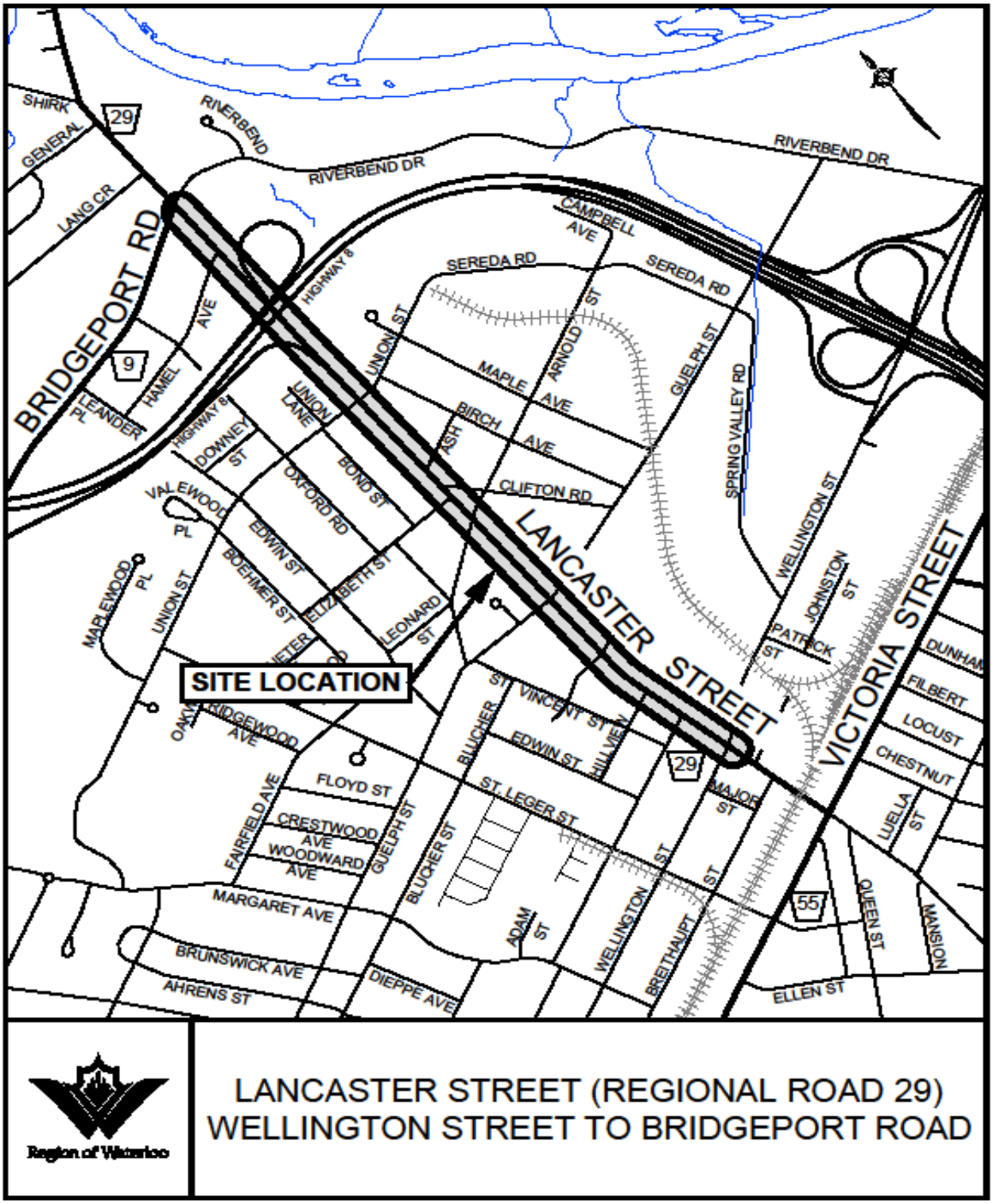
Why: To replace deteriorated pavement structure, sanitary sewers, storm sewers and watermains, improve traffic operations at intersections and provide facilities for pedestrians and cyclists.

When: Construction is currently scheduled to occur in phases from 2024 to 2026.

Who: Peter Linn, P.Eng.
Senior Project Manager
Region of Waterloo, Design and Construction
Phone: (519) 575-4757 ext. 3773
Email: PLinn@regionofwaterloo.ca

Public Consultation to be held virtually online at www.engagewr.ca from June 10 to July 6, 2022

KEY PLAN


SITE LOCATION
LANCASTER STREET
VICTORIA STREET
BRIDGEPORT RD
RIVERBEND DR
SHIRK
GENERAL
LANG CR
HAMEL AVE
LEANDER PL
HIGHWAY 8
DOWNEY ST
UNION LANE
UNION ST
SEREDA RD
CAMPBELL AVE
ARNOLD ST
GUELPH ST
MAPLE AVE
BIRCH AVE
ASH
CLIFTON RD
SPRING VALLEY RD
WELLINGTON ST
JOHNSTON ST
PATRICK ST
DUNHAM
FILBERT
LOCUST
CHESTNUT
LUELLA ST
MAJOR ST
QUEEN ST
MANSION
ELLEN ST
BREITHAUPT ST
WELLINGTON ST
ADAM ST
BLUCHER ST
ST VINCENT ST
HILLVIEW
EDWIN ST
ST LEGER ST
FLOYD ST
CRESTWOOD AVE
WOODWARD AVE
FAIRFIELD AVE
MARGARET AVE
BRUNSWICK AVE
AHRENS ST
DIEPPE AVE
OAKWOOD AVE
MARLEWOOD PL
VAL EWOOD PL
BOEHMER ST
ELIZABETH ST
LEONARD ST
OXFORD RD
BOND ST
29
9
55
Region of Waterloo
LANCASTER STREET (REGIONAL ROAD 29)
WELLINGTON STREET TO BRIDGEPORT ROAD

1. Why is the Region of Waterloo undertaking this study?

Lancaster Street within the study area is under the jurisdiction of the Regional Municipality of Waterloo (the Region). The Region is undertaking an Environmental Assessment and Preliminary Design Study to determine what improvements to the roadway and municipal services are required and how they should be implemented.

Lancaster Street currently consists of a two lane cross-section between Wellington Street and Union Street and four lanes between Union Street and Bridgeport Road. North of Bridgeport Road, Lancaster Street narrows to a two lane cross-section. There is a four lane bridge over Highway 85 between Union Street and Bridgeport Road. This bridge and the access ramps from Highway 85 are under the jurisdiction of the Ontario Ministry of Transportation (MTO).

The road is generally in satisfactory condition. However, this can be attributed to the single lift resurfacing that was done in 2009 as a temporary solution to defer the full depth road reconstruction that was required at the time. The roads granular base has continued to deteriorate and the overall condition of the road is expected to be in poor condition by the time of the scheduled reconstruction of the road. There are no existing cycling facilities on Lancaster Road. The existing sidewalks are not continuous within the study area.

Between Louisa Street and Bridgeport Road a jointly owned (Region and City of Kitchener) dual-use watermain is present. Sections of this watermain are over 80 years old and must be replaced due to on-going maintenance and repair issues. It is proposed that a new large diameter Regional trunk watermain and a separate local distribution watermain be installed to replace this dual-use watermain. The City of Kitchener has also indicated that the sanitary sewer between Louisa Street and Bridgeport Road must also be replaced due to its age.

2. Who is directing this study?

The planning and design of this study is being directed by a Project Team consisting of staff from the Region and the City of Kitchener and Kitchener City Councillor Sarah Marsh. A local consulting engineering firm, WalterFedy, has been retained by the Region to assist with the preparation of the Environmental Assessment and Preliminary Design Study, future Detailed Design and construction administration and inspection services during construction.

3. How is this project being planned and designed?

Specific project needs will be confirmed during the Environmental Assessment and Preliminary Design Study. Since the improvements being considered will not involve changes to the use, capacity or location of the reconstructed road, the Region intends to follow a Schedule A+ Municipal Class Environmental Assessment (EA) planning and design process. This means that the project is expected to have minimal long term adverse impacts on the environment.

The Municipal Class EA is a planning and decision-making process approved under the Environmental Assessment Act that is used by municipalities to plan public infrastructure projects so that potential environmental impacts are considered before a project is approved. The project may proceed to construction provided that appropriate public consultation is undertaken.

Studies of current conditions within the study area have been completed including the following;

- Intersection Control Study of the Bridgeport Road and Lancaster Street intersection
- Road Safety Audit
- Geotechnical Investigation and Pavement Design Report
- Vegetation Inventory Report
- Stage 1 Archaeological Assessment
- Cultural Heritage Resource assessment: Existing Conditions Report
- Phase 1 Environmental Site Assessment

Recommendations contained in these studies will be considered during the design of any infrastructure improvements within the study area.

The planning for this project will include public and stakeholder consultation to determine the potential impacts of the improvements being considered. Measures will be implemented to mitigate adverse impacts during and after construction to the greatest extent possible.

4. What is the Purpose of this Public Consultation Process?

Members of the public, business owners and other stakeholders are invited to review the existing conditions, identified deficiencies and potential improvements being considered and provide comments.

A Comment Sheet is attached to the back of this Information Package. Interested stakeholders are requested to fill out this out and submit it to the address indicated on the Comment Sheet. All comments received will be considered along with other information received over the course of the study to assist the Project team in completing the planning and design of this project.

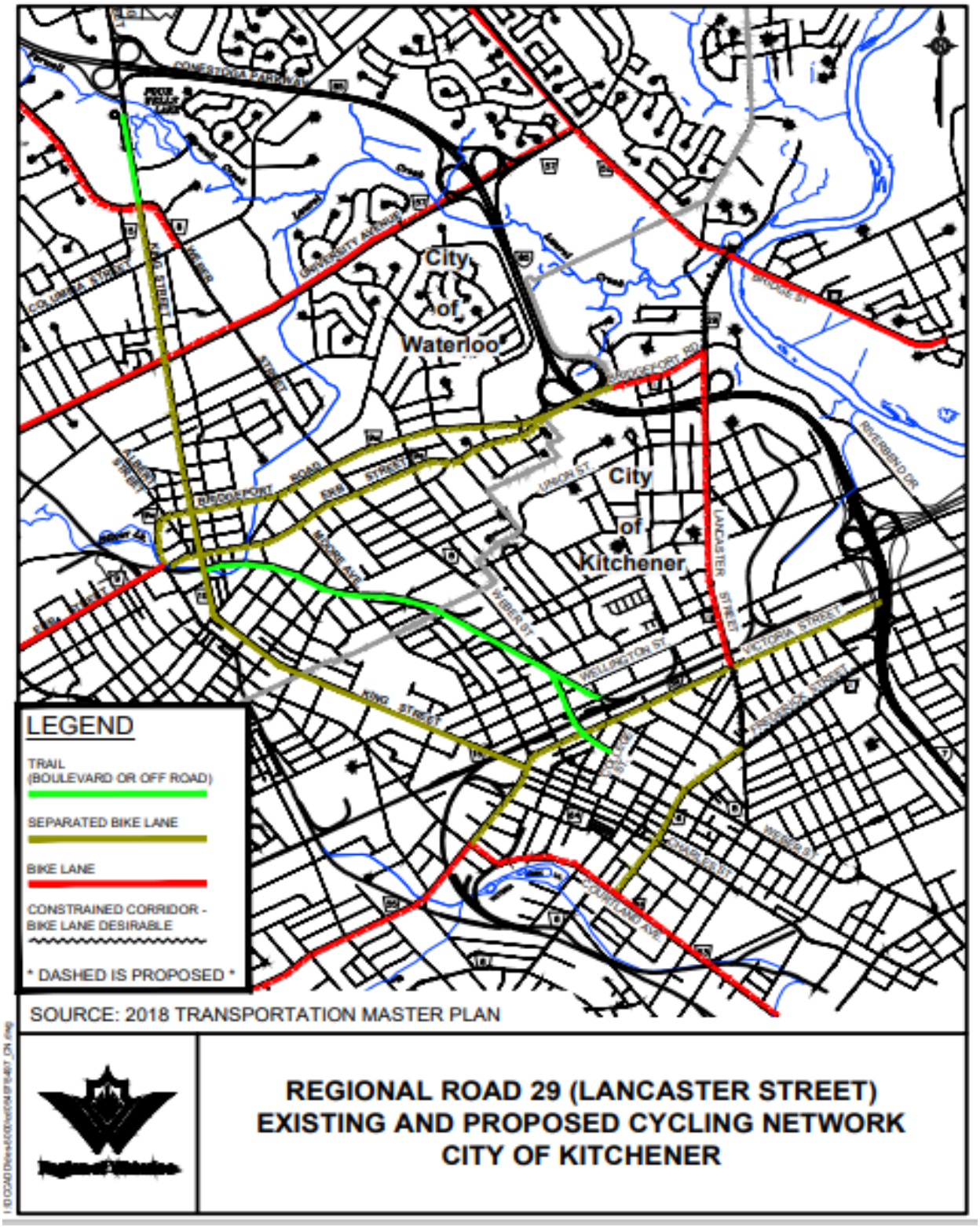
5. Are Active Transportation facilities being considered?

Yes, cycling facilities and sidewalks are being considered.

The Regions Corridor Design Guidelines identifies Lancaster Street within the study area as a Residential Connector. As such, the road corridor should have a strong focus on active transportation and transit modes of travel. Alternative types of cycling facilities are being considered and are described in Section 8 of this information package. In addition, sidewalks are proposed to be replaced or constructed where none currently exist.

The Region’s 2018 Transportation Master Plan does not identify a need to widen Lancaster Street within the study area to provide additional long-term vehicular traffic capacity. The Plan

does recommend that the Bridgeport Road at Lancaster Street intersection be improved to increase capacity through the intersection and that on-road cycling lanes be installed on Lancaster Street to connect with future cycling facilities on Bridge Street, Bridgeport Road and Frederick Street.



6. What other projects are being planned in this area?

The Region's approved 2022 Transportation Capital Program includes funding for the following projects in the vicinity of the study area;

- Bridgeport Road, Lancaster Street to Margaret Avenue – reconstruction in 2027
- Victoria Street, Lancaster Street to Margaret Avenue – resurfacing in 2024
- Lancaster Street at Metrolinx Rail crossing – Grade Separation Feasibility Study to be undertaken in 2022/23

7. What Improvements are being considered within the study area?

In order to improve the existing road conditions, the existing granular base, concrete curbs and asphalt surface must be replaced. The reconstruction of the roads pavement structure presents an opportunity to address other deficiencies within the study area. The additional improvements currently being considered include;

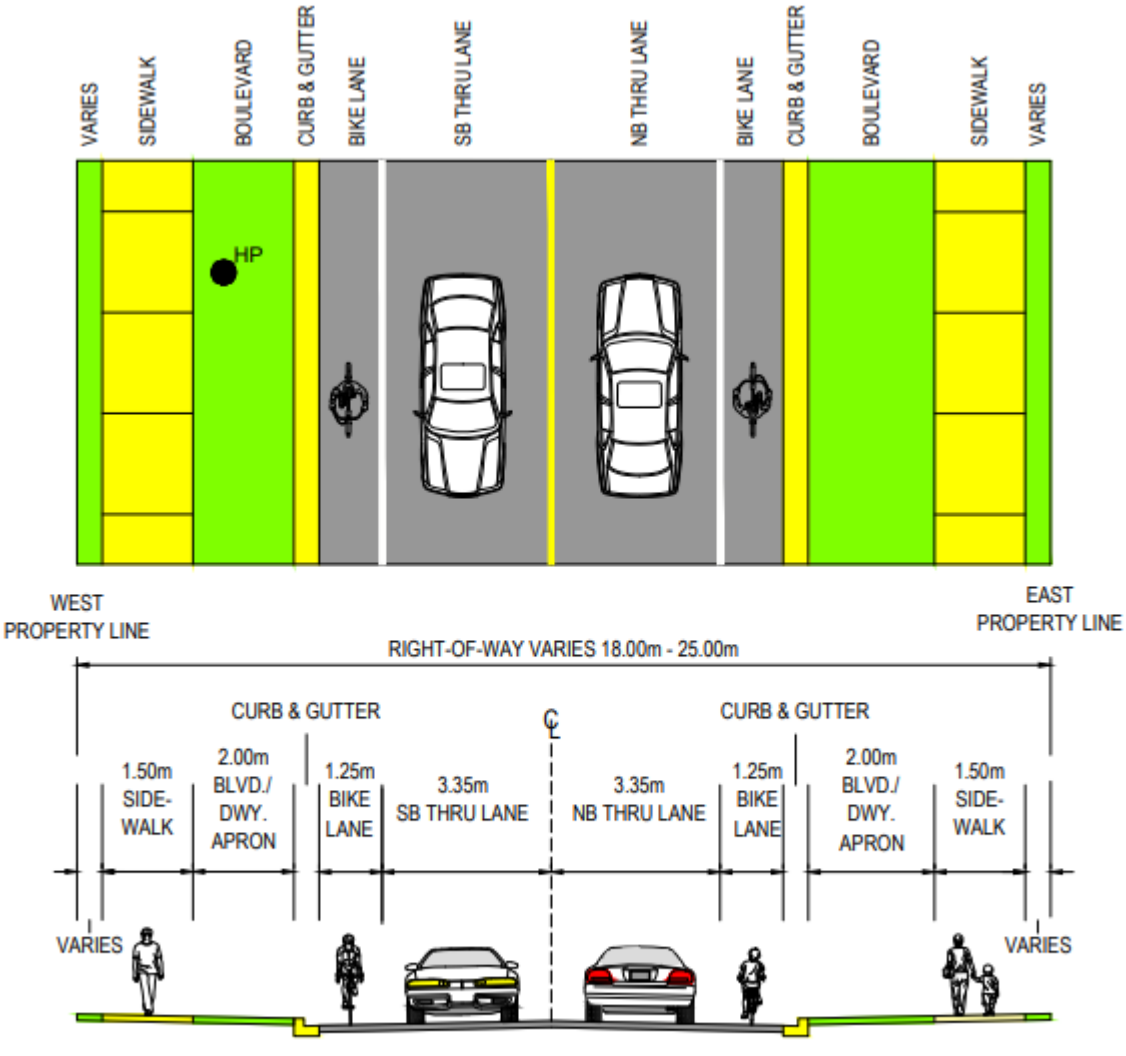
- Resurfacing of Lancaster Street between Bridgeport Road and General Drive including the construction of a new concrete sidewalk on the east side of Lancaster Street to service new development in the area
- Construction of new pedestrian and cycling facilities
- Intersection improvements at Bridgeport Road, Elizabeth Street, Louisa Street and Wellington Street including signal modernization and lane reconfiguration to improve capacity and safety
- Replacement of City of Kitchener sanitary sewers and watermains from Louisa Street to Bridgeport Road
- Replacement of Region of Waterloo storm sewers and trunk watermain from Louisa Street to Bridgeport Road
- Reconstruction of existing sidewalks and retaining walls as necessary
- Improvements to GRT bus stop pads
- Installation of a pedestrian refuge island at the Hamel Avenue intersection
- Utility relocation where necessary to accommodate the proposed improvements

8. What alternative Cycling Facilities are being considered?

Three alternative designs are currently being considered for cycling facilities on Lancaster Street within the study area. The narrow existing right-of-way width of Lancaster Street will impact the width of the facilities being considered, especially south of Guelph Street where there is a significant difference in elevation between residential properties and the existing road. The alternatives include the following;

Alternative #1 – On-Road Cycle Lanes

This alternative includes cycling lanes built a part of the asphalt road surface with the lane designated for cyclists demarcated with a painted line. Separate concrete sidewalks would be constructed between the curb and edge of the municipal right-of-way. This type of cycling facility conforms with the recommendations for cycling facilities on Lancaster Street contained in the Region's 2018 Transportation Master Plan. Alternative #1 would be the least expensive to construct and maintain of the three alternatives being considered.

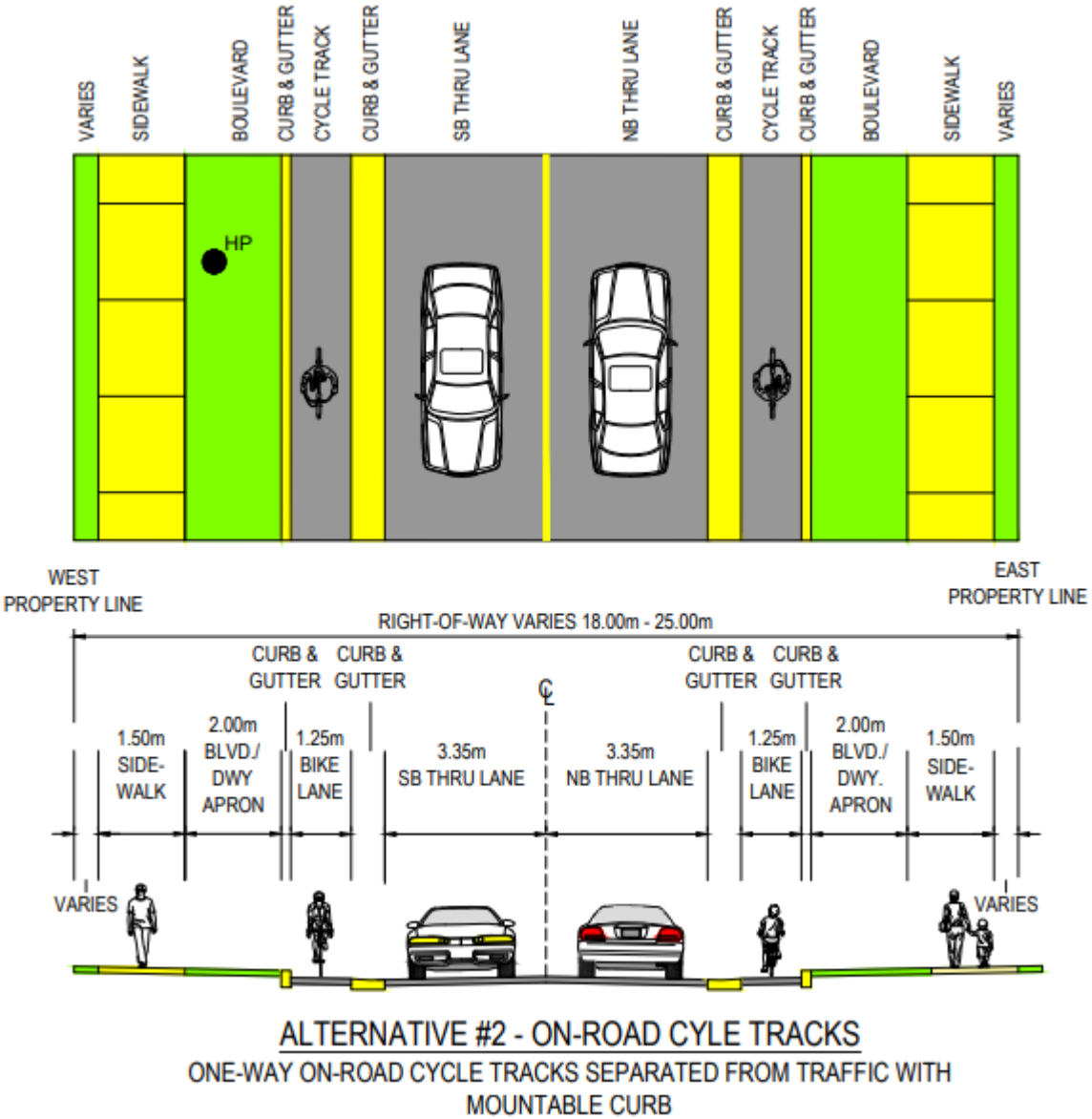


ALTERNATIVE #1 - ON-ROAD BIKE LANES
ON-ROAD BIKE LANES SEPARATED FROM TRAFFIC WITH PAVEMENT MARKINGS

Alternative #2 – On-road Cycle Tracks

This alternative includes cycling lanes built as part of the roads pavement structure but separated from the motor vehicles lanes by a flush concrete curb. Separate concrete sidewalks would be constructed between the barrier curb at the edge of the cycle track and the edge of the municipal right-of-way. This alternative would increase the separation

distance between motor vehicles and cyclists but would require utility relocation and limited property acquisition within the corridor.

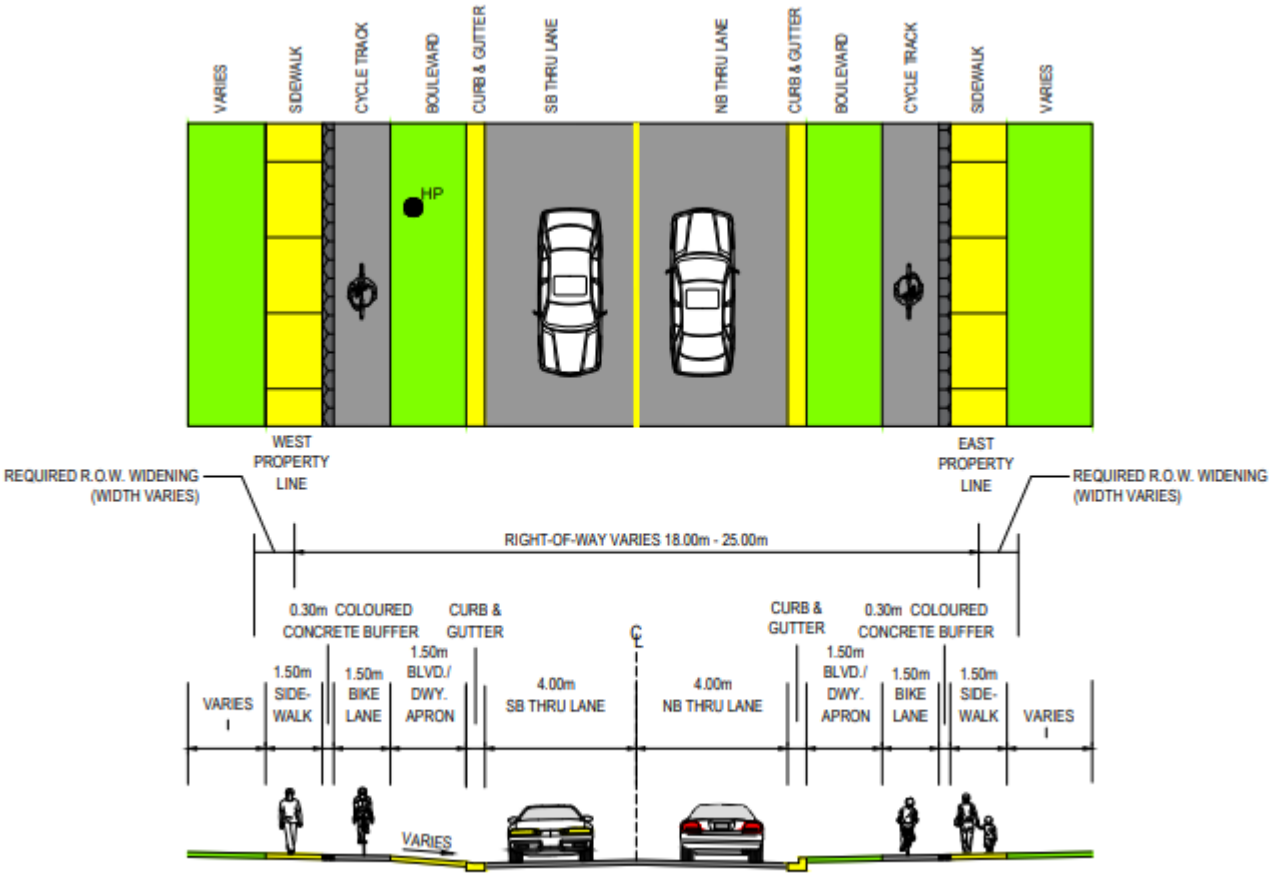


ALTERNATIVE #2 - ON-ROAD CYLE TRACKS

ONE-WAY ON-ROAD CYCLE TRACKS SEPARATED FROM TRAFFIC WITH MOUNTABLE CURB

Alternative #3 – Boulevard Cycle Tracks

This alternative includes cycling lanes built within the boulevard between the barrier curb at the edge of the road and the edge of the municipal right-of-way. The asphalt cycling lane would be built abutting the concrete sidewalk. A flush concrete buffer would be constructed between the cycling lane and the sidewalk. This alternative would maximize the separation distance between motor vehicles and cyclists. However the extra width required for this type of facility would require extensive utility relocation and property acquisition within the corridor. Alternative #3 would be the most expensive to construct and maintain of the three alternatives being considered.



ALTERNATIVE #3 - BOULEVARD CYCLE TRACKS

ONE-WAY BOULEVARD CYCLE TRACKS SEPARATED FROM SIDEWALKS WITH A COLOURED CONCRETE BUFFER

9. Is there a preferred design alternative?

The Project Team has consulted with the Kitchener Cycling and Trails Advisory Committee and the Region of Waterloo Active Transportation Advisory Committee regarding the alternative designs being considered for the cycling facilities on Lancaster Street. Both Committees and the Project Team have expressed a preference for Alternative #3-Boulevard Cycle Tracks due to the increased separation distance between motor vehicles and cyclists.

10. Who will be responsible for the winter maintenance of new cycle tracks and cycling facilities?

Maintenance of new active transportation (cycling) facilities constructed along Regional roads is the responsibility of the local municipality. On Lancaster Street, the City of Kitchener would undertake snow clearing operations on the proposed cycling facility.

11. How will traffic and access to properties be maintained during construction?

A detailed construction phasing and traffic management plan will be developed during the detailed design process for the improvements to be constructed. It may be necessary to close Lancaster street to all but local traffic when construction is occurring. Detours would be put in place for through traffic and signs would be erected to detour through traffic around the construction area via adjacent roads. The Fire Department, Waterloo Regional Police and Ambulance Service, as well as school boards for bus routing, will all be advised of the traffic restrictions and detour routes during the construction period. Motorists will be advised of the construction timing and traffic restrictions through advance signage and on the Region's web site.

During the construction, access to private driveways will be over temporary gravel surfaces and will be maintained at all times to the greatest extent possible. The Contractor will be required to temporarily block access into and out of driveways and side streets when completing any deep excavations or concrete pours (for curb and gutter, driveway aprons and sidewalks) across each driveway/side street. Where a disruption to a residential driveway is expected, the Contractor will be required to hand-deliver a notice at least 48 hours in advance advising of the time and duration of the driveway disruption.

For commercial properties, access for customers will be maintained at all times. For properties within the construction zone, "Name of Business" signage will be provided during construction to direct customers to the businesses. Please note that, the Region does not give tax relief or compensation to businesses within the work zone during construction.

Pedestrian access will be maintained via temporary paved sidewalks on at least one side of Lancaster Street for the duration of construction except for temporary situations where underground services or driveways are being replaced.

12. How will trees, driveways and lawns be affected?

It is expected that a number of trees will have to be removed during construction to accommodate the proposed improvements. In addition to new boulevard trees to enhance the streetscape, it is the Region's practice to plant two replacement trees for each tree removed as a result of any road projects where space permits.

There will be some work required at private driveways, retaining walls and front yards to tie into the new pedestrian and cycling facilities. Restoration of driveways and retaining walls will be done using materials which match or are similar to those which are existing. All driveway aprons between the sidewalk and roadside barrier curb will be completed in concrete.

The boulevard between the pedestrian/cycling facilities and the roadside curb will be sodded as will the area between the sidewalk and the edge of the municipal right-of-way.

13. How Will Garbage / Recycling Be Collected During Construction?

During construction property owners are asked to continue to place garbage, green bins and blue boxes at the end of driveways for pick-up as usual. When work is occurring in front of properties, the Regions contractor will deliver garbage and recyclables to an adjacent side street and return the empty containers afterwards.

14. What About Dust During Construction?

The Region will be monitoring the amount of dust generated by construction activities on a daily basis. When necessary, the Region will ensure that the contractor uses proper dust suppression measures (i.e. the application of water and/or calcium chloride) in accordance with the construction documents and specifications.

15. What About Working Hours?

In general, construction working hours will be from 7:00 a.m. to 7:00 p.m., Monday through Friday in accordance with the City of Kitchener's Noise Bylaw. There may be occasions where the Contractor requests or is required to complete a critical work item after normal working hours. In these special cases, the work must be agreed to by the Region and the City of Kitchener and must be proven to be critical to the requirements of the project or to lessen public inconvenience associated with the work.

16. Is any private property required for this project?

Widening of the existing municipal right-of-way and the acquisition of sections of private property may be required for the construction of the improvements currently being considered. Temporary working easements may also be required on several properties. For more information on the property acquisition process, please refer to Appendix A of this package.

17. Will any Heritage Resources or the Natural Environment be impacted by this project?

Several heritage resources including a number of buildings are located in proximity to the study area. However, it is expected that disturbance due to the construction of the proposed improvements will be limited primarily to the existing municipal right-of-way so that no mitigating measures will be required to protect these resources.

18. What is the estimated cost of this project?

The current estimated cost for the construction of the improvements expected to be a part of this project is approximately $9,100,000. This includes approximately $500,000 for active transportation facilities. The estimated cost of sewers and watermains to be installed on behalf of the City of Kitchener is $7,000,000.

19. What is the Project Schedule?

The Environmental Assessment and Preliminary Design Study is expected to be completed by December 2022. Detailed Design drawings and Phasing/Traffic Management Plans will be completed in 2023. Utility relocations and property acquisition will be undertaken in 2023. Construction is expected to be completed in phases from 2024 to 2026.

20. What are the next steps for this project?

Prior to proceeding with the completion of the Environmental Assessment and Preliminary Design Study, the Project Team will consider public and stakeholder input regarding the improvements being considered. The Project Team will use the comments obtained during this public consultation process to refine the alternative design concepts in conjunction with other technical data.

Once the Environmental Assessment and Preliminary Design Study is complete, a report regarding the proposed improvements will be presented to Regional Council for approval before proceeding with the preparation of Detailed Design drawings. Notices will be circulated to the public and stakeholders prior to the Council meeting so that anyone interested in speaking to Council about this project can do so before approval of the Recommended Design Concept.

21. How can I provide my comments?

In order to assist the Project Team in addressing any comments or concerns you might have regarding this project, we ask that you fill out the attached Comment Sheet and mail or email your comments to the Project Team members listed on the Comment Sheet no later than Wednesday July 6, 2022.

22. How can I view project information following this PCC ?

All of the Public Consultation Centre display materials and other relevant project information, notifications of upcoming meetings, and contact information are available for viewing at the Region of Waterloo municipal office as identified above. Alternatively, you may visit the Region's website at www.regionofwaterloo.ca.

Lancaster Street Reconstruction
Wellington Street to Bridgeport Road
Comment Sheet

Online Review and Comment Period – June 10 to July 6, 2022

Please complete this comment sheet so that your concerns can be considered for this project. Mail or e-mail your comments by Wednesday, July 6, 2022 to:

Mr. Peter Linn, P.Eng.
Senior Project Manager
Region of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3
Telephone: (519) 575-4757 x3773
Email: plinn@regionofwaterloo.ca

Mr. Dave Weiler, P.Eng.
Senior Civil Project Manager
Walter Fedy
675 Queen Street South, Suite 111
Kitchener, ON N2M 1A1
Telephone: (519) 576-2150 x242
Email: dweiler@walterfedy.com

Comments regarding this project:

Name:

Address:

Postal Code:

Phone: **Email:**

Do you wish to be placed on the mailing list for this project? Yes_____No_____

Collection Notice
All comments and information received from individuals, stakeholder groups and agencies regarding this project are being collected to assist the Region of Waterloo in making a decision. Under the "Municipal Act", personal information (such as name, address, telephone number, and property location) that may be included in a submission becomes part of the public record.

Appendix A

Property Acquisition Process Information Sheet

The following information is provided as a general overview of the property acquisition process and is not legal advice. Further, the steps, timing and processes can vary depending on the individual circumstances of each case.

Once the Recommended Design Concept has been approved and final design is near completion, the property acquisition process and the efforts of Regional Real Estate staff will focus on acquiring the required lands to implement the approved design. Regional staff cannot make fundamental amendments or changes to the approved design concept.

Property Impact Plans

After the project has been approved and as it approaches completion of final design, the project planners will generate drawings and sketches indicating what lands and interests need to be acquired from each affected property to undertake the project. These drawing are referred to as Property Impact Plans (PIP).

Initial Owner Contact by Regional Real Estate Staff

Once the PIPs are available, Regional Real Estate staff will contact the affected property owners by telephone and mail to introduce themselves and set-up initial meetings to discuss the project and proposed acquisitions.

Initial Meetings

The initial meeting is attended by the project engineer and the assigned real estate staff person to brief the owner on the project, what part of their lands are to be acquired or will be affected, what work will be undertaken, when, with what equipment, etc. and to answer any questions. The primary purpose of the meeting is to listen to the owner and identify issues, concerns, effects of the proposed acquisition on remaining lands and businesses that can be feasibly mitigated and/or compensated, and how the remaining property may be restored. These discussions may require additional meetings. The goal of staff is to work with the owner to reach mutually agreeable solutions.

Goal – Fair and Equitable Settlement for All Parties

The goal is always to reach a fair and equitable agreement for both the property owner and the Region. Such an agreement will provide compensation for the fair market value of the lands and address the project impacts (such as repairing or replacing landscaping, fencing, paving) so

that the property owner will receive the value of the lands acquired and the restoration of their remaining property to the condition it was prior to the Project.

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.

Steps Toward Offer of Settlement or Agreement of Purchase and Sale

The general steps towards such an offer are as follows;

1) the Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;
2) compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;
3) reasonable costs of the owner will be included in any compensation settlement;
4) an offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and
5) an Agreement will be finalized with any additional discussion, valuations, etc. as may be required.

Depending on the amount of compensation, most agreements will require the approval of Council. The approval is undertaken in Closed Session which is not open to the public to ensure a level of confidentiality.

Expropriation

Due to the time constraints of these projects, it is the practice of the Region to commence the expropriation process in parallel with the negotiation process to insure that lands and interests are acquired in time for commencement of the Project. Typically, over 90% of all required lands and interests are acquired through the negotiation process. Even after lands and interests have been acquired through expropriation an agreement on compensation can be reached through negotiation, this is usually referred to as a ‘settlement agreement’.

Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario *Expropriations Act* must be followed to ensure that the rights of the property owners provided under that *Act* are protected.

Region of Waterloo

Transportation and Environmental Services

Design and Construction

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Date:	June 7, 2022
Report Title:	C2022-10: Consultant Selection for Elmira By-Pass and Arthur Street Widening Corridor Study (Regional Road 85), from the King Street overpass at Hwy 85 to Listowel Road, Township of Woolwich

---

1. Recommendation:

That the Regional Municipality of Waterloo enter into a Consulting Services Agreement with Associated Engineering (Ont.) Ltd for the Elmira By-Pass and Arthur Street Widening Corridor Study (Regional Road 85), from approximately 900m north of the King Street overpass at Hwy 85 to Listowel Road, and a new Elmira By-Pass road corridor between Arthur Street at Listowel Road northerly to Arthur Street North (Regional Road 21) north of Elmira, in the Township of Woolwich, in the amount of $1,371,957 plus all applicable taxes, as outlined in report TES-DCS-22-19, dated June 7, 2022.

2. Purpose / Issue:

Purchasing by-law 16-032 Part VI, section 19 (2) requires Council to approve consultant proposals in excess of $500,000 provided that the proposal is compliant and that it best meets the established criteria.

3. Strategic Plan:

This project meets the 2019-2023 Corporate Strategic Plan Objective 2.3 to increase participation in active forms of transportation (cycling and walking) and Objective 2.4 to improve road safety for all users – drivers, cyclists, pedestrians, horse and buggies.

4. Key Considerations:

An engineering consultant is required to complete a Schedule C Class Environmental Assessment (Class EA) and preliminary design services for the Elmira By-Pass and Arthur Street Widening Corridor Study, in the Township of Woolwich, which includes:

1) Part A: Widening of Arthur Street (Regional Road 85) from approximately 900 metres north of the King Street overpass at Hwy 85 to Listowel Road, including consideration for active transportation facilities, Regional watermain and other infrastructure needs,

intersection improvements and the extension or replacement of the Arthur Street bridge over the Conestoga River.

2) Part B: A new Elmira By-Pass corridor between Arthur Street at Listowel Road northerly to Arthur Street North (Regional Road 21) north of Elmira, including consideration for active transportation facilities, infrastructure needs, and intersection improvements.

A consultant selection process was conducted in accordance with the Region's Purchasing By-Law. Associated Engineering (Ont.) Ltd. of Kitchener, Ontario, achieved the highest overall score. Therefore, the Consultant Evaluation Team recommends that Associated Engineering (Ont.) Ltd. be retained to undertake the Class EA and preliminary design for this assignment as described above.

The upset fee limit proposed by Associated Engineering (Ont.) Ltd. to complete the Class EA and preliminary design services is $1,371,957.00 plus all applicable taxes. The fee provided is within the expected range of fees for this type of assignment.

A description of the consultant selection process is included in Appendix A.

5. Background:

The Region of Waterloo intends to undertake a Schedule C Environmental Assessment for the widening of Arthur Street from approximately 900 metres north of the King Street overpass at Hwy 85 to Listowel Road and for consideration of a new Elmira By-Pass road corridor between Arthur Street at Listowel Road northerly to Arthur Street North (Regional Road 21) north of Elmira, in the Township of Woolwich, to address the need for transportation and traffic related improvements. The site location is shown in Appendix B.

In addition to the roadway improvements, other improvements planned for this project will include the need and ability to accommodate alternative modes for new active transportation facilities (pedestrian, cyclist, etc.) and transit network improvements, as well as possible intersection improvements, urbanization (curb and gutter, street lighting), storm sewers, drainage improvements, watermains, sanitary sewers and extension or reconstruction of the existing bridge over Conestoga River.

The 2018 Regional Transportation Master Plan Update (Moving Forward) has identified Regional Road 85 (Arthur Street South), Highway 85 to Sawmill Road (Regional Road 17), and Sawmill Road (Regional Road 17) to Listowel Road (Regional Road 85), for road widening (i.e. additional vehicle travel lanes) in the listing of recommended 2031 interim and 2031 to 2041 road network improvements, respectively. Other recommendations for road improvements beyond the 2031-2041 planning horizon of the Regional Transportation Master Plan include for an Elmira By-Pass road, north of Listowel Road (Regional Road 85) to Arthur Street North (Regional Road 21) north of Elmira. Planned improvements have been established to help manage the Region's growth and transportation needs, including supporting all modes of travel.

6. Area Municipality Communication and Public/Stakeholder Engagement:

The Project Team includes staff from the Region, the Region's consultant and the Township of Woolwich, as well as Region of Waterloo Councillor/Township of Woolwich Mayor Sandy Shantz and Township of Woolwich Councillor Scott McMillan.

The Class EA and preliminary design process will involve public, area municipal and stakeholder engagement prior to establishing the preferred design for the Arthur Street and Elmira By-Pass corridors. Ongoing engagement during the Class EA and preliminary design will include affected property owners, area municipalities, the Ontario Ministry of Transportation, utilities and regulatory authorities such as the Ontario Ministry of Environment, Conservation and Parks and the Grand River Conservation Authority.

7. Financial Implications:

The 2022-2031 Transportation Capital Program includes $595,000 in 2022 and $300,000.00 in 2023 for the Elmira By-Pass Study (Project #07551). Additional funding of $580,000.00 in 2023 and $397,000.00 in 2024 is required to complete the work for this project. Detailed financial implications are included in Appendix C.

8. Conclusion / Next Steps:

Subject to Regional Council's approval of this consultant assignment, the proposed schedule for this project is as follows:

- Project Initiation — June/July 2022
- Class EA and Preliminary Design — 2022 – 2024
- Project Approval by Regional Council — Fall of 2024
- Filing of Environmental Study Report (ESR) — End of 2024

9. Attachments / Links:

Appendix A: Consultant Selection Process

Appendix B: Site Location

Appendix C: Detailed Financial Implications

Prepared By: **William Gilbert**, Senior Engineer, Design and Construction

Marcos Kroker, Head, Design and Construction

Reviewed By: **Phil Bauer**, Director, Design and Construction

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Appendix A

Consultant Selection Process

A Request for Proposal to provide engineering consulting services was advertised in the Record, and on both the Region and Ontario Public Buyers Association websites. Five (5) Proposals were submitted and evaluated by the Region's selection team.

The criteria used to evaluate the Proposals and Upset Fee Estimates were in accordance with the Region's Purchasing By-law and included price as a factor in the selection process. These evaluation criteria and their respective weightings were as follows:

Quality Factors

- Project Understanding and Approach (35%)
- Experience of the Project Manager (25%)
- Experience of the Project Support Staff (10%)
- Experience on Similar Projects (15%)

Price Factor

- Upset Limit Fee (15%)

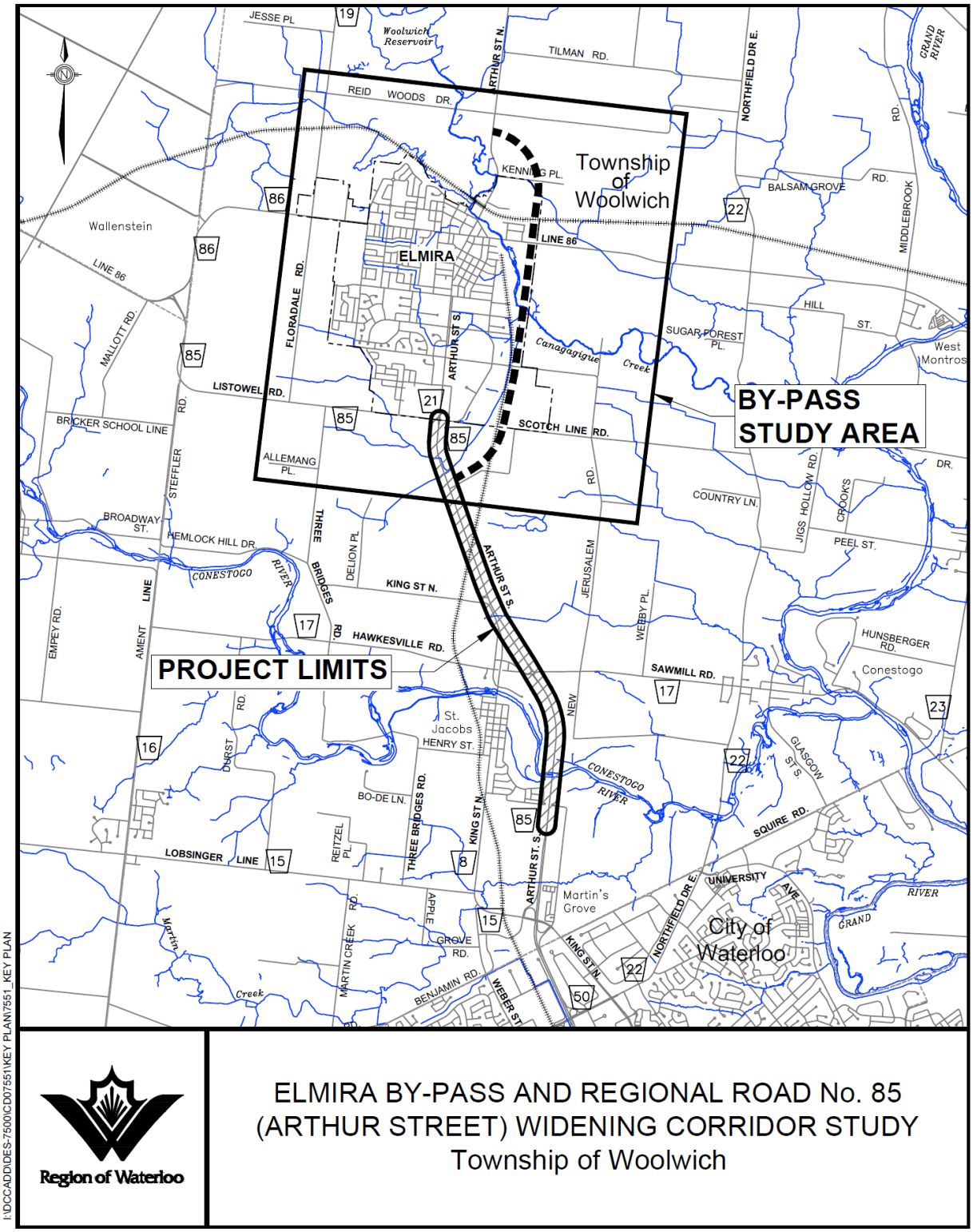
After evaluation of the proposals for quality factors, the evaluation team shortlisted and received Work Plans and Upset Limit Fee estimates from the following three (3) highest scoring consultants:

  - Associated Engineering (Ont.) Ltd.
  - Dillon Consulting
  - MTE

When considering all Quality and Price Factors, the submission from Associated Engineering (Ont.) Ltd. scored the highest overall score. Associated Engineering (Ont.) Ltd. received the highest technical score due to significant understanding of the project and superior experience on similar projects.

Appendix B

Site Location



Region of Waterloo

ELMIRA BY-PASS AND REGIONAL ROAD No. 85
(ARTHUR STREET) WIDENING CORRIDOR STUDY
Township of Woolwich

I:\DCCADDIDES-7500\CD07551\KEY PLAN\7551_KEY PLAN

Appendix C

Detailed Financial Implications

Region of Waterloo

C2022-10	$1,372,000
Geotechnical/Hydrogeological/Archaeological Studies	300,000
Region (PM, etc.) (HST N/A)	170,000
Sub-total	$1,842,000
Plus: Applicable Net HST of 1.76%	29,400
Total	$1,871,400

Note: All figures are rounded to the nearest $100.

The Region's approved 2022-2031 Transportation Capital Program includes a budget as outlined below:

Region of Waterloo Transportation Division - Proposed Budget Amendments (000's)

	2022	2023	2024	Total
07551 Elmira By-Pass Study				
Original Budget	$595	$300	$0	$895
Proposed Expenditure	595	880	397	1,872
Proposed Amendments	$0	$580	$397	$977
Proposed Funding Amendments				
RDC RF Transportation	$0	$580	$397	$977

Note: All figures are rounded to the nearest $100.

The cost of this engagement exceeds the project budget by $977,000. These additional costs are attributable to an increase in the scope of work necessary for completion of the EA study due to the complexity of work, including significant public consultation, potential environmental impacts and extent of the study area under consideration for both the Arthur Street widening and Elmira By-Pass corridor.

The proposed funding amendments will be made during the 2023 capital budget process.

Region of Waterloo

Transportation and Environmental Services

Design and Construction

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Notice of Virtual Public Consultation, King Street and Coronation Boulevard Improvements, Bishop Street to Water Street, City of Cambridge

---

1. Recommendation:

For information.

2. Purpose / Issue:

To share information that will be presented through public consultation for the King Street and Coronation Boulevard Improvements, Bishop Street to Water Street, in the City of Kitchener.

3. Strategic Plan:

This project supports Strategic Focus Area 2 (Sustainable Transportation) and specifically Strategic Objectives 2.3 and 2.4 to increase participation in active forms of transportation (cycling and walking) and improve road safety for all users.

This public consultation supports Strategic Focus Area 5 (Responsive and Engaging Public Service), specifically 5.1 – Enhance opportunities for public engagement, input and involvement in Region of Waterloo.

4. Key Considerations:

This first public consultation provides an opportunity for individuals and interested groups to:

- View the proposed design concepts that have been developed to provide active transportation infrastructure, roadway improvements, and intersection improvements on King Street and Coronation Boulevard from Bishop Street to Water Street.
- Engage in “virtual dialogue” with Project Team representatives and ask any questions regarding the project or study process.
- Provide comments and input regarding the planning and design of the improvements being considered.

This will be a virtual public consultation, consistent with the approach outlined in TES-DCS-20-02.

5. Background:

The following needs are driving this project:

- Deteriorated road condition
  The pavement condition on King Street and Coronation Boulevard is in fair to poor condition due to the age of the asphalt. The proposed works will replace the deteriorated pavement and upgrade the underground storm sewer system.

- Underground Service Condition
  A study completed by the City of Cambridge of the current underground services (infrastructure) identified the existing watermain and sanitary to be in poor condition and requires replacement. The proposed works will identify improvement needs and replace the underground services for a significant length of this project.

- Pedestrian and Cycling Needs
  Currently there are limited pedestrian or cycling facilities on King Street and Coronation Boulevard. The Region of Waterloo 2018 Transportation Master Plan identifies King Street and Coronation Boulevard as “medium-high” potential for cycling infill through the use of protected cycling facilities. Accordingly multiuse trails and cycle tracks are being considered as alternatives on both the north and south sides of King Street and Coronation Boulevard for the entire length from Bishop Street to Water Street. Efficient and desirable interconnections for pedestrians and cyclists between existing developments on both sides of the roadway will be considered with the design.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Area Municipality Communication: The Project Team consists of staff from the Region of Waterloo and the City of Cambridge, including Regional Councillor Karl Kiefer (Cambridge), City of Cambridge Councillor Mike Mann (Ward 3) and Councillor Jan Liggett (Ward 4).

Public/Stakeholder Engagement: Proposed design concepts will be posted to the Region’s EngageRW site from June 8 to July 6, 2022 to solicit input from the public on the proposed active transportation facilities and road improvements for King Street and Coronation Boulevard. The Region will communicate with the public and stakeholders through channels such as: direct letter mail to all properties within the project area and other stakeholders; signs installed at the project location with website links to consultation opportunities; direct email will be sent through the EngageRW site to all project page members; and a link to the EngageRW site will be posted on the Region’s social media channels.

7. Financial Implications:

The Region's approved 2022-2031 Transportation Capital Program includes a budget of approximately $15.2 million for this project, to be funded from the Transportation Capital Reserve.

8. Conclusion / Next Steps:

The Project Team will consolidate and assess all comments received from the public and agencies during this consultation, and take this feedback into consideration as the Project Team develops a preferred alternative. This preferred alternative will be shared with the public for a second round of public consultation and agency input, then a recommended alternative will be presented to Council for consideration. Subject to Council approval, the project will proceed to detailed design and ultimately construction. Construction is currently planned for 2025 and 2026.

9. Attachments / Links:

Attachment A: King Street, Coronation Boulevard PPC No. 1 Information Package (Docs #4004665)

Prepared By: **Greg Proctor**, Project Manager, Design and Construction

Skylar Van Kruistum, Head, Design and Construction

Reviewed By: **Phil Bauer**, Director, Design and Construction

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Information Package

King Street and Coronation Boulevard Improvements

Bishop Street to Water Street, City of Cambridge

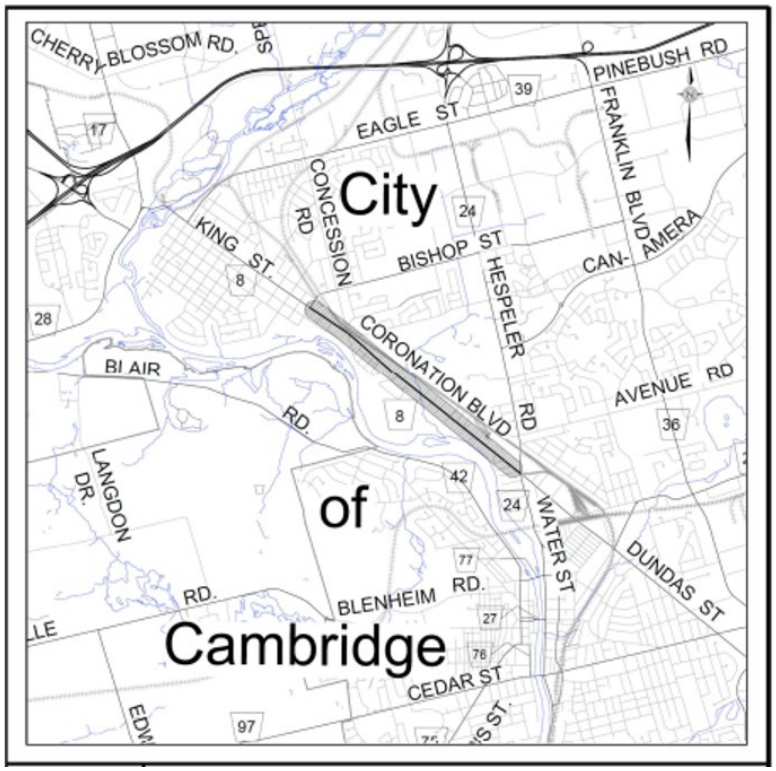
Public Consultation Centre No. 1 — June 8–July 6, 2022
website: engagewr.ca/king-and-coronation-improvements

What: The Region of Waterloo is undertaking a Municipal Class Environmental Assessment (EA) of King Street and Coronation Boulevard to determine improvements to the corridor.

Where: Bishop Street to Water Street, City of Cambridge

When: 2025 and 2026 Construction (tentative)

Who: Region of Waterloo, Project Manager
Greg Proctor, C.E.T.
519-575-4729
Gproctor@regionofwaterloo.ca



Questions and answers

1. Project background

Why is the Region considering this project?

There are a number of needs driving this project, as follows:

- Deteriorated road condition
  The pavement condition on King Street and Coronation Boulevard is in fair to poor condition due to the age of the asphalt. The proposed works will replace the deteriorated pavement and upgrade the underground storm sewer system.

- Underground Service Condition
  A study completed by the City of Cambridge of the current underground services (infrastructure) identified the existing watermain and sanitary sewer to be in poor condition and requires replacement. The proposed works will identify improvement needs and replace the underground services for a significant length of this project.

- Pedestrian and Cycling Needs
  Currently there are limited cycling facilities on King Street and Coronation Boulevard, and some of the pedestrian facilities are in need of upgrades. The Region of Waterloo 2018 Transportation Master Plan identifies King Street and Coronation Boulevard as “medium-high” potential for cycling infill through the use of protected cycling facilities. Accordingly, multiuse trails and cycle tracks are being considered as alternatives on both the north and south sides of King Street and Coronation Boulevard for the entire length from Bishop Street to Water Street. Efficient and desirable interconnections for pedestrians and cyclists between existing developments on both sides of the roadway will be considered with the design.

Who is directing the project?

The planning and design for this project is being directed by a project team consisting of staff from the Region of Waterloo and the City of Cambridge, including Regional Councillor Karl Kiefer (Cambridge), City of Cambridge Councillor Mike Mann (Ward 3) and Councillor Jan Liggett (Ward 4). The consulting engineering firm WalterFedy has been retained by the Region of Waterloo to assist the Region in leading this Class EA Study and to provide planning and preliminary design services.

How is this project being planned?

This project is being planned in accordance with the requirements of the Municipal Class Environmental Assessment (Class EA) process. The Municipal Class EA process is a planning and decision-making process approved under the Environmental Assessment Act of Ontario used by municipalities to plan and implement public

infrastructure projects to ensure that potential environmental, transportation, social/economic and cost impacts are considered before a project is approved. Consultation with the public, stakeholders, and federal and provincial agencies is required during the Class EA Study and development of planning and design alternatives and their potential impacts.

This Class EA Study is being completed as a Schedule 'A+' Class EA project, which are pre-approved activities, however, the public is to be advised prior to project implementation.

This initial Public Consultation is being held for members of the public to become aware of the project and to provide input into the project for further development of alternatives.

What is the estimated cost of this project?
The cost of this project will depend on the approved improvement alternative, as well as necessary infrastructure relocations, replacements, utility relocations, and property acquisitions. The Region's approved 2022 Transportation Capital Program currently has approximately $15.2 million budgeted for this project between 2022 and 2027.

What is the project schedule and what are the next steps for improvements on King Street and Coronation Boulevard?
The project team will review the public comments received from this first public consultation along with any other stakeholder feedback and technical studies completed to date to further develop the design alternatives and establish a preferred design alternative. The alternatives considered and the preferred design alternative will be presented at the second public consultation, which is tentatively scheduled for fall/winter 2022. After the second public consultation, the project team will review the public comments and identify a Recommended Design Alternative to be brought forward to Regional Council for design approval.

Pending design approval by Regional Council, detailed design, property acquisitions and utility relocations will commence, followed by construction, which will be completed in stages. Construction is tentatively scheduled to start in 2025.

2. Active transportation

Are active transportation upgrades or road width impacts being considered?
Yes, both active transportation upgrades and road width impacts are being considered in accordance with current Regional master plans and guidelines. The Context Sensitive Regional Transportation Corridor Design Guidelines (CDG) is a planning policy document that guides the design of Regional roads. The CDG identifies design parameters for necessary features within the road allowance such as vehicle lanes, cycling facilities, sidewalks, and boulevards.

Coronation Blvd, from Water Street to Concession Road, is identified as a "Neighborhood Connector: Avenue" in the CDG. Avenue streets are intended to support active transportation including walking, cycling and transit and provide a high level of design and comfort for pedestrians and cyclists. The 2018 Transportation Master Plan (TMP) recommends the installation of protected cycle facilities on both sides of the roadway.

The section of King Street from Concession Road to Bishop Street is identified as a "Neighborhood Connector: Main Street" in the CDG. Main Streets are supportive of, and prioritize, active transportation and transit. The 2018 Transportation Master Plan (TMP) recommends the installation of protected cycle facilities on both sides of the roadway.

Consideration of all road corridor users (pedestrians, cyclists and motorists) will ensure efficient and desirable interconnections between existing developments on both sides of the roadway.

A recent traffic study has examined the existing traffic volumes and patterns along with an in-depth analysis of the potential traffic volumes and travel patterns. This analysis has identified that King Street, between Bishop Street and Concession Road should undergo a "road diet", reducing the current four through lanes to two, in order to accommodate active transportation. Coronation Boulevard, from Concession Road to Water Street will remain at four lanes, with localized improvements to accommodate active transportation and the traffic movements at existing proposed intersections.

GRT currently operates transit routes along the King Street and Coronation Boulevard corridor, and any needed bus stop improvements will be coordinated with GRT as part of this project.

Has the project team identified alternatives for active transportation facilities?
The project team has identified preliminary design alternatives that include a boulevard multi-use trail on each side of the road or a concrete sidewalk and an off-road separated cycling facility. These design alternatives and potentially others will be reviewed by the project team and recommended active transportation facilities will be included in the preferred design alternative to be presented at the second public consultation (currently planned for fall/winter 2022).

3. Options

What potential solutions have been considered so far, and which of these solutions will be further considered and developed into alternative design options moving forward?
The solutions for improvements considered by the project team so far are described in the list below. The project team has screened and evaluated each of these potential solutions and has made recommendations as described below.

In reviewing the potential solutions, the project team considered adding active transportation facilities as the Region's primary objective for the corridor.

A. Do Nothing

As part of any Class EA process, there is always a consideration of the "Do Nothing" alternative to assess what would happen if no action is taken to address the project concerns beyond typical restoration measures. In this case, the "Do Nothing" solution would involve reconstructing King Street and Coronation Boulevard in their current four-lane urban cross-section with sidewalk and a small portion of multi-use trail. This solution was screened out because it does not satisfy the Region's primary objective for the corridor.

Recommendation: Do not carry forward

B. Active Transportation Facilities

Providing facilities for cyclists and pedestrians on King Street and Coronation Boulevard, between Bishop Street and Water Street, is considered an essential component of the overall solution for this corridor. There are two options under consideration:

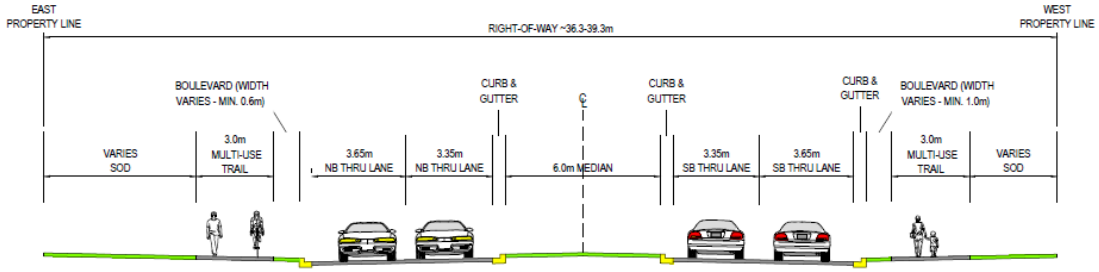
- A multiuse trail (two directional), or
- A multi-directional cycle track and sidewalk

Recommendation: Carry forward both options in conjunction with other solutions

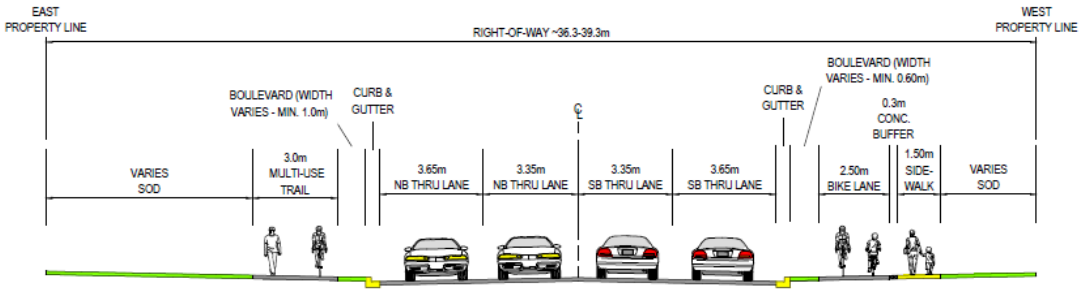
C. Coronation Boulevard Centre Median

A median is used to divide traffic flow, which provides the opportunity for sheltered left turn movements, plantings and controlled access from adjacent properties. However, this also restricts movements from adjacent properties and presents the necessity for U-turns. The two options under consideration include:

- A 6.0m wide centre median, with narrow boulevards, or
- No centre median, with widened boulevards.



ALTERNATIVE #2A
6.0 CENTER MEDIAN
TYPICAL SECTION



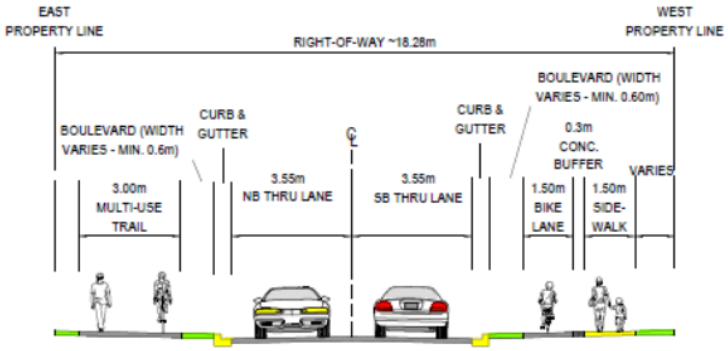
ALTERNATIVE #2B
NO CENTER MEDIAN
TYPICAL SECTION

Recommendation: Carry forward both options in conjunction with other solutions

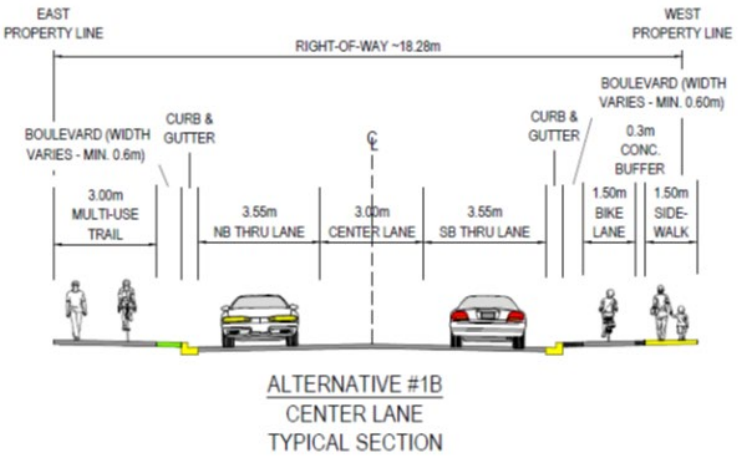
D.King Street Road Diet

Currently King Street consists of four through lanes and is to be reduced to two through lanes to accommodate active transportation facilities. However, two options are under consideration, which include:

- Two through lanes with multi-use trails and no centre lane; or
- Two through lanes with multi-use trails and a 3.0m wide centre turn lane.



ALTERNATIVE #1A
NO CENTER LANE
TYPICAL SECTION



Recommendation: Carry forward both options in conjunction with other solutions

E. Traffic Signals

Traffic signals provide effective traffic control at intersections to provide pedestrian and cycle movements. Turning movement stacking will also be reviewed as turning movements may suffer from lower level of service during peak periods, which may result in large traffic queues.

Recommendation: Carry forward

As the project study moves forward, the alternative solutions selected for further consideration will be used to determine alternative design options for the corridor. The design options will be evaluated by the project team and presented at a future public consultation along with a Preferred Design Solution for review and comment.

How and when will the project team develop design alternatives?

Once feedback from the first public consultation is received, along with feedback from agencies and stakeholders, and technical studies that are in progress, the project team will further refine and evaluate the design alternatives over the course of the summer and fall of 2022. A preferred design alternative will be presented at a second public consultation, currently scheduled for fall/winter 2022.

How will the project team evaluate design alternatives to establish a preferred design alternative?

Once the design alternatives are established by the project team, they will be assessed against a set of evaluation criteria to determine which design alternative best addresses the project needs.

Where will roundabouts or traffic signals be considered on this project?
Where projected traffic volumes would warrant new or improved traffic control signals, roundabouts have also been considered. Based on preliminary screening, roundabouts have been screened out and traffic signals will be utilized at the following intersections:

- Bishop Street
- Concession Road
- Cambridge Memorial Hospital (north access)
- Oliver Avenue
- Hespeler Road / Water Street / Dundas Street ('The Delta')

Further analysis will be completed by the project team at the above locations to determine whether signalized intersection improvements are recommended as part of the overall preferred design alternative to be presented at a second public consultation (currently scheduled for fall/winter 2022)

What will happen at the intersections where traffic signals are not being considered?
Preliminary analyses for those existing intersections along King Street and Coronation Boulevard that are currently not controlled by traffic signals has determined that traffic signals are not warranted. The project team will review the current configurations and identify any improvements or modifications to these intersections and identify the need for them to operate as full-movement access with turning lanes or whether there is a need to restrict left-turn in and/or left-turn out movements. The project team will determine which improvements will be recommended as part of the overall preferred design alternative to be presented at a second public consultation (currently scheduled for fall/winter 2022).

Will the posted speed limit be changed when King Street and Coronation Boulevard are reconstructed?
King Street, between Bishop Street and Concession Road is posted at 50 km/h. Coronation Boulevard between Concession Road and Pheasant Avenue is posted at 50km/h. Coronation Boulevard between Pheasant Avenue and Water Street is posted at 60km/h. At this point, there is no intention to change the posted speed.

4. Environmental and cultural considerations

How has the natural environment been considered for this project?
The impacts due to construction of this project will have minimal impact on the natural environment as the limits are to be contained to previously disturbed areas.

Trees within the project limits will be inventoried and assessed for overall health and significance in order to develop mitigation and protection plans for any trees to be

retained. Where trees may be impacted or removed, a compensation strategy will be developed as part of the tree management and landscaping design.

How has the cultural/heritage environment been considered for this project?
A Cultural Heritage Report will be completed, including a review and inventory of heritage resources within and adjacent to the study area. It is also understood that potential impacts of the project on identified cultural heritage resources will be determined following guidance in the Regional Official Plan (ROP) Policies 3.G.16 and 3.G.17.

The project team will identify all cultural heritage resources and identify any impacts as part of the overall preferred design alternative to be presented at a second public consultation (currently scheduled for fall/winter 2022).

Will noise mitigation be considered for this project?

As this project does not include a road widening, and most of the adjacent properties are front-lotted, noise barriers are not being considered within the project limits.

Is any property required for the road improvements?
One of the goals of the planning and design process is to minimize the impact on adjacent properties and the need to acquire private property. An initial review of the existing King Street allowance, between Bishop Street and Concession Road, indicates that there may be a need to acquire a small amount of land from some of the property frontages on the west side to accommodate the proposed alternatives.

Refer to Appendix A for details on the property acquisition process.

Who will be responsible for the winter maintenance of new multi-use trails, sidewalks and/or separated cycling facilities?
There is ongoing dialogue between the City of Cambridge and the Region of Waterloo regarding the responsibility for winter maintenance of new multi-use trails, sidewalks and separated cycling facilities. It is not anticipated that winter maintenance of any of the new multi-use trails, sidewalks and separated cycling facilities will be the responsibility of the adjacent property owner.

5. Public consultation

What is the purpose of this public consultation?

This Public Consultation is a forum to have interested groups and individuals learn about and provide input on:

- The needs and opportunities for improvements on King Street and Coronation Boulevard.

- The project environment (natural, social, cultural/heritage, and economic).
- The potential improvements that are being considered by the project team to date.
- How the design alternatives for improvements will be developed and evaluated and how a preferred design alternative will be identified.
- Future public input opportunities planned.

Region and project consultant staff are available before, during, and after the public consultation period to answer any questions you may have. Contact information has been provided in this information package.

How can I provide my comments?
To provide comments, you can:

- Visit EngageWR.ca (https://www.engagewr.ca/king-and-coronation-improvements)
- Email or call project team members list below.
- Complete and mail/fax in the comment sheet at the end of this document

Project team information:

Greg Proctor, C.E.T.
Region Project Manager
Region of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3
Telephone: 519-575-4729
Fax: 519- 575-4430
Gproctor@regionofwaterloo.ca

Dan Schipper, P.Eng.
Project Manager
WalterFedy
675 Queen Street South
Kitchener, ON N2M 1A1
519-576-2150 ext. 276
dschipper@walterfedy.com

How can I view project information following the public consultation?
All of the consultation materials and other relative project information, notifications of upcoming meetings, and contact information are available for viewing at the Region of Waterloo municipal office as identified above. Alternatively, you may visit the Region's website at www.regionofwaterloo.ca or the EngageWR.ca.

How will I receive further notification regarding this project?
Property owners and tenants abutting the project site, and members who register through the Region's project page (**https://www.engagewr.ca/king-and-coronation-improvements**), will receive all upcoming public correspondence, and will be notified of all future meetings.

Appendix A

Property Acquisition Process Information Sheet

The following information is provided as a general overview of the property acquisition process and is not legal advice. Further, the steps, timing, and processes can vary depending on the individual circumstances of each case.

Once the Class Environmental Assessment is complete and the Environmental Study Report outlining the Recommended Design Concept has been approved, the property acquisition process and the efforts of Regional Real Estate staff will focus on preparation for acquiring the required lands to implement the approved design. Regional staff cannot make fundamental amendments or changes to the approved design concept.

Property Impact Plans

After the project has been approved and as it approaches final design, the project planners will generate drawings and sketches indicating what lands and interests need to be acquired from each affected property to undertake the project. These drawing are referred to as Property Impact Plans (PIP).

Initial Owner Contact by Regional Real Estate Staff

Once the PIPs are finalized and available, Regional Real Estate staff will retain an independent appraiser to provide preliminary valuations of the land requirements and their effect on the value of the property. As this process nears completion Real Estate staff will contact the affected property owner/s by telephone and mail to introduce themselves and set-up initial meetings to discuss the project, appraisals, and proposed acquisitions.

Initial Meetings

The initial meeting is attended by the project engineer and the assigned real estate staff person to brief the owner on the project, what part of their lands are to be acquired or will be affected, what work will be undertaken, when, with what equipment, etc. and to answer any questions. The primary purpose of the meeting is to listen to the owner and identify issues, concerns, effects of the proposed acquisition on remaining lands and businesses that can be feasibly mitigated and/or compensated, and how the remaining property may be restored. These discussions may require additional meetings. The goal of staff is to work with the owner to reach mutually agreeable solutions.

Goal – Fair and Equitable Settlement for All Parties

The goal is always to reach a fair and equitable agreement for both the property owner and the Region. Such an agreement will provide compensation for the fair market value of the lands and address the project impacts (such as repairing or replacing landscaping, fencing, paving, etc.) such that the property owner will receive the value of

the lands acquired and the restoration of their remaining property to the condition it was prior to the Project.

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.

Steps Toward Offer of Settlement or Agreement of Purchase and Sale

The general steps toward such an offer are as follows:

1) the Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;
2) compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;
3) reasonable costs of the owner will be included in any compensation settlement;
4) an offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and
5) an Agreement will be finalized with any additional discussion, valuations, etc. as may be required.

Depending on the amount of compensation, agreements may require the approval of Council. The approval is undertaken in Closed Session which is not open to the public to ensure a level of confidentiality.

Expropriation

Due to the time constraints of these projects, it is the practice of the Region to commence the expropriation process in parallel with the negotiation process to ensure that lands and interests are acquired in time for commencement of the Project. Typically, over 90% of all required lands and interests are acquired through the negotiation process. Even after lands and interests have been acquired through expropriation an agreement on compensation can be reached through negotiation, this is usually referred to as a ‘settlement agreement’.

Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario *Expropriations Act* must be followed to ensure that the rights of the property owners provided under that *Act* are protected.

For information on the expropriation process, please refer to ‘Expropriation Information Sheet’.

The following information is provided as a general overview of the expropriation process and is not legal advice. For complete information, reference should be made to the Ontario *Expropriations Act* as well as the more detailed information in the Notices provided under that *Act*.

Expropriation Information Sheet

What is Expropriation?

Governmental authorities such as municipalities, school boards, and the provincial and federal governments undertake many projects which require them to obtain land from private property owners. In the case of the Regional Municipality of Waterloo, projects such as the construction or improvement of Regional Roads sometimes require the purchase of land from private property owners. In many cases, the Region of Waterloo only needs a small portion of the private property owner's lands or an easement for related purposes such as utilities, although in certain instances, entire properties are required.

Usually the governmental authority is able to buy the land required for a project through a negotiated process with the affected property owners. Sometimes, however, the expropriation process must be used in order to ensure that the land is obtained within a specific timeline. Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario **Expropriations Act** must be followed to ensure that the rights of the property owners provided under that *Act* are protected.

Important Note: The Region of Waterloo tries in all instances to obtain lands needed for its projects through a negotiated agreement on mutually acceptable terms. Sometimes, the Region of Waterloo will start the expropriation process while negotiations are underway. This dual approach is necessary to ensure that the Region of Waterloo will have possession of all of the lands needed to start a construction project on schedule. However, it is important to note that Regional staff continues to make every effort to reach a negotiated purchase of the required lands on mutually agreeable terms while the expropriation process is ongoing. If agreement is reached, expropriation proceedings can be discontinued and the land transferred to the Region of Waterloo in exchange for payment of the agreed-upon compensation.

What is the process of the Region of Waterloo under the Expropriations Act?

- Regional Council considers a request to begin an application under the ***Expropriations Act*** to obtain land and/or an easement for a specific Regional project. No decision is made at this meeting to expropriate the land. This step is simply direction for the Region of Waterloo to provide a "Notice of Application for

Approval to Expropriate" to affected property owners that the process has started to seek approval to expropriate the land.

- As stated in the Notice, affected property owners have 30 days to request a Hearing to consider whether the requested expropriation is "fair, sound and reasonably necessary in the achievement of the objectives" of the Region of Waterloo. This Hearing is conducted by a provincially-appointed Inquiry Officer. Prior to the Hearing, the Region of Waterloo must serve the property owner with a Notice setting out its reasons or grounds for the proposed expropriation. **Compensation for lands is not determined at this Hearing.** The Inquiry Officer can order the Region of Waterloo to pay the property owner up to $200.00 as compensation for the property owner's costs in participating in this Hearing, regardless of the outcome of the Hearing.
- If a Hearing is held, a written report is provided by the Inquiry Officer to the property owner and the Region of Waterloo. Council must consider the Report within 90 days of receiving it. The Report is not binding on Council and Council may or may not accept the findings of the Report. After consideration of the Report, Council may or may not approve the expropriation of the land or grant approval with modifications. A property owner may wish to make written and/or verbal submissions to Council at the time that it is considering the Report.
- If no Hearing is requested by the property owner, then Council may approve the expropriation of the land after expiry of a 30 day period following service of the Notice of Application for Approval to Expropriate.
- If Council approves the expropriation then, within 3 months of this approval, the Region of Waterloo must register a Plan at the Land Registry Office that describes the expropriated lands. The registration of this Plan automatically transfers title of the lands to the Region of Waterloo, instead of by a Deed signed by the property owner.
- Within 30 days of registration of the Plan, the Region of Waterloo must serve a Notice of Expropriation on the affected property owner advising of the expropriation. Within 30 days of this Notice, the property owner may serve the Region of Waterloo with a Notice of Election selecting the valuation date under the *Expropriations Act* for calculation of the compensation.
- In order to obtain possession of the expropriated lands, the Region of Waterloo must also serve a Notice of Possession setting out the date that possession of the land is required by the Region of Waterloo. This date has to be 3 months or more from the date that this Notice of Possession is served on the affected property owner.

- Within 3 months of registration of the Plan, the Region of Waterloo must provide the affected property owner with payment for the full amount of the appraised fair market value of the expropriated land or easement and a copy of the appraisal report on which the value is based. If the property owner disagrees with this amount, and/or claims other compensation and/or costs under the *Expropriations Act*, the compensation and/or costs matter may be referred to a provincially-appointed Board of Negotiation in an effort to reach a mediated settlement and/or an appeal may be made to the Ontario Municipal Board (OMB) for a decision. In any event, the Region of Waterloo continues in its efforts to reach a negotiated settlement with the affected property owner prior to the OMB making a decision.

Comment Sheet

Regional Municipality of Waterloo
King Street and Coronation Boulevard Improvements
Bishop Street to Water Street, City of Cambridge

Please complete this form so that your comments can be considered for this project, and return it by mail, or scan and email by July 6, 2022 to:

Greg Proctor, C.E.T. Project Manager Region of Waterloo 150 Frederick Street, 6th Floor Kitchener, ON N2G 4J3 Telephone: 519-575-4729 Fax: 519-575-4430 Gproctor@regionofwaterloo.ca	Dan Schipper. P.Eng. Project Manager WalterFedy 675 Queen Street S. Kitchener, ON N2M 1A1 Telephone: 519-576-2150 ext. 276 dschipper@walterfedy.com

Comments regarding this project:

Name: _____

Address: _____ Postal Code: _____

Phone: _____Email: _____

Collection Notice:

All comments and information received from individuals, stakeholder groups, and agencies regarding this project are being collected to assist the Region of Waterloo in making a decision. Under the “Municipal Act”, personal information such as name, address, telephone number and property location that may be included in a submission becomes part of the public record.

Region of Waterloo

Transportation and Environmental Services

Design and Construction

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Public Consultation No. 2 Information Package Fairway Road Improvements, Lackner Boulevard to King Street East in the City of Kitchener

---

1. Recommendation:

For information.

2. Purpose / Issue:

A virtual Public Consultation #2 for the Fairway Road Improvements between Lackner Boulevard and King Street East in the City of Kitchener will be available on the Region's website, Engage Region of Waterloo, from June 20th through July 31st, 2022. The purpose of Public Consultation #2 is to ask the public to contribute ideas and feedback on the preferred design concept for improvements to Fairway Road.

3. Strategic Plan:

The Fairway Road Improvements from Lackner Boulevard to King Street East in the City of Kitchener supports the Sustainable Transportation focus area in the 2019-2023 Strategic Plan by increasing participation in active forms of transportation (Objective 2.3) and improving road safety for all users (Objective 2.4).

4. Key Considerations:

The first Public Consultation Centre for the Fairway Road Improvements was in May 2019. This second virtual Public Consultation outlines the changes made to the design concepts for Fairway Road based on additional design and analysis, including feedback received through the first Public Consultation.

The preferred design includes:

- Widening of Fairway Road from two lanes to four lanes between North Hill Place and Lackner Boulevard, along with the full reconstruction of the pavement structure;

- Full reconstruction of Fairway Rd. from King St. to North Hill Place;
- Installation of additional turn lanes at select intersections;
- Multi-use trails on both sides of Fairway Road, from Lackner Boulevard to King St.
- Pedestrian and cycling connections from Fairway Road multi-use trail to the Dom Cardillo Trail, including pedestrian refuge islands;
- Improved pedestrian and cycling connections to transit stops on Fairway Road;
- Municipal utility reconstruction (City of Kitchener sewer and water) in portions of the corridor; and
- Noise attenuation barriers/wall in select locations along both sides of Fairway Road.

The most common concerns expressed by the public during Public Consultation #1 related to traffic, pedestrian and cycling safety, road noise and the impact the improvements may have on property. The Project Team re-evaluated the alternative solutions for road improvements along with the transportation/traffic analysis. The outcome of the review combined with the input received from Public Consultation #1 results in a preferred design that provides the necessary improvements for the corridor for both vehicles and pedestrians (traffic operations, vehicle and pedestrian safety, etc.) while minimizing the impact on property and mitigating concerns related to noise.

5. Background:

This purpose of this project is to:

- address the traffic growth and deteriorated pavement condition of Fairway Road;
- improve cycling, pedestrian and transit facilities throughout the corridor; and
- urbanize the Fairway Road corridor with curb and gutter.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Area Municipality Communication: The preferred design was developed in consultation with a Project Team. The Project Team included Region of Waterloo Councillor Tom Galloway and City of Kitchener Councillor Dave Snider, and staff from both the Region of Waterloo and the City of Kitchener. In addition, the Waterloo Region District School Board was consulted.

Public/Stakeholder Engagement: Feedback received from the first Public Consultation Centre is incorporated into the updated design. A summary of the Project Team's responses to the input received from Public Consultation #1 are provided in the Public Consultation #2 Information Package. Public Consultation #2 notification letters will be mailed to all those who have previously provided comments on the project, and to properties within the project area.

7. Financial Implications:

Nil.

8. Conclusion / Next Steps:

The project team will incorporate feedback from Public Consultation #2 and finalize the preferred design concept. Then the Project Team will recommend Committee approval of the design concept later in 2022. Construction is planned to occur in stages from Spring 2027 to Fall 2029.

9. Attachments / Links:

Attachment A: Fairway Road Improvements Public Consultation #2 Information Package (DOCS 4055718)

Prepared By: **Jason J. Lane**, Senior Engineer, Design and Construction

Marcos Kroker, Head, Design and Construction

Reviewed By: **Phil Bauer**, Director, Design and Construction

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Fairway Road Improvements

Lackner Boulevard to King Street East

City of Kitchener

Public Consultation #2
Information Package

What: The Region of Waterloo is undertaking a Municipal Class Environmental Assessment (EA) of Fairway Road to determine improvements to the corridor.

Where: Fairway Road from Lackner Boulevard to King Street East in the City of Kitchener.

Why: To provide road improvements for traffic growth, deteriorating road structure and active transportation improvements for pedestrians, cyclists, and transit along the corridor.

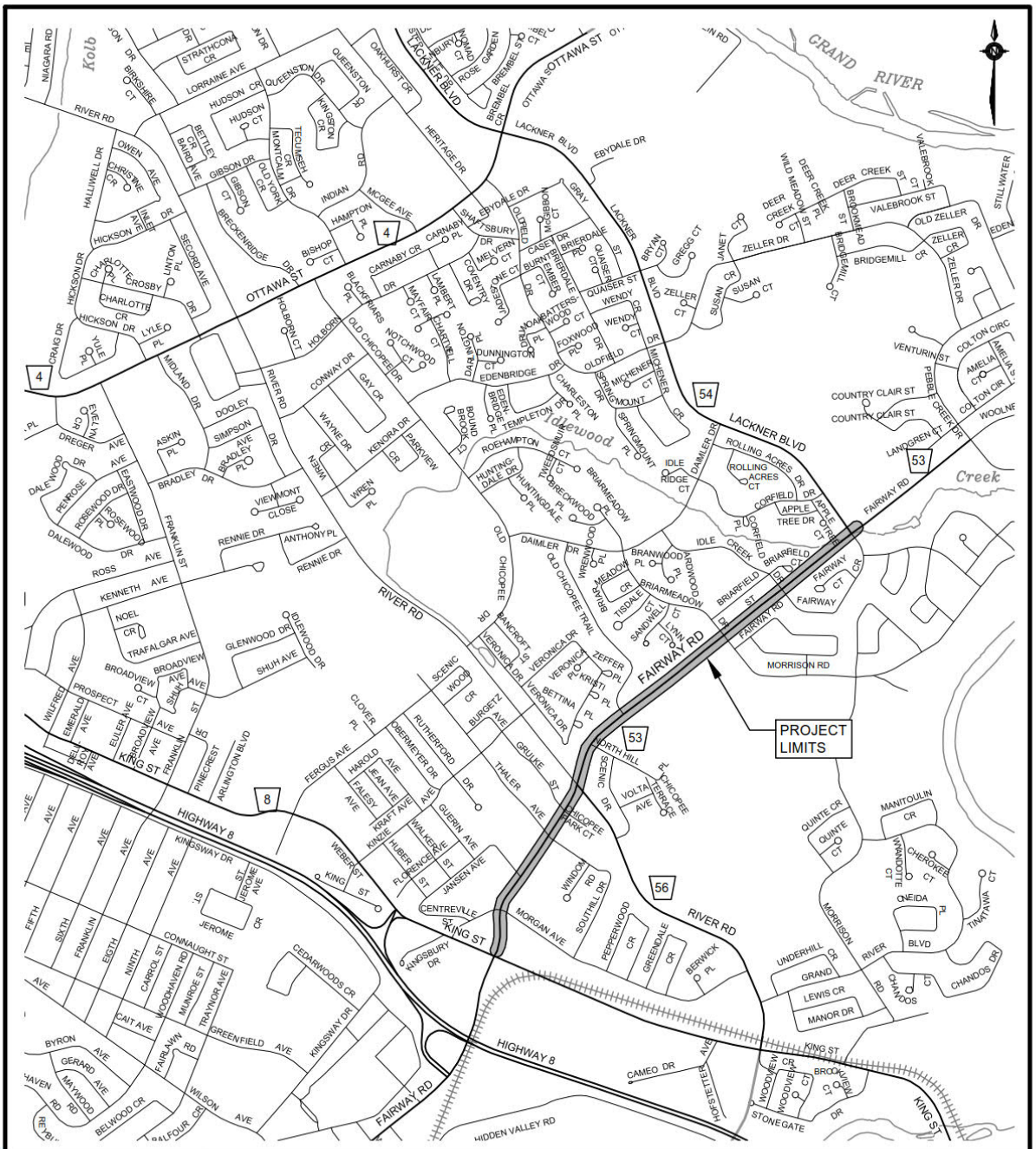
When: 2027-2029 Construction (2022 Region Transportation Capital Program).

Who: Region of Waterloo Project Manager
Jason Lane, P.Eng., Senior Engineer
(519) 575-4757 Ext. 3752
JLane@regionofwaterloo.ca

Public Consultation #2
Held Virtually online at www.engagewr.ca from June 20 to July 31, 2022

There is a comment sheet at the back of this package. Please fill it out and share your comments with us.

KEY PLAN


PROJECT LIMITS
FAIRWAY RD
RIVER RD
LACKNER BLVD
KING ST
HIGHWAY 8
OTTAWA ST
GRAND RIVER
Idlewood Creek
Region of Waterloo
REGIONAL ROAD No. 53
(FAIRWAY ROAD)
KING STREET TO LACKNER BOULEVARD
CITY OF KITCHENER

1. What is the purpose of this Public Consultation Centre?

The purpose of this Public Consultation Centre is to have interested groups and individuals learn about and provide input on:

a) The needs and opportunities for improvements on Fairway Road;
b) The project environment (natural, social, cultural /heritage, and economic);
c) The alternative solutions for improvements being considered by the Project Team;
d) How the alternative solutions for improvements have been evaluated and the preferred alternative identified; and
e) What feedback was received at Public Consultation Centre No. 1.

Region and project consultant staff are available to answer any questions you may have.

To complement this process, the Region of Waterloo will use its EngageWR online survey platform to help reach as many of the public as possible to get input on this project. Your comments will be considered by the project team in conjunction with all other relevant information in recommending a preferred alternative for this project.

2. What is a Class Environmental Assessment?

The Municipal Class Environment Assessment (Class EA) process is a planning and decision-making process approved under the Environmental Assessment Act, used by municipalities to plan public infrastructure projects so that potential environmental impacts are considered before a project is approved. It requires consultation with the public, involved stakeholders, and agencies to consider alternatives and their potential impacts on the project environment.

This project class is a Schedule 'C' Class EA. This Schedule applies to larger, more complex projects with the potential for significant environmental impacts (natural, social, cultural and economic) and requires multiple opportunities for public input.

This project 2nd Public Consultation is being held for members of the public to become aware of the project, review the preliminary identified Preferred Alternative, and to provide

input into the project for the further development of the Recommended alternative and their environmental impacts.

3. Who is directing this project?

The planning and design for this project is directed by staff from the Region of Waterloo and City of Kitchener, along with Region of Waterloo (Kitchener) Councillor Tom Galloway and City of Kitchener (Ward 2) Councillor Dave Schnider. The consulting engineering firm MTE Consultants Inc. provides planning and preliminary design services during the study phase of this project to the Region of Waterloo.

For additional details regarding the Municipal Class EA process, please refer to Appendix A.

4. Why is the Region considering this project?

The 2018 Regional Transportation Master Plan Update has identified the section of Fairway Road from Lackner Boulevard to North Hill Place for widening from 2 to 4 lanes. The section of Fairway Road from River Road to King Street North is identified for reconstruction. The 2018 Regional Transportation Master Plan Update has also identified the need for active transportation improvements for pedestrians, cyclists, and transit along the corridor.

5. What is the scope of Fairway Road Improvements?

As part of the Class Environmental Assessment, a Problem or Opportunity Statement is developed to ensure a clear project scope. For this project the Problem Statement is:

> "Fairway Road from Lackner Boulevard to King Street North is in need of improvements to provide an adequate level of service for current and future traffic operations, provide improved pedestrian and cycling facilities to support the Region of Waterloo's active transportation objectives, and address infrastructure deficiencies related to pavement condition, and underground infrastructure."

6. How does the project relate to the Regional Transportation Master Plan (RTMP) and other studies?

The 2018 Regional Transportation Master Plan Update identified the need to widen Fairway Road from 2 to 4 lanes between North Hill Place and Lackner Boulevard along with full reconstruction of the existing 4 lane section on Fairway Road from River Road to King Street North. The 2018 Regional Transportation Master Plan Update has also identified the need for active transportation improvements for pedestrians, cyclists, and transit along the corridor.

The Context Sensitive Regional Transportation Corridor Design Guidelines (CDG) is a planning policy document that guides the design of Regional roads. The CDG identifies design parameters for necessary features within the road allowance such as vehicle lanes, cycling facilities, sidewalks, and boulevards. In accordance with the CDG, Fairway Road is a “Neighbourhood Connector – Avenue”. Designing Fairway Road to support active transportation modes, including walking and cycling, is a fundamental character of this road classification and is supported by Regional Staff and Council.

Transit (GRT) route 23 currently exists on Fairway Road and future service upgrades are planned for the future and is considered in this study.

The Regional Transportation Master Plan and Corridor Design Guidelines all support complete and continuous pedestrian facilities on this section of Fairway Road for the full length of this project. Boulevard multi-use trails or sidewalks and cycle paths/tracks on both sides of the road would satisfy that requirement.

7. Have active transportation upgrades or road widening been considered?

Yes, both active transportation upgrades and road widening is considered in accordance with the Regional master plans and guidelines.

The adjacent section of Fairway Road to the north (towards the Grand River) has sidewalks and on-road bike lanes while the adjacent section of Fairway Road to the south (towards Highway 8) has a sidewalk on the west side and no dedicated cycling facilities.

8. What are the alternatives for improvements to Fairway Road?

The alternative solutions for improvements presented at PCC No. 1 and considered by the Project Team are listed below. Additional details are contained in the display drawings (available via the Region's Engage platform as well as our website https://www.engagewr.ca/regionofwaterloo), and cross sections and plan views of various alternatives are included in Appendix B.

1) **Alternative 1 - Do Nothing:** this alternative includes reconstructing the road to its current cross-section, including upgrades to watermain and sanitary and storm sewers;
2) **Alternative 2 - Reconstruct or Widen Fairway Road to 4-lanes and Add Multi-Use Trails:** this alternative involves widening or maintaining Fairway Road as 4-lanes (undivided) and add or upgrade the following facilities:
    - Curb and gutter and a storm drainage system;
    - Add turn lanes at intersections where required;
    - Additional street lighting; and
    - Active transportation facilities (3.0 metre wide multi-use trail along both sides behind the curb and boulevard).

    Lackner Boulevard to North Hill Place

    - There is sufficient road allowance to widen Fairway Road to 4 lanes plus turn lanes and construct a multi-use trail.

    North Hill Place to King Street North

    - Private property impacts resulting from this alternative will require significant private property purchases to replace the existing 1.5 meter wide sidewalk with a 3.0 metre wide multi-use trail and turn lanes at intersections.
3) **Alternative 3 - Reconstruct or Widen Fairway Road to 4-lanes and Add/Reconstruct Sidewalk and Install On-road Bike Lanes:** this alternative involves widening or maintaining Fairway Road as 4-lanes (undivided) and add or upgrade the following facilities:

- Curb and gutter and a storm drainage system;
- Additional street lighting;
- 1.5 metre wide on-road bike lanes along both sides; and
- 1.5 to 2.1 metre wide pedestrian sidewalks along both sides (2.1 metre wide preferred).

Lackner Boulevard to North Hill Place

- There is sufficient road allowance to widen Fairway Road to 4 lanes plus turn lanes, add 1.5 metre on-road bike lanes, maintain the existing sidewalk or construct a new sidewalk in areas currently without sidewalk.

North Hill Place to King Street North

- Private property purchases will be required to reconstruct the roadway with a 1.5 to 2.1 metre wide sidewalk, and 1.5 metre on-road bike lanes and turn lanes at intersections.

4) **Alternative 4 - Reconstruct or Widen Fairway Road to 4-lanes and Add/Reconstruct Sidewalk and Install Separated Cycle Tracks:** this alternative involves widening or maintaining Fairway Road as 4-lanes (undivided) and add or upgrade the following facilities:
   - Curb and gutter and a storm drainage system
   - Additional street lighting;
   - 1.5 metre wide off-road, separated cycle tracks along both sides; and
   - 1.5 to 2.1 metre wide pedestrian sidewalks along both sides (2.1 metre wide preferred).

   Lackner Boulevard to North Hill Place

   - There is sufficient road allowance to widen Fairway Road to 4 lanes plus turn lanes, 1.5 metre separated cycle tracks and maintain the existing sidewalk or construct a new sidewalk in areas currently without sidewalk.

North Hill Place to King Street North

- Private property purchase requirements in this section will be more extensive in comparison to on-road bike lanes, due to the requirements for a “rollover” curb to separate the new 1.5 metre cycle tracks from the roadway and reconstruct the roadway with a 1.5 to 2.1 meter wide sidewalk and turn lanes at intersections.

Widening or reconstructing Fairway Road to 4-lanes is common to all alternatives except the Do Nothing alternative.

9. What comments were received since PCC No. 1?

The main comments received at PCC No. 1 are summarized as follows:

Summary of Main Issues	Project Team Response
• Concerns with increased traffic causing increased noise	• A preliminary noise study has been undertaken for all back-lotted homes under Part B of the Regions Noise Policy for existing developments (see Appendix D). There are areas that require noise mitigation at rear yard property lines on Fairway Road between Lackner Boulevard and North Hill Place. These areas are illustrated on the display drawing and on our Engage Platform and website https://www.engagewr.ca/regionofwaterloo. A final noise study will be untaken as part of detail design when final details of the road elevations and cross-section are confirmed.

• Vehicle speeds on Fairway Road are too high	• The proposed narrower lane widths will provide some traffic calming effects, and encourage slower speeds on Fairway Road. • Region Transportation has conducted speed surveys, and there is no warrant for changing the current posted speed limits.
• A traffic signal is needed at the Briarmeadow/Fairway Intersection due to safety issues and difficulties turning off of and onto Fairway Rd.	• Signal warrants have been reviewed for the Briarmeadow intersection, based on projected future traffic. There are existing traffic signals at the Briarmeadow intersection with Fairway Road, and this intersection will remain signalized.
• Property purchases due to road widening in the section of Fairway Road between North Hill Place and King Street, will reduce front yards and devalue private property.	• When developing the Preferred Alternative, modifications have been made to the alternatives to minimize purchase of portions of private properties. However, some private property will still be required. Private property purchases will follow the provisions outlined in Appendix E.
• Trucks should be banned from Fairway Road, due to their speeds, noise and related safety issues for pedestrians.	• Since Fairway Road is a Regional Road, truck traffic cannot be banned.

• Concerns with installation of roundabouts due to proximity of schools and elementary school students having to use them.	• The intersections with Fairway Road at both Lackner Boulevard and River Road have been reviewed by staff and will remain signalized.
• Concerns with vibration and maintaining access to private property during construction.	• Measures will be included in the construction contract documents to minimize vibrations during construction. In addition, a precondition survey of buildings will be undertaken to assist in determining if any potential damage to structures was a result of construction. • Access to private property will be maintained as much as possible. There may be short term closures of driveways during specific construction operations, however notice will be given and in some instances other parking/access arrangements will be implemented.
• Facility to protect against dust/CO2 emissions.	• Measures will be included in the construction contract documents to control dust during construction. • There is no known practical facility to protect against CO2 emissions. Federal and Provincial vehicle emission standards limit allowable emissions from vehicles.

• Concerns with Multi-Use Trails (MUT) in areas with front lotted private properties. • All neighbours want signals at Fairway/Thaler. • 2011 traffic report looked at accidents at Fairway and Thaler. What has changed? Report indicated that signals not warranted at Thaler, but would review making Thaler right-in/right out. • Sight lines at Thaler needs to be corrected.	• The project team is recommending a Multi-Use Trail on Fairway Road. A MUT is the preferred alternative. • The transportation analysis has been reviewed for the Thaler intersection. Based on the analysis by staff, warrants were met for left turn lanes on Fairway Road at Thaler Avenue; however, the intersection has not met the traffic signal warrants and will remain un-signalized. The intersection review also determined that a signalized pedestrian crossing was not warranted. Signal warrants look at many factors including traffic volumes, pedestrian volumes and existing and anticipated collision statistics. • Sight line improvements throughout corridor will be reviewed through detailed design.
• Pedestrian safety, collision and sight visibility concerns with the Fairway Road and Thaler intersection. • A 2011 Council report was prepared regarding this intersection, and no action has been taken.	• Signal warrants have been reviewed for the Thaler intersection based on the projected traffic volumes and proposed new cross-section. Signal warrants look at many factors including traffic volumes, pedestrian volumes and existing and anticipated collision statistics. Based on this review, no new signals are being recommended. However, this intersection will continue to be monitored after construction. • Sight line improvements throughout corridor will be reviewed through detailed design.

10. What work was completed since PCC #1?

The Project Team reevaluated the alternative solutions for road improvements along with the transportation/traffic analysis. The outcome of the review combined with the input received from PCC #1 results in the following changes to the design alternatives:

- A northbound and a southbound left-turn lane is added on Fairway Road at Morgan Avenue to address traffic and collision issues;
- A northbound and a southbound left-turn lane is added to Fairway Road at Thaler Avenue to address traffic and collision issues;
- A pedestrian refuge island is being considered on Fairway Road between Morgan Avenue and Thaler Avenue to improve pedestrian and cycling connectivity;
- The southbound right-turn lane on Fairway Road at River Road was combined/shared with a southbound through lane to address traffic issues and mitigate property impacts;
- River Road westbound lanes at the intersection with Fairway Road were revised to have a westbound left-turn lane plus a shared through/right-turn lane; in future, the City of Kitchener will consider improvements to the eastbound section of River Road under a separate project;
- The southbound left-turn lane was removed and a pedestrian refuge island is included at North Hill Place at the Dom Cardillo Trail to improve pedestrian and cycling connectivity;
- Transit stops and a pedestrian refuge island is included at Old Chicopee Trail to improve pedestrian and cycling connectivity with transit; and
- A Fairway Road northbound and a southbound through lane added at the Lackner Boulevard intersection.

11. What about Roundabouts at the intersections?

Roundabouts were considered at both River Road and Lackner Boulevard. Roundabouts typically improve traffic safety by reducing injury collisions and provide additional intersection traffic capacity.

At River Road, the proximity of the buildings and the skew of the intersection result in significant property impacts. Based on the private property impacts and the unsuitable design requirements, a roundabout is not considered for Fairway Road and River Road.

There is available space to construct a roundabout at Lackner Boulevard and Fairway Road, but there are impacts to the existing concrete box culvert and would require additional private property purchase. Due to these constraints, a Traffic Signal is recommended to remain at this intersection.

12. How are the alternatives for improvements to Fairway Road evaluated?

The various alternatives is assessed against a set of evaluation criteria established by the Project Team in order to determine which alternative or combination of alternatives are “preferred” and are considered to best address the needs for Fairway Road. The evaluation criteria is below:

Criteria	Description
Traffic Capacity, Operations & Safety	• How does the alternative serve the expected vehicular, transit, pedestrian and cycling traffic needs • Does the alternative efficiently and safely handle the forecasted traffic from existing/future developments and properties
Social Environment	• Impact on local community (noise, etc.) • Property impacts (cost, feasibility) • Can impacts be avoided
Natural Environment	• Effect on existing vegetation, wildlife, habitat, water quality etc.
Heritage, Archaeological, Cultural Impacts	• Is there potential impact to these resources, can it be mitigated
Costs	• Capital Cost of alternatives • Utility relocation costs • Land acquisition costs

Appendix C includes an illustrative comparison table, using the above criteria and a pie chart rating system, to rate the Design Alternatives.

13. What is the preferred alternative for improvements to Fairway Road?

The preferred Alternative is Alternatives 2 and summarized as follows:

- King Street to Lackner Boulevard (4 lanes,)
    - 3.0 m asphalt multi-use trail on both sides
    - No on road bike facility
    - Pedestrian refuge island added on Fairway Road
        - between Morgan Avenue and Thaler Avenue
        - at North Hill Place/Dom Cardillo Trail
        - at Old Chicopee Trail

Fairway Road (Lackner Boulevard to North Hill Place)

Alternative 2 was selected as the preferred alternative for Fairway Road between Lackner Boulevard and North Hill Place. All three options were similar in their impact to social environment, natural environment, heritage and archaeological,

and are equivalent in the evaluation. Alternative 2 was chosen because it scored much better in relation to the Traffic Capacity, Operations, Safety Criteria with a multi-use trail, cyclists are removed from the roadway, making the operations of the roadway safer, comfort for cyclists, and the capital cost of construction is the lowest.

Fairway Road (North Hill Place to King Street)

Between North Hill Place and King Street, alternative 2 was considered the preferred alternative, and will be carried forward. . The Region's objective is to implement infrastructure that allows for further adoption of active transportation being a means of travel, and the multi-use trail alternative allows for this long term. Each alternative has very similar impact to property, natural environment, and overall cost.

- Intersections:

Intersection	Signalization		Turning lanes
	Current	Future	
Morgan Avenue	Signals	Signals	Westbound left turn lane added
Jansen Avenue	Unsignalized	Unsignalized	No turning lanes added
Thaler Avenue	Unsignalized	Unsignalized	Left turn lanes added on Fairway Road in each direction
River Road*	Signalized	Signalized	Left turn lanes maintained each direction, additional straight through lanes added in each direction
North Hill Place	Unsignalized	Unsignalized	No turning lanes added
Old Chicopee	Unsignalized	Unsignalized	Eastbound left turn lane added
Briarmeadow Drive	Signalized	Signalized	Left turn lanes maintained each direction, additional through/right lanes added in each direction
Idle Creek Drive	Unsignalized	Unsignalized	No turning lanes added
Lackner Boulevard*	Signalized	Signalized	Left turn lanes maintained each direction, additional through/right lanes added in each direction
**Improvements to signalized intersection planned*			

14. Who will be responsible for clearing snow on the new multi-use trails?

Currently, the City of Kitchener clears snow from multi-use trails, on Regional Roads, in the City of Kitchener. Following construction of the new multi-use trails as part of this project, the City will continue to clear snow from the trails within the project limits.

15. Will the posted speed be changed?

The existing posted speed limit is 50km/hr on Fairway Road between King Street and Old Chicopee Trail, and 60/km/hr. between Old Chicopee Trail and Lackner Boulevard; No change to the posted speed is proposed.

16. Are noise barriers being considered for this project?

The Region's Noise Policy determines when noise barriers such as noise walls or berms are recommended as part of an upcoming project.

Part B of the Region's Noise Policy applies when a road widening is being considered. For this project, Part B of the Region's Noise Policy would apply to Fairway Road from Lackner Boulevard to North Hill Place if the road is widened from two lanes to four lanes.

A preliminary noise study has been undertaken. The study indicates that noise levels are such that would warrant a noise barrier on Fairway Road in the following locations:

- On the west side: between 175 metres south of the Fairway Road/Lackner Boulevard intersection and 200 metres south of the Fairway Road/Briar Meadow Drive intersection; and between 100 metres to 155 metres south of the Fairway Road/Old Chicopee Trail intersection;
- On the east side between 175 metres south of the Fariway Road/Lackner Boulevard intersection and the Fairway Road/Sims Estate Drive intersection.

Part C of the Region's Noise Policy applies when a road widening is not being considered. For this project, Part C applies between North Hill Place and King Street because it is not proposed to widen Fairway Road with additional motorized vehicle lanes. Most of the residences in this section are front-lotted with driveways for property access,

and constructing a noise barrier is not practical. For properties in this section that have no driveways onto Fairway Road, a noise barrier may be considered under certain circumstances if property owners are willing to share in the cost of a noise barrier. However, installing a noise barrier for one individual property is not effective, as a noise wall typically has to extend beyond the limits of a property to address noise travelling "around" the end of the noise barrier.

A summary of Part B and Part C of the Region's Noise Policy is contained in Appendix D.

17. What happens when property is required for this project?

One of the goals of the planning and design process for this project is to minimize the impact on adjacent properties and the need to acquire property. An initial review of the existing road allowance indicates that along the road corridor, there are properties between North Hill Drive and King Street that will require a road allowance widening, including at the intersection of Fairway Road and River Road.

No property purchase requirements are anticipated between Lackner Boulevard and North Hill Drive.

The Region may need to obtain temporary access at some locations along the right-of-way limit for construction grading activities. Identification of final property needs is confirmed during detailed design, following completion of the study.

The preliminary property needs are illustrated on the drawings as part of this package.

In areas where property or temporary access is required, the property owner is contacted directly by the Region of Waterloo real estate services staff during the detailed design process. Compensation is provided at fair market rates based on recent similar area sales. Please refer to Appendix E for further information on the property acquisition process.

18. How has the natural environment been considered?

As part of the environment inventory for the project, a Natural Environment Report (NER) has been undertaken documenting the natural features and wildlife within the study area. Included within the draft NER are review and documentation of:

- Watercourses: Idlewood Creek (coldwater), one other unnamed watercourse (warmwater) near the Lackner Boulevard/Fairway Road intersection. Although road construction is not anticipated to result in direct impacts to these watercourses, the roadwork will likely be within the designated floodplain and a permit will be required form the Grand River Conservation Authority to construct these improvements
- Provincially Significant Wetlands (PSW): Idlewood Creek PSW is located near the intersection. Although no direct impacts are anticipated to the PSW as a result of road construction, during detail design any appropriate permits will be submitted if impacts are determined to be necessary
- Fish Habitat: Idlewood Creek and the warmwater feature provides direct and indirect habitat for fish species. Although no direct impacts to fish habitat is anticipated, appropriate permits will be submitted to the Ministry of Natural Resources and Forestry and Department of Fisheries and Ocean as required.
- Significant Wildlife Habitat (SWH): No SWH were identified but natural vegetated areas will be protected as much as possible;
- Regionally Significant Species: Bird nest surveys will be completed prior to construction;
- Street Trees: A Tree Preservation/Enhancement Plan be prepared as part of detailed design.

In summary, Idlewood Creek and the associated wetlands are not impacted, as the culvert near the Fairway Road and Lackner Boulevard intersection is already in place and will not be disturbed as part of construction.

19. How has the cultural heritage/archaeological environment been considered?

A Built Heritage and Cultural Heritage Landscape Assessment and a Stage 1 Archaeological Assessment is complete for the Fairway Road Study area.

The Archaeological investigation identifies a few potential undisturbed areas that will require further investigation if the proposed construction affects these areas. Any further archaeological investigation will be undertaken prior to construction.

The Built Heritage and Cultural Heritage Landscape Assessment did not identify Cultural Heritage Resources that are impacted by the proposed improvements to Fairway Road, other than the Chicopee Ski Hill property on the east side of Fairway Road between Sims Estate Drive and North Hill Place. Chicopee Ski Hill has plans to develop portions of this property in the future, and if his area does not develop prior to road construction occurring, the cultural heritage impacts will be evaluated further in conjunction with Chicopee Ski Hill and the City of Kitchener.

20. What is the estimated cost of this project?

The cost of this project will depend on the approved improvement alternative, as well as necessary infrastructure relocations and property acquisitions. Initial cost estimate for the road reconstruction is $19 million, which includes property acquisition which is estimated to be approximately $4 million

21. What is the project schedule and what are the next steps for improvements on Fairway Road?

The Project Team will review the public comments received from this 2nd Public Consultation and use them as input for completion of the Fairway Road Class Environmental Assessment, including confirmation of the Recommended Alternative. After consideration of the technical information is completed and all public input received, the Project Team will present a recommendation to Regional Council in late Fall of 2022 for approval of the Recommended Alternative that best meets the needs of the public and approving agencies while minimizing the impact on the project environment.

Pending project approval by Regional Council, detailed design and property acquisition is scheduled throughout 2023-2025, with utility relocations in 2025-2026, and construction commencing in 2027 and construction will require approximately 3 years to complete.

22. How will I receive further notification regarding this project?

Property owners and tenants abutting the project site and members of the public registered at Public Consultation Centre No. 1 and this Public Consultation Centre will receive all forthcoming public correspondence, and will be notified of Regional Council Planning and Works Committee and Council meetings where the Recommended Alternative will be considered for approval. Advertising in local newspapers advising the public of the meetings and availability of the final Environmental Study Report (ESR).

23. How can I provide my comments?

We encourage you, stakeholder groups, and agencies to actively participate in this study by attending public consultation opportunities and/or contacting staff directly with comments or questions. If you wish to be added to the project mailing list, or would like further information on the project and any future project meetings, please visit our website at www.engagewr.ca or contact one of the following:

Jason Lane, P.Eng
Senior Engineer
Region of Waterloo
150 Frederick Street
Kitchener ON N2G 4J3
Phone: 519-575-4757 Ext. 3752
Email: jlane@regionofwaterloo.ca

Vince Pugliese, P.Eng., PMP
Senior Project Manager
MTE Consultants Inc.
520 Bingemans Centre Drive
Kitchener, ON N2K 3M5
Phone: 519-743-6500 Ext. 1347
Email: vpuglese@mte85.com

24. How can I review project information following the PCC?

All the PCC display materials and other relevant project information, notifications of upcoming meetings and contact information are available for reviewing at the Region of Waterloo municipal office as identified above. Alternatively, you may visit the Region's website at: www.regionofwaterloo.ca or https://www.engagewr.ca/regionofwaterloo.

Comment Sheet

Regional Municipality of Waterloo

Fairway Road Improvements

Public Consultation Centre #2 – June 20- July 31, 2022

Please complete and hand in this sheet so that your comments can be considered for this project. Please mail, fax, or email your comments by July 31, 2022 to:

Jason Lane, P.Eng
Senior Engineer
Region of Waterloo
150 Frederick Street
Kitchener ON N2G 4J3
Phone: 519-575-4757 Ext. 3752
Email: jlane@regionofwaterloo.ca

Vince Pugliese, P.Eng., PMP
Senior Project Manager
MTE Consultants Inc.
520 Bingemans Centre Drive
Kitchener, ON N2K 3M5
Phone: 519-743-6500 Ext. 1347
Email: vpuglese@mte85.com

Comments regarding this project:

_____

_____

_____

_____

_____

_____

Name: _____

Address: _____

Postal Code: _____

Phone: _____ Email: _____

Collection Notice:

All comments and information received from individuals, stakeholder groups, and agencies regarding these projects and meetings are being collected to assist the Region of Waterloo in making a decision. Under the "Municipal Act", personal information (such as name, address, telephone number, and property location) which may be included in a submission becomes part of the public record. Questions regarding the collection should be forwarded to the staff member noted above.

Appendix A – Municipal Class Environmental Assessment Process

Ontario Environmental Assessment Act

The purpose of the Ontario Environmental Assessment Act (EA Act) is to provide for "the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management of the environment in Ontario". Environment is applied broadly and includes the natural, social, cultural, built and economic components.

The key principles of successful environmental assessment planning include:

- Consultation with stakeholders and affected members of the public;
- Consideration of a reasonable range of alternatives;
- Assessment of the environmental impacts for each alternative;
- Systematic evaluation of alternatives; and
- Clear documentation of the process followed.

The Municipal Class EA is a planning process approved under the Environmental Assessment Act that is used by municipalities to plan infrastructure enhancement projects while satisfying the requirements of the Environmental Assessment Act. Under the Class EA process, projects are planned in one of three ways depending on their scope, complexity, and potential for adverse environmental impacts.

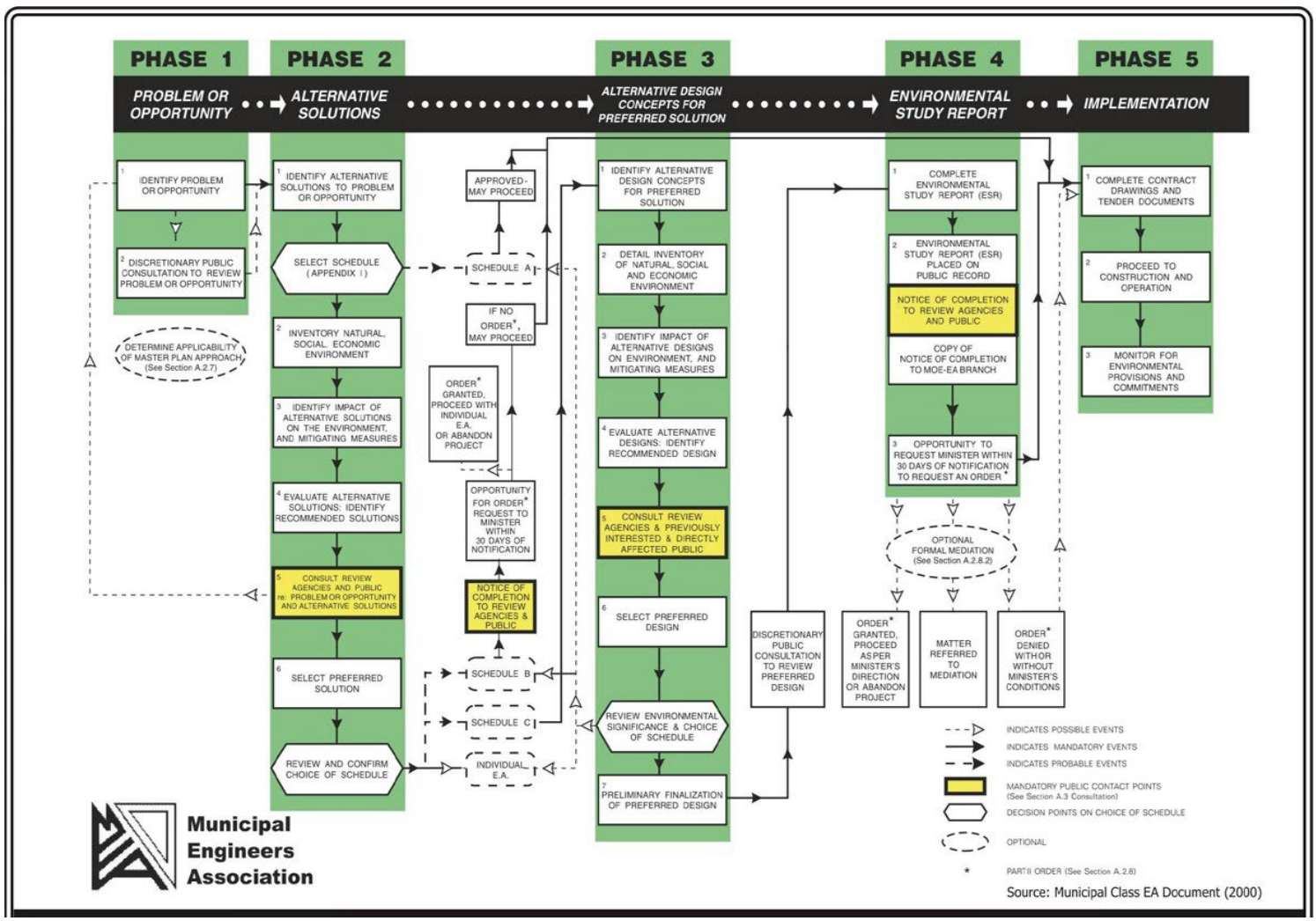
Schedule "A"	Includes routine maintenance, operation and emergency activities. The Municipality can proceed with this work without further approval or public consultation.
Schedule "B"	Includes projects with the potential for some adverse environmental effects. These projects are subject to a screening process that includes consultation with directly affected public and agencies.
Schedule "C"	Includes larger, more complex projects with the potential for significant environmental effects.

These projects are subject to all phases of the Class EA and require a minimum of 3 points of public contact.

Public Involvement

Members of the public that have a stake in the project are encouraged to provide comment throughout the Class EA process. For Schedule "C" projects there are a minimum of three (3) opportunities for public contact. These typically include two Public Consultation Centres and the Notice of Study Completion.

Class EA Process for Schedule "C" Projects



Change in Project Status – Appeal Provision

It is recommended that all stakeholders (including the proponent, public and review agencies) work together to determine the preferred means of addressing a problem or opportunity. If you have any concerns, you should discuss them with the proponent and try to resolve them. In the event that there are major issues which cannot be resolved, you may request the Minister of the Environment by order to require a proponent to comply with Part II of the EA Act before proceeding with a proposed undertaking which has been subject to Class EA requirements. This is called a "Part II Order". The Minister will make one of the following decisions:

1. Deny the request (with or without conditions);
2. Refer the matter to mediation; or
3. Require the proponent to comply with Part II of the EA Act, ordering a full Environmental Assessment.

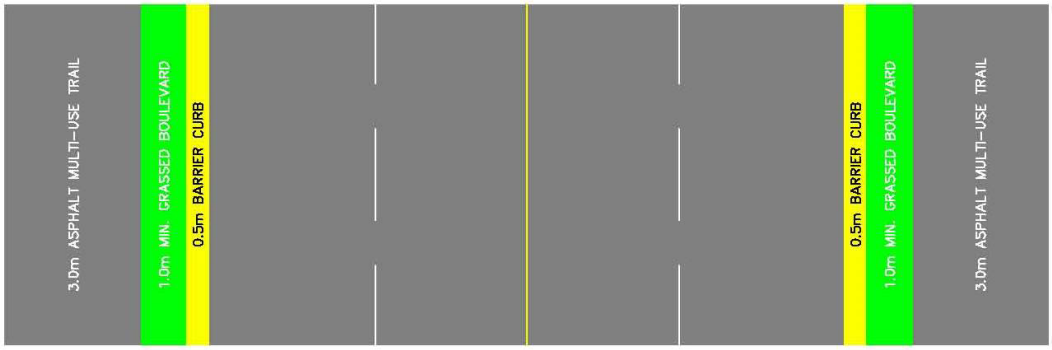
All stakeholders are urged to try to resolve issues since it is preferable for them to be resolved by the municipality in which a project is located, rather than at the provincial level.

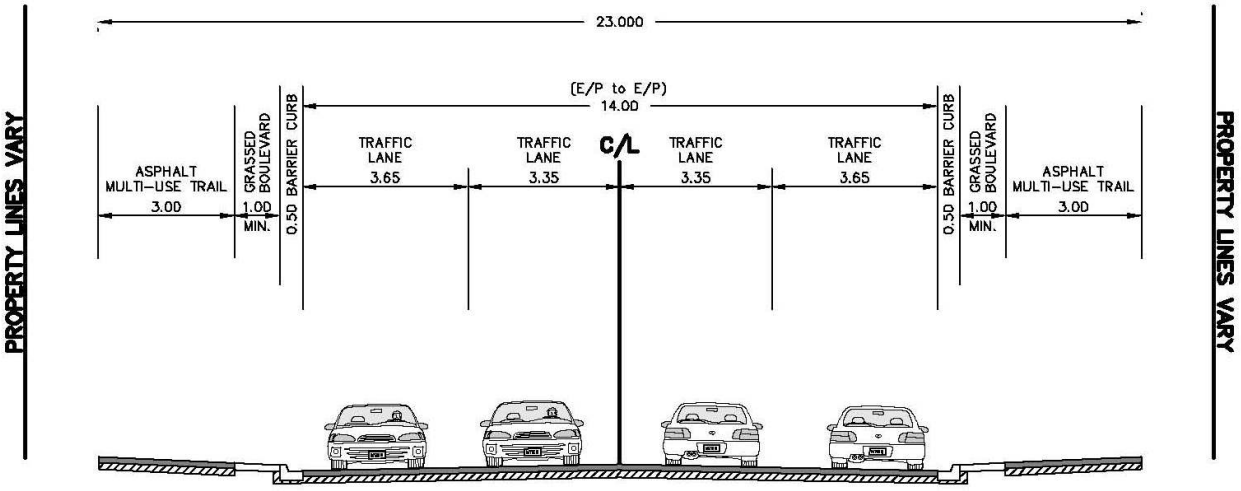
To request a Part II Order, a person must send a written request to: The Ministry/Minister of Environment and Climate Change
77 Wellesley St. West, 11th Floor
Toronto, ON M7A 2T5

The request must address the following with respect to the identified concerns:

- Environmental Impacts and specific concerns;
- Adequacy of the planning and public consultation process; and,
- Involvement of the person in the planning process and details of discussion held between the person and the proponent.

Appendix B – Design Alternatives





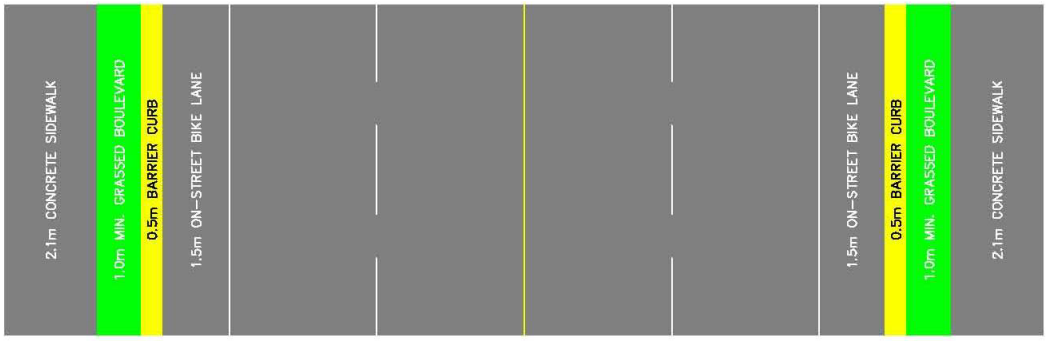
FAIRWAY ROAD

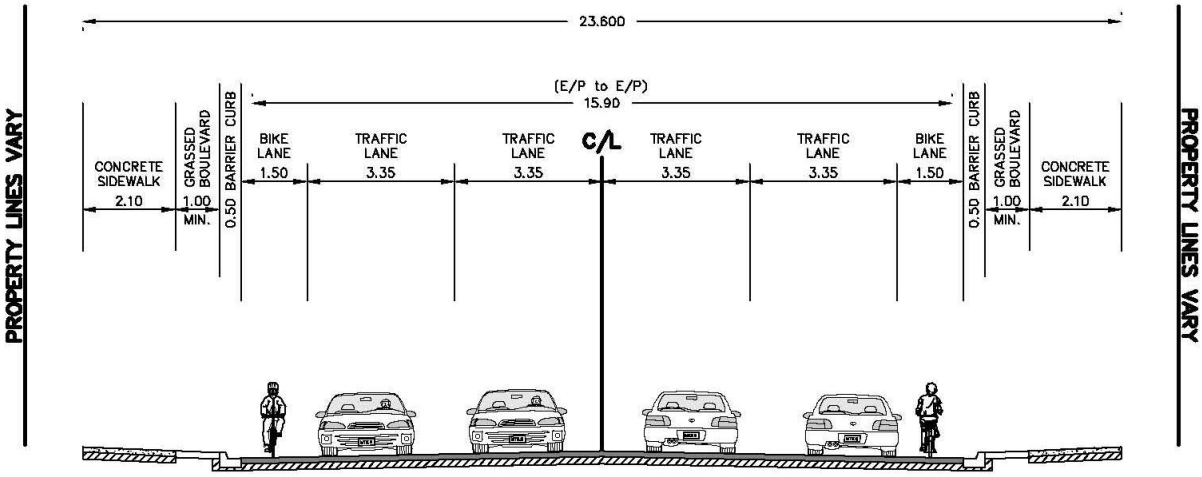
Date: APR.2019 Scale: N.T.S.

ALTERNATIVE 2
4-LANES AND MULTI-USE TRAIL

MTE
Engineers | Scientists | Surveyors

Project No.: 43544-100





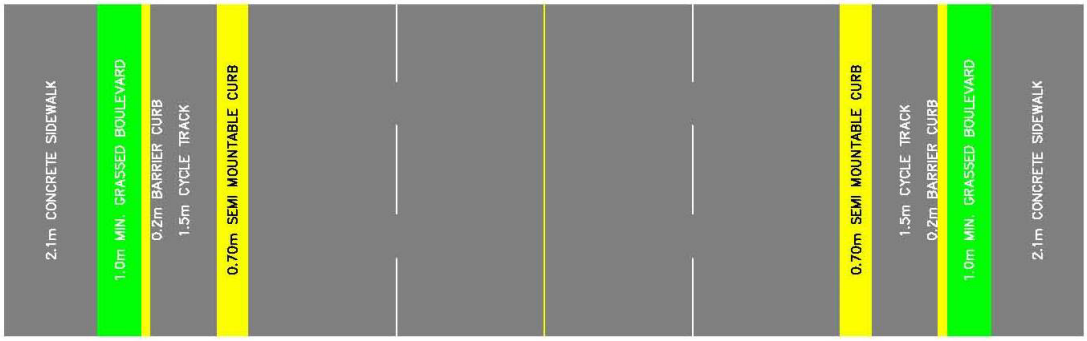
FAIRWAY ROAD

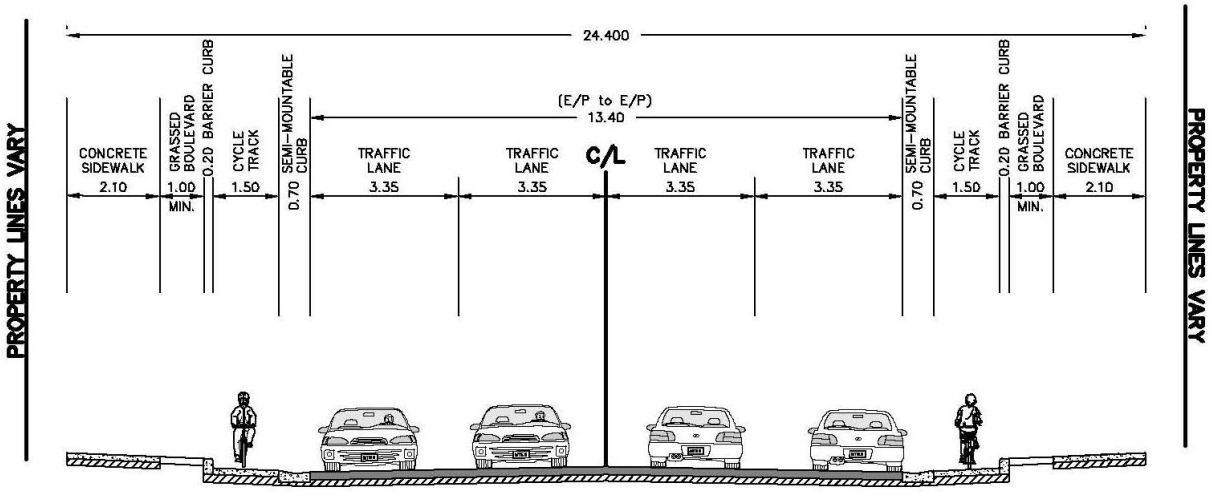
Date: APR.2019 Scale: N.T.S.

ALTERNATIVE 3
4-LANES AND
ON-ROAD BIKE LANES

MTE
Engineers | Scientists | Surveyors

Project No.: 43544-100





FAIRWAY ROAD

Date: APR.2019 Scale: N.T.S.

ALTERNATIVE 4
4-LANES AND CYCLE TRACK

MTE
Engineers | Scientists | Surveyors

Project No.: 43544-100

Appendix C

EVALUATION CRITERIA		Alternative 2	Alternative 3	Alternative 4
	Traffic Capacity Operations Safety			
	Social Environment			
	Natural Environment			
	Heritage, Archaeological Impacts			
	Costs			
	Preferred	✓	X	X

Legend	Poor		Fair		Good

Appendix D

Region of Waterloo Noise Policy Information Sheet

Summary of Region of Waterloo Noise Policy

The Region's Noise Policy is made up of three Parts:

Part A: New Developments Impacted By Noise from Roads & Railways

Part B: Existing Development Impacted By Proposed Region Road Widenings

Part C: Existing Development Impacted By Noise from Existing Region Roads

- Since no new development, only Parts B or C applies to this project.

The Fairway Road project from Lackner Boulevard to King Street North is proposing to:

- ✓ Widen Fairway Road between Lackner Boulevard and North Hill Place – therefore Part B applies to this section of Fairway Road; and
- ✓ Reconstruct Fairway Road only and maintain existing "4 lane" vehicle lane configuration in all other areas – therefore Part C applies to all other areas of the project.
  - Noise is calculated at a residence Outdoor Living Area – typically defined as the backyard or patio within 3 meters of the rear wall of a residential unit.
  - Noise is calculated using a Ministry of the Environment, Conservation and Parks (MECP) model that calculates a 16-hour average noise level for the outdoor living area based on several factors, such as traffic volumes, distance from the outdoor living area to the centre of the road, and elevation differences between the outdoor living area to the centre of the road. The noise level used in the policy is not based on peak levels that may be recorded at a given location/time.

Part B of Region Noise Policy – Road Widenings

Lackner Boulevard to North Hill Place

Region will consider building and paying for noise barrier if:

- ✓ Projected noise level in ten years is calculated to exceed 65 dBa; or
- ✓ Projected noise level in 10 years is calculated to exceed 60 dBa and increase over existing noise is 5dBa or more; and,

- ✓ By constructing noise barrier, projected noise is calculated to be reduced to 60 dBa or less, and reduction in projected noise is 5dBa or more.

Part C of Region Noise Policy – No Road Widening's – Request Driven

Region will consider building and Cost Sharing noise barrier construction if:

- ✓ Resident requests a noise barrier ; and
- ✓ Existing noise levels are calculated to exceed 60dBa; and
- ✓ Two thirds (2/3) of affected property owners are in agreement to build noise barrier (based on rear yard property length) in accordance with Local Improvement Act; and
- ✓ All property owners pay 50% of cost of noise barrier based on length of wall installed at their property with payments charged over a period of ten (10) years (in accordance with Local Improvement Act); and
- ✓ Residents may also decide to take **other measures** such as installing a privacy fence, air conditioning or window improvements at their own expense.

Appendix E

Property Acquisition Process Information Sheet

The following information is provided as a general overview of the property acquisition process and is not legal advice. Further, the steps, timing, and processes can vary depending on the individual circumstances of each case.

Once the Class Environmental Assessment is complete and the Environmental Study Report outlining the Recommended Design Concept has been approved, the property acquisition process and the efforts of Regional Real Estate staff will focus on preparation for acquiring the required lands to implement the approved design. Regional staff cannot make fundamental amendments or changes to the approved design concept.

Property Impact Plans

After the project has been approved and as it approaches final design, the project planners will generate drawings and sketches indicating what lands and interests need to be acquired from each affected property to undertake the project. These drawing are referred to as Property Impact Plans (PIP).

Initial Owner Contact by Regional Real Estate Staff

Once the PIPs are finalized and available, Regional Real Estate staff will retain an independent appraiser to provide preliminary valuations of the land requirements and their effect on the value of the property. As this process nears completion Real Estate staff will contact the affected property owner/s by telephone and mail to introduce themselves and set-up initial meetings to discuss the project, appraisals, and proposed acquisitions.

Initial Meetings

The initial meeting is attended by the project engineer and the assigned real estate staff person to brief the owner on the project, what part of their lands are to be acquired or will be affected, what work will be undertaken, when, with what equipment, etc. and to answer any questions. The primary purpose of the meeting is to listen to the owner and identify issues, concerns, effects of the proposed acquisition on remaining lands and businesses

that can be feasibly mitigated and/or compensated, and how the remaining property may be restored. These discussions may require additional meetings. The goal of staff is to work with the owner to reach mutually agreeable solutions.

Goal – Fair and Equitable Settlement for All Parties

The goal is always to reach a fair and equitable agreement for both the property owner and the Region. Such an agreement will provide compensation for the fair market value of the lands and address the project impacts (such as repairing or replacing landscaping, fencing, paving, etc.) such that the property owner will receive the value of the lands acquired and the restoration of their remaining property to the condition it was prior to the Project.

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.

Steps Toward Offer of Settlement or Agreement of Purchase and Sale

The general steps toward such an offer are as follows;

1) the Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;
2) compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;
3) reasonable costs of the owner will be included in any compensation settlement;
4) an offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and
5) an Agreement will be finalized with any additional discussion, valuations, etc. as may be required.

Depending on the amount of compensation, agreements may require the approval of Council. The approval is undertaken in Closed Session which is not open to the public to ensure a level of confidentiality.

Expropriation

Due to the time constraints of these projects, it is the practice of the Region to commence the expropriation process in parallel with the negotiation process to ensure that lands and interests are acquired in time for commencement of the Project. Typically, over 90% of all required lands and interests are acquired through the negotiation process. Even after lands and interests have been acquired through expropriation an agreement on compensation can be reached through negotiation, this is usually referred to as a 'settlement agreement'.

Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario *Expropriations Act* must be followed to ensure that the rights of the property owners provided under that *Act* are protected.

For information on the expropriation process, please refer to 'Expropriation Information Sheet'.

The following information is provided as a general overview of the expropriation process and is not legal advice. For complete information, reference should be made to the Ontario Expropriations Act as well as the more detailed information in the Notices provided under that Act.

Expropriation Information Sheet

What is Expropriation?

Governmental authorities such as municipalities, school boards, and the provincial and federal governments undertake many projects which require them to obtain land from private property owners. In the case of the Regional Municipality of Waterloo, projects such as the construction or improvement of Regional Roads sometimes require the purchase of land from private property owners. In many cases, the Region of Waterloo only needs a small portion of the private property owner's lands or an easement for related purposes such as utilities, although in certain instances, entire properties are required.

Usually the governmental authority is able to buy the land required for a project through a negotiated process with the affected property owners. Sometimes, however, the expropriation process must be used in order to ensure that the land is obtained within a specific timeline. Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario **Expropriations Act** must be followed to ensure that the rights of the property owners provided under that *Act* are protected.

Important Note: The Region of Waterloo tries in all instances to obtain lands needed for its projects through a negotiated agreement on mutually acceptable terms. Sometimes, the Region of Waterloo will start the expropriation process while negotiations are underway. This dual approach is necessary to ensure that the Region of Waterloo will have possession of all of the lands needed to start a construction project on schedule. However, it is important to note that Regional staff continues to make every effort to reach a negotiated purchase of the required

lands on mutually agreeable terms while the expropriation process is ongoing. If agreement is reached, expropriation proceedings can be discontinued and the land transferred to the Region of Waterloo in exchange for payment of the agreed-upon compensation.

What is the process of the Region of Waterloo under the Expropriations Act?

- Regional Council considers a request to begin an application under the **Expropriations Act** to obtain land and/or an easement for a specific Regional project. No decision is made at this meeting to expropriate the land. This step is simply direction for the Region of Waterloo to provide a "Notice of Application for Approval to Expropriate" to affected property owners that the process has started to seek approval to expropriate the land.
- As stated in the Notice, affected property owners have 30 days to request a Hearing to consider whether the requested expropriation is "fair, sound and reasonably necessary in the achievement of the objectives" of the Region of Waterloo. This Hearing is conducted by a provincially-appointed Inquiry Officer. Prior to the Hearing, the Region of Waterloo must serve the property owner with a Notice setting out its reasons or grounds for the proposed expropriation. **Compensation for lands is not determined at this Hearing.** The Inquiry Officer can order the Region of Waterloo to pay the property owner up to $200.00 as compensation for the property owner's costs in participating in this Hearing, regardless of the outcome of the Hearing.
- If a Hearing is held, a written report is provided by the Inquiry Officer to the property owner and the Region of Waterloo. Council must consider the Report within 90 days of receiving it. The Report is not binding on Council and Council may or may not accept the findings of the Report. After consideration of the Report, Council may or may not approve the expropriation of the land or grant approval with modifications. A property owner may wish to make written and/or verbal submissions to Council at the time that it is considering the Report.

- If no Hearing is requested by the property owner, then Council may approve the expropriation of the land after expiry of a 30-day period following service of the Notice of Application for Approval to Expropriate.
- If Council approves the expropriation then, within 3 months of this approval, the Region of Waterloo must register a Plan at the Land Registry Office that describes the expropriated lands. The registration of this Plan automatically transfers title of the lands to the Region of Waterloo, instead of by a Deed signed by the property owner.
- Within 30 days of registration of the Plan, the Region of Waterloo must serve a Notice of Expropriation on the affected property owner advising of the expropriation. Within 30 days of this Notice, the property owner may serve the Region of Waterloo with a Notice of Election selecting the valuation date under the *Expropriations Act* for calculation of the compensation.
- In order to obtain possession of the expropriated lands, the Region of Waterloo must also serve a Notice of Possession setting out the date that possession of the land is required by the Region of Waterloo. This date has to be 3 months or more from the date that this Notice of Possession is served on the affected property owner.
    - Within 3 months of registration of the Plan, the Region of Waterloo must provide the affected property owner with payment for the full amount of the appraised fair market value of the expropriated land or easement and a copy of the appraisal report on which the value is based. If the property owner disagrees with this amount, and/or claims other compensation and/or costs under the *Expropriations Act*, the compensation and/or costs matter may be referred to a provincially-appointed Board of Negotiation in an effort to reach a mediated settlement and/or an appeal may be made to the Local Planning Appeal Tribunal (LPAT), formerly known as the Ontario Municipal Board (OMB), for a decision. In any event, the Region of Waterloo continues in its efforts to reach a negotiated settlement with the affected property owner prior to the LPAT making a decision.

Region of Waterloo

Transportation and Environmental Services

Design and Construction

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Date:	June 7, 2022
Report Title:	C2022-08: Consultant Selection for Preliminary Design, Public Consultation, Detailed Design, Contract Administration & Construction Inspection Services for Schneider's Creek Multi-Use Trail from Block Line Road to Manitou Drive, City of Kitchener

---

1. Recommendation:

That the Regional Municipality of Waterloo enter into a Consulting Services Agreement with IBI Group for the Preliminary Design, Public Consultation, and Detailed Design for Schneider's Creek Multi-Use Trail from Block Line Road to Manitou Drive, in the City of Kitchener, in the amount of $522,600 plus all applicable taxes, with additional contract administration and construction inspection services, estimated at $339,400 plus all applicable taxes to be paid on a time basis, as outlined in report TES-DCS-22-24, dated June 7, 2022.

2. Purpose / Issue:

Purchasing by-law 16-032 Part VI, section 18 (2) requires Council to approve consultant proposals in excess of $500,000 provided that the proposal is compliant and that it best meets the established criteria.

3. Strategic Plan:

This project meets the 2019-2023 Corporate Strategic Plan Objective 2.3 to increase participation in active forms of transportation (cycling and walking).

4. Key Considerations:

An engineering consultant is required to complete preliminary design, public consultation, detailed design, contract administration and construction inspection services for the construction of the Schneider's Creek Multi-Use Trail from Block Line Road to Manitou Drive in the City of Kitchener:

A consultant selection process was conducted in accordance with the Region's Purchasing By-Law. IBI Group of Waterloo, Ontario achieved the highest overall score.

Therefore, the Consultant Evaluation Team recommends that IBI Group be retained to undertake the preliminary design, public consultation, detailed design, contract administration and construction inspection services for this assignment as described above.

The upset fee limit proposed by IBI Group to complete the preliminary design, public consultation and detailed design services is $522,600 plus all applicable taxes. The fee provided is within the expected range of fees for this type of assignment. Contract administration and construction inspection services will be paid on a time basis, estimated at this time to be $339,400 plus applicable taxes.

A description of the consultant selection process is included in Appendix A.

5. Background:

The Region of Waterloo intends to undertake preliminary design, public consultation, and detailed design for the construction of a proposed Multi-Use Trail from Block Line Road to Manitou Drive in the City of Kitchener, to provide a connecting link between existing Multi-Use Trails already in place. The site location is shown in Appendix B. In addition to the pedestrian/ cycling facilities, other improvements planned for this project will include illumination improvements, consideration to providing a pedestrian bridge crossing of Schneider's Creek, CNR railway crossing, and landscape enhancements where feasible. Construction of the Schneider's Creek Multi-Use Trail is planned to occur in 2024.

6. Area Municipality Communication and Public/Stakeholder Engagement:

The Project Team includes Regional Councillor Michael Harris and staff from the Region, the Region's consultant and the City of Kitchener.

The preliminary design process will involve public, area municipal and stakeholder engagement prior to establishing the preferred design for the Schneider's Creek Multi-Use Trail and Schneider's Creek pedestrian bridge crossing. Ongoing engagement during design and construction will include affected property owners, area municipalities, CNR Railway, First Nations Indigenous Communities, Hydro Electric Power Commission of Ontario, utilities and regulatory authorities such as the Ontario Ministry of Environment, Conservation and Parks and the Grand River Conservation Authority.

7. Financial Implications:

There are sufficient funds in the 2022-2031 Transportation Capital Program to complete the work of this assignment. Detailed financial implications are included in Appendix C. It is anticipated that this project be equally cost shared with the City of Kitchener. City staff have indicated that the trail connection is considered within the 2020 Cycling and Trails Master Plan, but it is not currently a funded project. City staff will be seeking

funding for this project through capital budget 2023.

8. Conclusion / Next Steps:

Subject to Regional Council's approval of this consultant assignment, the proposed schedule for this project is as follows:

- Preliminary Design, Public Consultation and Detail Design 2022 – 2023
- Project Approval by Regional Council late 2023
- Tendering and Construction 2024

9. Attachments / Links:

Appendix A: Consultant Selection Process

Appendix B: Site Location

Appendix C: Detailed Financial Implications

Prepared By: **Jeff Nyenhuis**, Senior Engineer, Design and Construction

Marcos Kroker, Head, Design and Construction

Reviewed By: **Phil Bauer**, Director, Design and Construction

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Appendix A

Consultant Selection Process

A Request for Proposal to provide engineering consulting services was advertised in the Record, and on both the Region and Ontario Public Buyers Association websites. Nine (9) Proposals were submitted and evaluated by the Region's selection team.

The criteria used to evaluate the Proposals and Upset Fee Estimates were in accordance with the Region's Purchasing By-law and included price as a factor in the selection process. These evaluation criteria and their respective weightings were as follows:

Quality Factors

- Project Understanding and Approach (35%)
- Experience of the Project Manager (25%)
- Experience of the Project Support Staff (10%)
- Experience on Similar Projects (15%)

Price Factor

- Upset Limit Fee (15%)

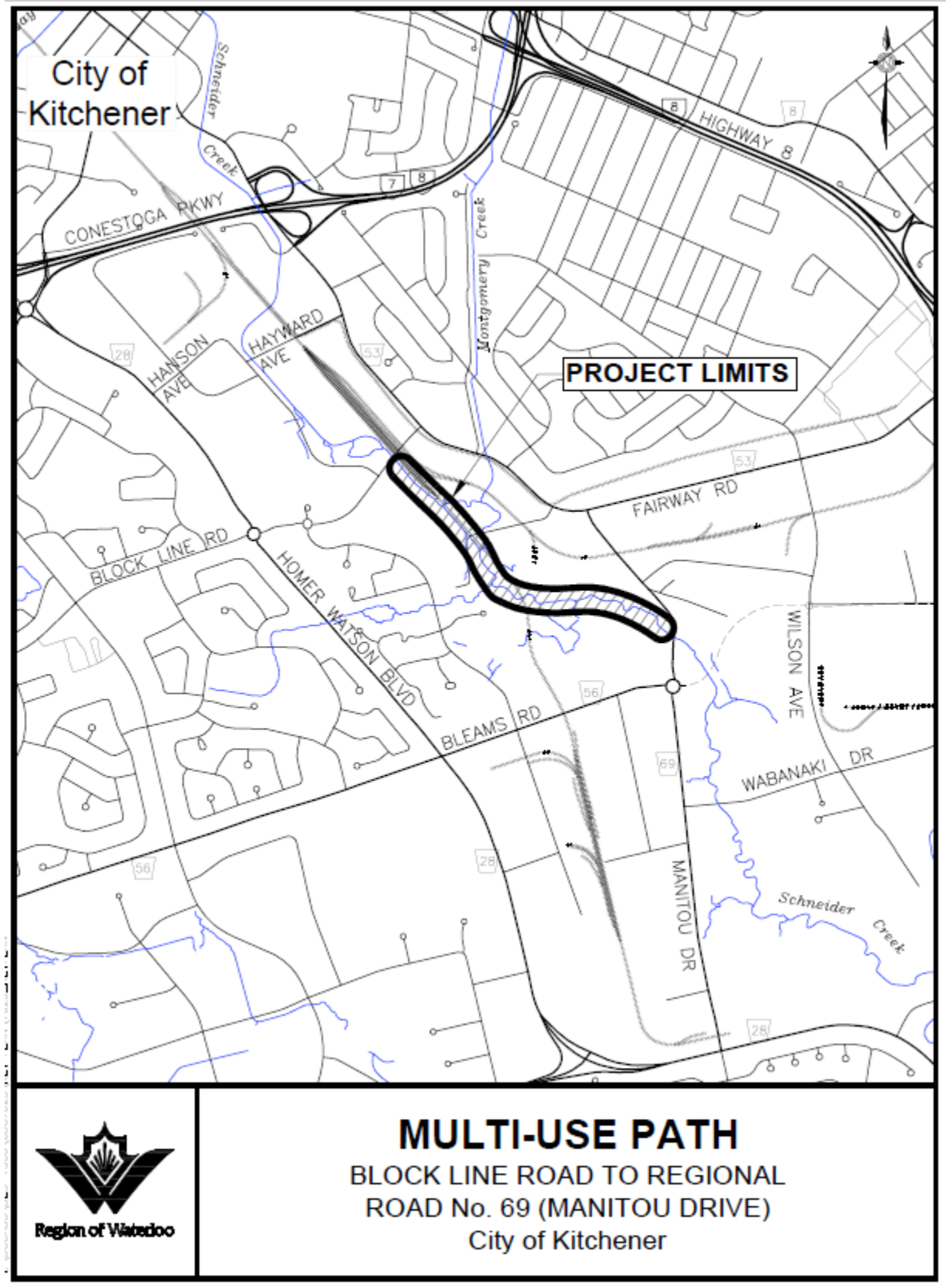
After evaluation of the proposals for quality factors, the evaluation team shortlisted and received Work Plans and Upset Limit Fee estimates from the following four (4) highest scoring consultants:

  - Associated Engineering
  - IBI Group
  - Stantec
  - Walter Fedy

When considering all Quality and Price Factors, the submission from IBI Group scored the highest overall score. IBI Group received the highest technical score due to significant understanding of the project and superior experience on similar projects.

Appendix B

Site Location



Appendix C

Detailed Financial Implications

Region of Waterloo

Item	Fee
1. Preliminary Design, Public Consultation, and Detailed Design	$522,600
2. Contract Administration and Construction Inspection Services (time basis)	339,400
Total Estimated Fees (excluding HST)	$862,000
Plus: Applicable Net HST of 1.76%	15,200
Total	$877,200
Cost sharing:	
Region of Waterloo	$438,600
City of Kitchener	438,600
Total	$877,200

Note: All figures are rounded to the nearest $100.

The Region's approved 2022-2031 Transportation Capital Program includes a budget of $2,035,000 in 2022 to 2025 (project #07623) to be funded from Transportation Capital Reserve. Based on preliminary design, the estimated cost of the project will be approximately $5.0 million and will be cost shared equally ($2.5 million). This would result in an additional Regional project costs of $465,000. The Region was informed on January 31, 2022 that this project has been approved to receive funding of up to $948,700 from the Strategic Priorities Infrastructure Fund (SPIF)- Sport and Community Renewal stream. The project budget will be amended to reflect the new funding source as well as the additional budget requirement through the 2023 capital budget process.

It is anticipated that this project be equally cost shared with the City of Kitchener. City staff have indicated that the trail connection is considered within the 2020 Cycling and Trails Master Plan, but it is not currently a funded project. City staff will be seeking funding for this project through capital budget 2023.

There are sufficient funds available for the work to be completed in 2022. The design assignment will proceed from 2022 to 2024 and there are sufficient funds in the overall budget to accommodate this work.

Region of Waterloo

Transportation and Environmental Services

Design and Construction

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Notice of Virtual Public Consultation Centre #2 - West Montrose Covered Bridge Rehabilitation

---

1. Recommendation:

For information.

2. Purpose / Issue:

A virtual Public Consultation Centre (PCC #2) for the West Montrose Covered Bridge Rehabilitation in the Village of West Montrose will be available on the Region's Engage WR website from June 7 to July 4, 2022. The purpose of PCC #2 is to solicit input from the public on the preferred rehabilitation alternative for the West Montrose Covered Bridge. The results of PCC #1 and recommended next steps are presented in this report.

3. Strategic Plan:

The project supports the 2019-2023 Corporate Strategic Plan objectives to increase participation in active forms of transportation (cycling and walking) and improve road safety for all users: drivers, cyclists, and pedestrians; and to support the arts, culture and heritage sectors to enrich the lives of residents and attract visitors to Waterloo Region.

4. Key Considerations:

The first Public Consultation Centre for the West Montrose Covered Bridge was held in October 2021. This second virtual PCC outlines the changes made to the proposed rehabilitation strategy based on additional design and analysis, including feedback received through the first PCC. This PCC provides an opportunity for the public to provide comment on:

- The needs and opportunities for improvements to the West Montrose Covered Bridge;

- Alternative solutions considered by the Project Team;
- The criteria used to evaluate the alternatives; and
- The Project Team's recommended preferred alternative.

The Project Team re-evaluated the alternative rehabilitation methods following PCC#1, based on the following criteria: Structural, Constructability, Heritage, Aesthetics, Sustainability and Life-cycle Costs. The Alternatives ranked closely for a number of criteria however, Alternative B was slightly preferred over Alternative A for aesthetic and sustainability reasons. The outcome of this review combined with the input received from PCC#1 results in a preferred rehabilitation strategy that provides the necessary improvements for the bridge.

The preferred bridge rehabilitation alternative includes:

- Removal of the existing Bailey truss and strengthening of the existing wooden truss with high strength fiber reinforcement
- Increasing the height of the bridge by approximately 300mm (1 foot), due to the increased depth of the bottom chord. This results in the need for new, longer exterior cladding.
- Height restrictor devices to prevent heavy vehicles from using the bridge;
- Replacement of the existing wooden deck with a timber glue-laminated deck;
- Reinstatement of the tar and chip surface on the deck; and
- Removal of the interior white cladding and installation of a timber guiderail to protect the exposed wooden truss.

5. Background:

This project has been initiated to provide:

- Improvements to the overall structural reliability;
- General aesthetic improvements;
- Measures to prevent entry by unauthorized oversize / overweight vehicles; and
- Fire suppression measures (further investigation required – to be implemented in a follow up Contract).

6. Area Municipality Communication and Public/Stakeholder Engagement:

Area Municipality Communication: The preferred bridge rehabilitation alternative was developed in consultation with a Project Team. The Project Team consists of Region of Waterloo Councillor Sandy Shantz, Woolwich Councillor Murray Martin (Ward 3), Woolwich Councillor Larry Shantz (Ward 3), as well as staff from both the Region of Waterloo and Township of Woolwich.

Public/Stakeholder Engagement: Approximately 36 persons submitted electronic or paper copies of the survey during PCC#1. Some email correspondence was also received. The most common concerns expressed by the public during PCC#1 were related to concerns about speeds on Line 86, the need for a fire suppression system, upgraded lighting, and protection of the oak tree in Letson Park. Respondents also requested that the Region investigate alternatives to strengthen the existing wooden truss instead of moving forward with the installation of a new custom-built steel girder presented in PCC#1 (Alternative A). A detailed summary of the comments received and responses to these comments is presented in Attachment B to this report.

Feedback received from the first PCC is incorporated into the updated design. PCC #2 notification letters were hand-delivered to all properties within the project area, and mailed to regulatory agencies and other stakeholders. Signs within the project limits were also be installed and a notification placed on the Region of Waterloo's general website and EngageWR website. A stakeholder meeting is planned with the West Montrose Residents' Association. PCC #2 will be a virtual PCC, consistent with the approach outlined in TES-20-02.

7. Financial Implications:

Nil.

8. Conclusion / Next Steps:

The Project Team will incorporate feedback received from PCC#2 and finalize the preferred bridge rehabilitation concept. A recommended alternative is planned for Council consideration in Fall 2022. Subject to Council approval, construction is planned to occur starting in Summer 2023, with completion anticipated by Summer 2024.

9. Attachments / Links:

Attachment A: West Montrose Covered Bridge Rehabilitation Public Consultation Centre #2 Information Package (DOCS #3991949)

Attachment B: Summary of Comments Received through Public Consultation Centre #1 (DOCS #3991947)

Prepared By: **Michelle Pinto**, Engineer, Design and Construction

Skylar Van Kruistum, Head, Design and Construction

Reviewed By: **Phil Bauer**, Director, Design and Construction

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Region of Waterloo

West Montrose Covered Bridge Rehabilitation
Township of Woolwich

Public Consultation Centre #2
Information Package
https://www.engagewr.ca/west-montrose

What: The Regional Municipality of Waterloo plans to rehabilitate the West Montrose Covered Bridge through a Schedule "A+" Municipal Class Environmental Assessment (Class EA).

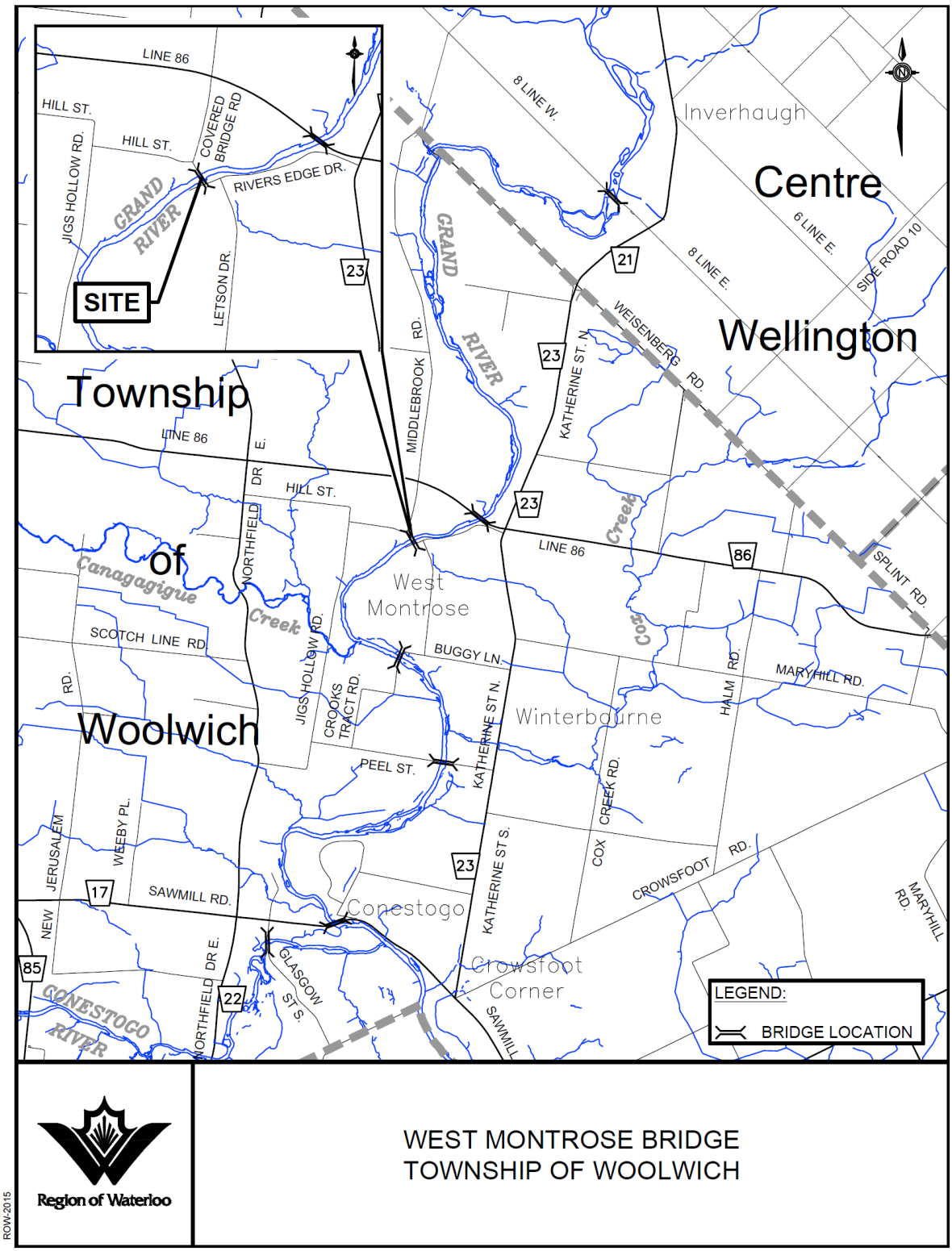
Where: Covered Bridge Road in the Township of Woolwich.

Why: To conduct a comprehensive structural rehabilitation of the West Montrose Covered Bridge to ensure safety and preservation of the structure over the long-term.

When: 2023 construction (tentative).

Who: Region of Waterloo Project Manager
Michelle Pinto
519-575-4400 x3637
MiPinto@regionofwaterloo.ca

KEY PLAN


SITE
LINE 86
HILL ST.
HILL ST.
COVERED BRIDGE RD
JIGS HOLLOW RD.
GRAND RIVER
RIVERS EDGE DR.
LETSON DR.
23
8 LINE W.
Inverhaugh
Centre
6 LINE E.
SIDE ROAD 10
8 LINE E.
21
WEISENBERG RD.
Wellington
KATHERINE ST. N.
MIDDLEBROOK RD.
GRAND RIVER
Township
LINE 86
HILL ST.
NORTHFIELD DR E.
of
Canagagigue Creek
West Montrose
Cox Creek
LINE 86
86
SPLINT RD.
SCOTCH LINE RD
BUGGY LN.
JIGGS HOLLOW RD.
CROOKS TRACT RD.
Woolwich
Winterbourne
MARYHILL RD.
HALM RD.
PEEL ST.
KATHERINE ST N.
CREEK RD.
JERUSALEM
WEEBY PL.
NEW
17
SAWMILL RD.
Conestogo
KATHERINE ST S.
COX
CROWSFOOT RD.
MARYHILL RD.
85
CONESTOGO RIVER
NORTHFIELD DR E.
22
GLASGOW ST S.
Crowsfoot Corner
SAWMILL
LEGEND:
BRIDGE LOCATION
Region of Waterloo
ROW-2015
WEST MONTROSE BRIDGE
TOWNSHIP OF WOOLWICH

CONTENTS

Frequently Asked Questions
Survey

Appendix A – Brief History of Bridge
Appendix B – Existing Bridge Components and Planned Rehabilitation Measures
Appendix C – Rehabilitation Alternatives
Appendix D – Deck Replacement Options
Appendix E – Height Restriction Bar Options
Appendix F – Evaluation of Alternative Rehabilitation Methods
Appendix G – Proposed Access and Staging Areas

1. Why is the Region considering this project?

The West Montrose Covered Bridge requires a complete structural rehabilitation in order to ensure that the structure will continue to serve the public through the current century.

Between 2012 and 2018, the Region undertook a number of field studies and analyses to determine the long-term structural behaviour of the hybrid dual truss system (consisting of the original 1881 wood truss and the supplemental 1944 steel Bailey truss). The principal ultimate findings were as follows:

- The dead load (i.e. weight of the bridge itself) and live loads (i.e. weight of vehicles, pedestrians, snow, etc.), are being carried by both the original wooden truss and the steel Bailey trusses.
- As the original wood trusses age, they are “shedding” (transferring) load to the Bailey trusses.
- The Bailey trusses do not have sufficient capacity to carry the entire load of the bridge. Accordingly, if sufficient load is shed by the wooden trusses onto the Bailey trusses, the Bailey trusses could become overloaded leading to the collapse and loss of the bridge.
- The Bailey trusses (manufactured in 1944) are now 76 years old and cannot be readily retrofitted to achieve a strength sufficient to carry the entire load of the bridge.
- The life of the bridge and the safety of the bridge cannot be addressed through restriction of the bridge to pedestrian-only traffic. For example, a tour group of 40 adults on foot imposes a weight approximately equal to two passenger vehicles plus occupants.
- For the best assurance of safety of the structure and its users, the bridge should undergo a major rehabilitation intended to provide a single robust load bearing system capable of supporting all dead and live loads imposed on the bridge.

A brief chronology of the West Montrose Covered Bridge is presented in **Appendix A**.

Pictures of the bridge with labels of the various components can be found in **Appendix B**

2. Who is directing this project?

The planning and design for this project is being directed by staff from the Region of Waterloo and Township of Woolwich, along with Township of Woolwich Mayor Sandy Shantz and Township of Woolwich (Ward 3) Councillors Larry Shantz and Murray Martin. The consulting engineering firm Doug Dixon and Associates (“DDA”) has been

retained by the Region of Waterloo to provide preliminary and final design services for this project, as well as contract administration and inspection services through the construction phase.

3. How is this project being planned?

This project is being planned in accordance with the requirements of the Municipal Class Environmental Assessment (Class EA) process. The Municipal Class EA process is a planning and decision-making process approved under the Environmental Assessment Act that is used by municipalities to plan public infrastructure projects in order that potential environmental impacts are considered before a project is approved. It requires consultation with the public, involved stakeholders, and agencies in consideration of alternatives and their potential impacts on the project environment.

This project is being planned as a Schedule “A+” Class EA project which applies to projects that are classified as pre-approved under the Environmental Assessment Act, with the added requirement of public notification prior to implementation.

4. What is the purpose of this second public consultation?

The purpose of this second public consultation is to offer an opportunity for the public and interested stakeholders to provide input on the:

a) Alternatives that were considered by the project team for the major rehabilitation of the bridge.

b) Criteria used to evaluate the alternatives.

c) Project team preferred alternative rehabilitation strategy.

Responses to the comments received in PCC#1 can be found on the Engage website.

Updated information on this project, and a short survey to capture your comments, is available at EngageWR.ca (https://www.engagewr.ca/west-montrose).

Region and project consultant staff are available to answer questions. You can reach staff through the EngageWR site, email, mail, or telephone. Contact information is available in this Information Package.

All comments received, study and technical findings, best practices and all information received will be considered by the project team to complete the planning and design for this project.

5. What work has been completed on this project since the first Public Consultation Centre (PCC)?

Following Public Consultation Centre #1, the project team collected and summarized all comments and feedback received. A summary of those comments, complete with responses from the project team, are included on the EngageWR website for the West Montrose Covered Bridge Project.

Work is ongoing for the Natural Resource Assessment, Heritage Impact Assessment and Archeological Study required for this project. The Region has continued engagement with various stakeholders and agencies including the Grand River Conservation Authority (GRCA) and Fisheries and Oceans Canada (DFO).

After receiving feedback from members of the public during the first PCC, the project team has evaluated additional alternatives for the rehabilitation of the West Montrose Covered Bridge and has chosen a preferred alternative which includes strengthening of the existing wooden truss with high-strength fibre reinforcement. The project team is seeking feedback on the preferred rehabilitation alternative.

6. What rehabilitation actions are planned for this project?

The rehabilitation actions planned for this project include the following:

- Remove the existing steel 1944 Bailey trusses and strengthening of the existing wooden truss, designed and built specifically for the purpose of carrying the loads of the West Montrose Covered Bridge.
- Increase the height of the bridge by 300mm or one foot to facilitate reinforcing the bottom chord of the existing wooden truss.
- Remove the interior white cladding and installation of a timber guide rail to protect the wooden truss.
- Replace the deck system, including the longitudinal stringers and transverse nail-laminated wood deck with a timber glue-laminated deck (refer to Appendix D).
- Replace the roof system.
- Replace the external red timber cladding with new, longer cladding to match the new height of the bridge.
- Remove the non-functioning longitudinal tension-rod system installed by MTO in the 1950s.
- Install height restriction bars to prevent entry by unauthorized oversize/overweight vehicles (refer to Appendix E).

- Place a boulder “protection collar” around the base of the pier in order to guard against harmful scour effects associated with heavy river flows during flood events.

Please refer to Appendix **B** for figures showing the planned rehabilitation measures.

7. How is the natural environment being considered?

A Natural Resource Assessment is underway for this project by Ecotec Environmental. The relevant environmental review agencies including the Region of Waterloo, Grand River Conservation Authority (GRCA), Ministry of Natural Resources and Forestry (MNRF), Ministry of Environment Conservation and Parks (MECP), and Department of Fisheries and Oceans (DFO) will be liaised with for input in the environmental assessment/review process.

8. How is the Cultural / Heritage environment being considered?

The Region of Waterloo must apply to the Township of Woolwich for approval of any changes to the bridge that will impact heritage attributes identified in the Ontario Heritage Act Designation By-law.

The steel Bailey truss that was added internally to the bridge in a 1959 rehabilitation project is not supporting the bridge as intended and needs to be removed as part of this project. Archive photos show the cladding inside the bridge dating at least as far back as the early 1940s. The Bailey truss and interior white cladding are specifically identified in the Heritage Designating By-law for the bridge. As such, this by-law will need to be amended. It is anticipated that the amendment to the Designation By-law can occur either nearing the completion or after the rehabilitation and reconstruction work.

The rehabilitation and reconstruction project has been planned with retaining cultural heritage value as its central consideration. A Heritage Impact Assessment (HIA) will be prepared to assess potential impacts of the project and recommend mitigation measures for any identified negative impacts. Once completed, the HIA will be reviewed by the Region’s and Township of Woolwich’s Heritage Planning Committees.

A Conservation Plan that will build on 2014 Preservation Plan for the bridge and the recommendations of the HIA will also be developed. The Conservation plan will outline measures that may need to be undertaken during the bridge rehabilitation, as well as conservation measures for the short, medium and long-term to ensure timely and appropriate maintenance and conservation efforts.

While some negative impacts cannot be avoided, it is the sole purpose of this project to preserve the heritage bridge in perpetuity. The information gathered through the above

supporting studies will be used to make certain the rehabilitation project will be undertaken in the least impactful way and ensure that the West Montrose Covered Bridge will be conserved for many decades to come.

9. What alternatives are being considered regarding the planned rehabilitation actions? How were they evaluated?

There are two rehabilitation options currently under consideration:

> **Alternative A – Steel Girder Reinforcement.** This option was presented to the public in PCC#1, and involves removal of the existing Bailey truss and replacement with new steel girders. The interior white cladding would be replaced and the new steel girder would be hidden from view, similar to the look of the bridge interior today.
>
> **Alternative B (Preferred) – Timber Truss Reinforcement.** This option involves strengthening of the existing wooden truss with high strength fiber reinforcement. The height of the bridge would increase by approximately 300mm or one foot to facilitate reinforcing the bottom chord of the existing wooden truss. The interior cladding would be removed under this Alternative, and the addition of a timber guiderail would be required to protect the wooden truss from damage.

Please refer to **Appendix C** for figures showing the two rehabilitation alternatives.

A height restriction bar is proposed under both alternatives and was supported by the public in PCC#1. Please refer to **Appendix E** for the height restriction bar options that the project team is seeking input on during this round of public consultation.

Under both alternatives, the existing wooden deck would be replaced with a glue-laminated timber deck.

10. How have the bridge rehabilitation alternatives been evaluated?

The rehabilitation alternatives have been assessed against a set of evaluation criteria by the project team to determine which alternative is “Preferred” and is considered to best address the needs and opportunities for improvements to the West Montrose Covered Bridge.

The evaluation criteria included the following:

- Structural—compliance with design standards, level of redundancy, structural integrity and longevity.
- Constructability—consideration for the complexity or ease of the construction process and approval requirements.

- Heritage—does the alternative preserve the cultural heritage of the bridge? Is the alternative reversible?
- Aesthetics—how visually appealing is the proposed alternative?
- Sustainability—which alternative requires less energy to construct and produces the least amount of greenhouse gas emissions?
- Costs—what is the total cost of the alternative, including construction costs and the costs for future maintenance requirements?

Following PCC#1, the project team reviewed public input to develop and finalize the evaluation of the rehabilitation alternatives. Results of the project team evaluation of the rehabilitation alternatives was tabulated (**Appendix F**). The alternatives ranked closely for a number of criteria however, Alternative B was slightly preferred over Alternative A for aesthetic and sustainability reasons.

11. What is the project team's preferred alternative?

Based on the evaluation of the rehabilitation alternatives, including public and agency input, as well as the various inventories and identified constraints, the project team's preferred alternative includes the following:

- Remove the existing Bailey truss and strengthening of the existing wooden truss with high strength fiber reinforcement.
- Increase the height of the bridge by approximately 300mm (one foot), as a result of the increased depth of the bottom chord. This results in the need for new, longer exterior cladding.
- Install height restriction devices to restrict heavy vehicles from using the bridge.
- Reinstate the tar and chip wearing surface.
- Replace the existing wooden deck with a timber glue-laminated deck.
- Remove the interior white cladding and installation of a timber guiderail to protect the wooden truss.

Please refer to **Appendix C** and **Appendix D** to view the elements of the Preferred Rehabilitation Alternative in closer detail.

12. Will a fire suppression system be installed as part of the main rehabilitation contract?

The Region will continue to investigate options for the installation of a fire suppression system. Since the local watermain does not have sufficient pressure and/or flow capacity to drive a fire suppression system, a more in-depth review of alternative water sources and potential budget requirements will be completed as a separate

undertaking. The preferred alternative rehabilitation method will not preclude the installation of a sprinkler system at a later date.

The Region's contacts in New Brunswick have noted that fire suppression systems can be very expensive. New Brunswick officials note that only one of New Brunswick's 50 covered bridges (Hartland) is equipped with a fire suppression system.

By investigating the feasibility of a fire suppression system in a follow-up contract, the design can be removed from the critical path for the rehabilitation work. This also provides more time for the Region to identify and retain a firm interested in providing the design of the system.

13. Is any private property required for the preferred alternative?

The work will require access to the river near the bridge. The Region will seek to arrange for temporary access with adjacent property owners or seek to acquire necessary easements as required. Please refer to **Appendix G** for a plan view showing the proposed access locations.

14. What is the estimated cost of this project?

The recommended rehabilitation will cost approximately $4,000,000. Please note that this cost is only an estimate. The final cost will depend on the exact scope of work and details incorporated into the rehabilitation.

Funding for this project is being provided by the Investigating in Canada Infrastructure Program (ICIP).

15. What is the project schedule? When will construction occur?

Construction is currently scheduled to begin starting in summer 2023 and continue until summer 2024.

16. Will the bridge be closed to vehicles and pedestrians during construction?

Construction of the rehabilitation will require the full closure of the West Montrose Covered Bridge to all motorized vehicles and horse-and-buggy traffic for up to one full year.

It is currently believed that the bridge can remain open to pedestrians and cyclists for most of the construction period; however, there will be critical phases where the bridge

will be unavailable to pedestrians and cyclists for an estimated period of up to two weeks.

Detour routes will be established and efforts will be made to make these routes as convenient and safe as possible for all road users, including horse-and-buggy traffic, pedestrians, cyclists and motorists.

More detailed information will be made available prior to construction to adjacent property owners, tenants and the public.

17. How will I receive further notification regarding this project? How can I view project information following PCC#2?

Property owners and tenants abutting the project site and members of the public registering at this Public Consultation Centre will receive all forthcoming public correspondence, and will be notified of all future meetings.

Alternatively, you may visit https://www.engagewr.ca/west-montrose. Please "Subscribe" to the page to receive update notices.

The PCC display materials, and other relevant project information, notifications of upcoming meetings, and contact information are available by visiting https://www.engagewr.ca/west-montrose.

18. How can I provide my comments?

We want to hear from you!
Visit engagewr.ca and complete the survey to share your comments.
You can also mail, or email your comments to the project team leads as indicated below.

Thank you for your participation. Please contact Michelle or Doug if you have any questions or concerns.

Michelle Pinto, P.Eng., MBA
Engineer
Region of Waterloo
150 Frederick Street
Kitchener, ON N2G 4J3
519-575-4096
mipinto@regionofwaterloo.ca

Doug Dixon, P.Eng.
Consultant Project Manager
Doug Dixon & Associates Inc.
2 County Court Blvd #345
Brampton, ON L6W 3W8
647-405-0523
ddixon@dougdixonassociates.com

Survey on West Montrose Covered Bridge Rehabilitation
Due: Monday, July 4, 2022

Please feel free to select from any of the following options to complete and submit the survey.

Option 1 – On-line survey at www.engagewr.ca/west-montrose/

Option 2 – Email survey. Copy-and-paste the survey text into an email message and send it to MiPinto@regionofwaterloo.ca. Alternatively, you may print and complete a paper version of the survey and send a scan of the survey to same email address.

Option 3 – Mail-In survey. If you received a paper copy of the survey (or if you have printed your own copy), you may complete it and mail it to the Region at the following address.

> Michelle Pinto, P.Eng., Engineer, Region of Waterloo
> 150 Frederick Street, Kitchener, ON N2G 4J3

If you would like to receive a paper copy of the survey, please contact Michelle Pinto at 519-575-4400, ext. 3637 or mipinto@regionofwaterloo.ca.

If you wish to complete the survey, we ask that you send it to the Region no later than **July 4, 2022**.

1. What advantages do you see in moving forward with the preferred alternative?

(The Preferred Alternative involves strengthening the existing wooden truss using high strength fiber reinforcement. The height of the bridge would be increased due to the increased depth of the bottom chord of the truss. The interior cladding would be removed and a timber guide rail installed.)

2. What challenges do you see in moving forward with the preferred alternative?

3. What are your thoughts on removing the white cladding in the interior to expose the wooden truss elements?

(The addition of a railing would be required to protect the wooden truss.)

- ☐ I support the removal of the interior white cladding to expose the wood truss and the addition of a timber railing as required to protect the truss.
- ☐ Leave it as is, regardless of which Alternative is recommended. The interior white cladding is part of the history of the bridge.
- ☐ Not Sure / No preference.
- ☐ Other (please specify) _____

4. Additional roadside features are required to prevent large vehicles from gaining access to the West Montrose Covered Bridge, causing damage to the floor beams. What advantages/disadvantages do you see with each option?

☐ Option 1 – Steel Goal Post

☐ Option 2 – Wooden Goal Post

☐ Other (please specify)

5.

5. Do you have any other comments regarding this project?

Please provide your contact information.

Name:

Address:

Postal Code:

Phone:

Email:

Collection Notice:

All comments and information received from individuals, stakeholder groups, and agencies regarding these projects and meetings are being collected to assist the Region of Waterloo in making a decision. Under the “Municipal Act”, personal information (such as name, address, telephone number, and property location) which may be included in a submission becomes part of the public record. Questions regarding the collection should be forwarded to the staff member noted above.

APPENDIX A – BRIEF HISTORY OF THE WEST MONTROSE COVERED BRIDGE

1881. The original bridge constructed. The two span bridge employs wooden trusses to support weight on the bridge.

After 1900. Original wood abutments replaced with concrete abutments.

1933. The original wooden trusses are replaced.

1937 - 1998. The Ontario Department of Highways (DOH), now the Ministry of Transportation, assumes ownership of the bridge. The DOH undertakes miscellaneous work to strengthen the bridge, including the addition of steel World War II era bailey trusses, hidden from view by the use of white wood cladding.

1998. The Ministry of Transportation transfers ownership of the bridge to the Region of Waterloo.

1999 - 2014. The Region completes a number of major and minor rehabilitation projects. Long-term structural monitoring started in 2012.

2014 - 2019. The Region presents its 10-year Preservation Plan for the bridge. Improvement recommendations included: installation of fire and lightning protection ;regulatory and advisory signage improvements; approach barrier upgrades; bracing restoration; climate studies; survey sensor installation; sprinkler installation; illumination upgrades; floor beam strengthening; and overall structural strengthening. The Region begins to implement these recommendations.

2019. The Region completes the gathering of the long-term bridge monitoring data. A Structural Evaluation to the current Bridge Design Code is undertaken, using data gathered through long-term bridge monitoring.

2020. Region Council approves a structural rehabilitation plan for the bridge.

2020 - 2021. Detailed engineering design starts for the upgrades.

For a more detailed history of the bridge, please visit: https://www.engagewr.ca/west-montrose

---

APPENDIX B – EXISTING BRIDGE COMPONENTS AND PLANNED REHABILITATION MEASURES

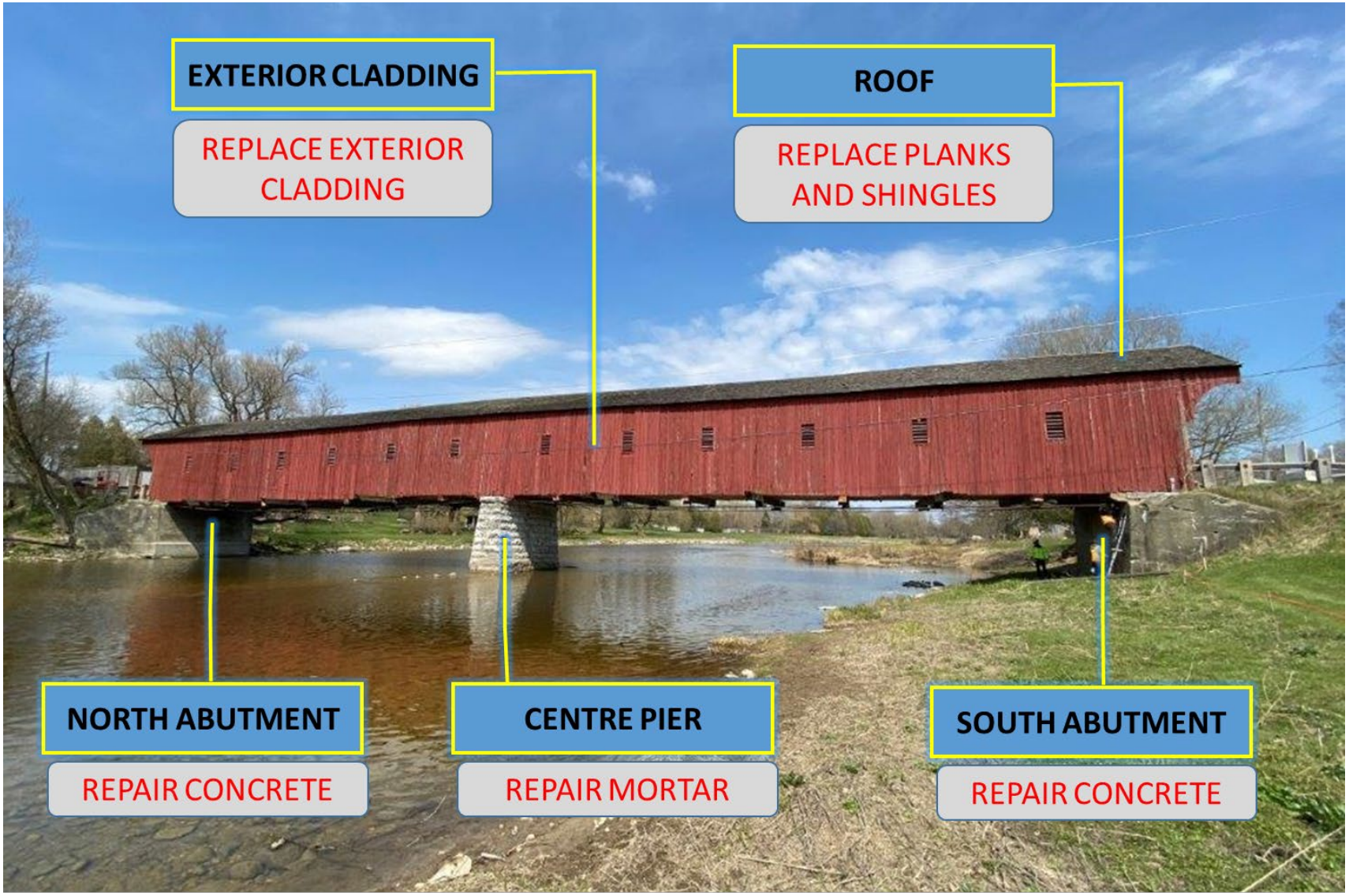


Figure B1: Elevation View – Bridge Components and Proposed Rehabilitation

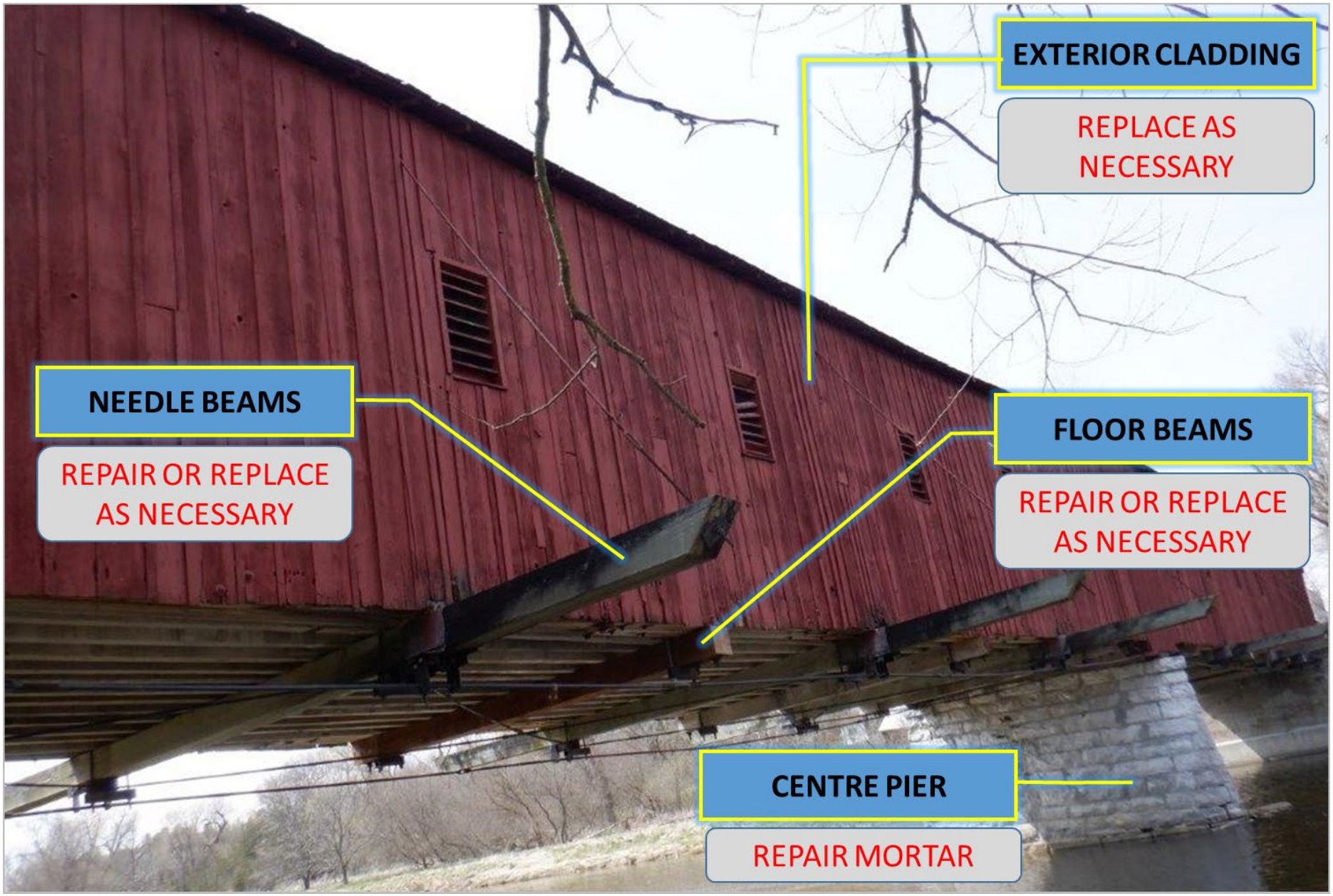


Figure B2: Exterior View – Bridge Components and Proposed Rehabilitation

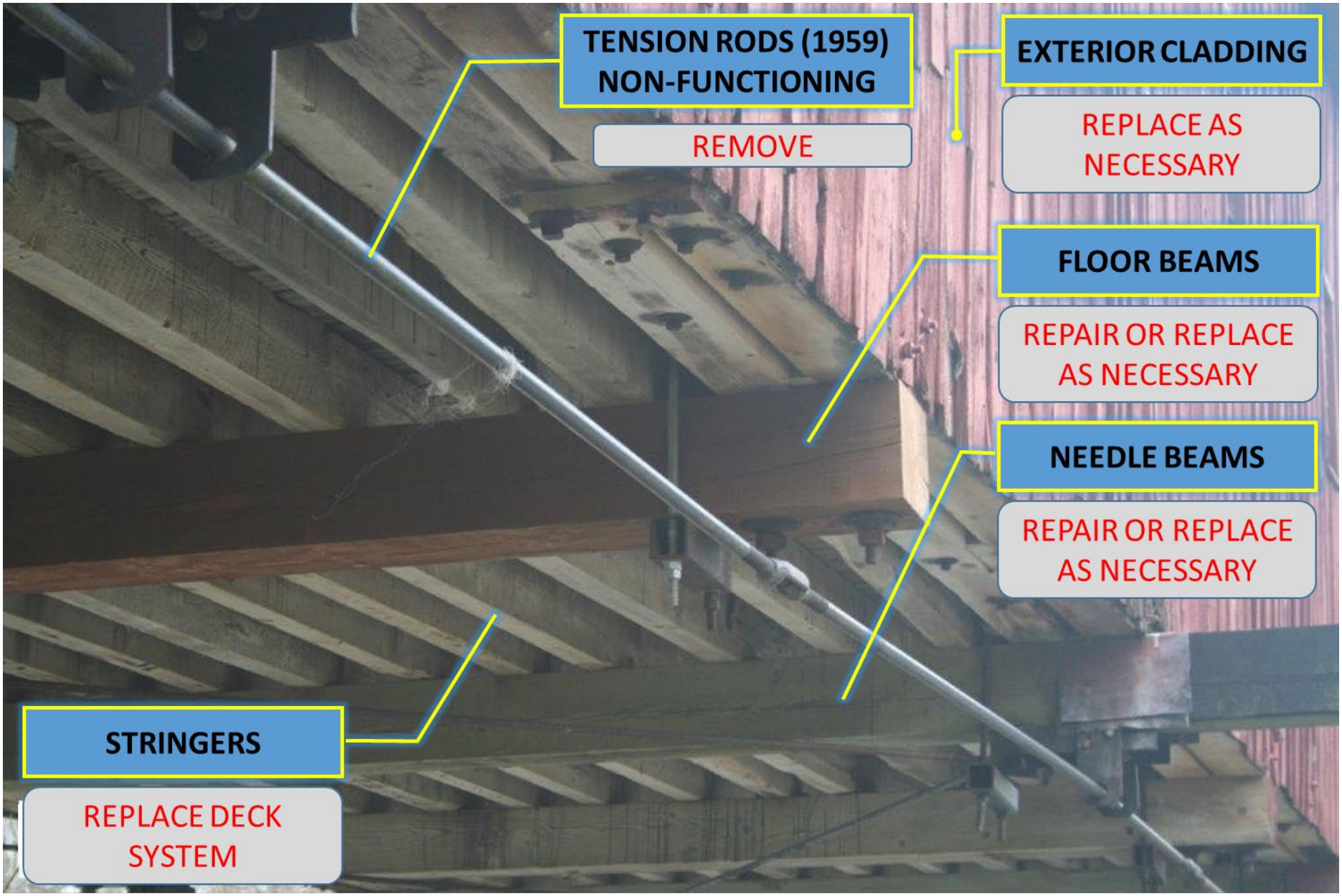


Figure B3: Exterior View – Bridge Components and Proposed Rehabilitation

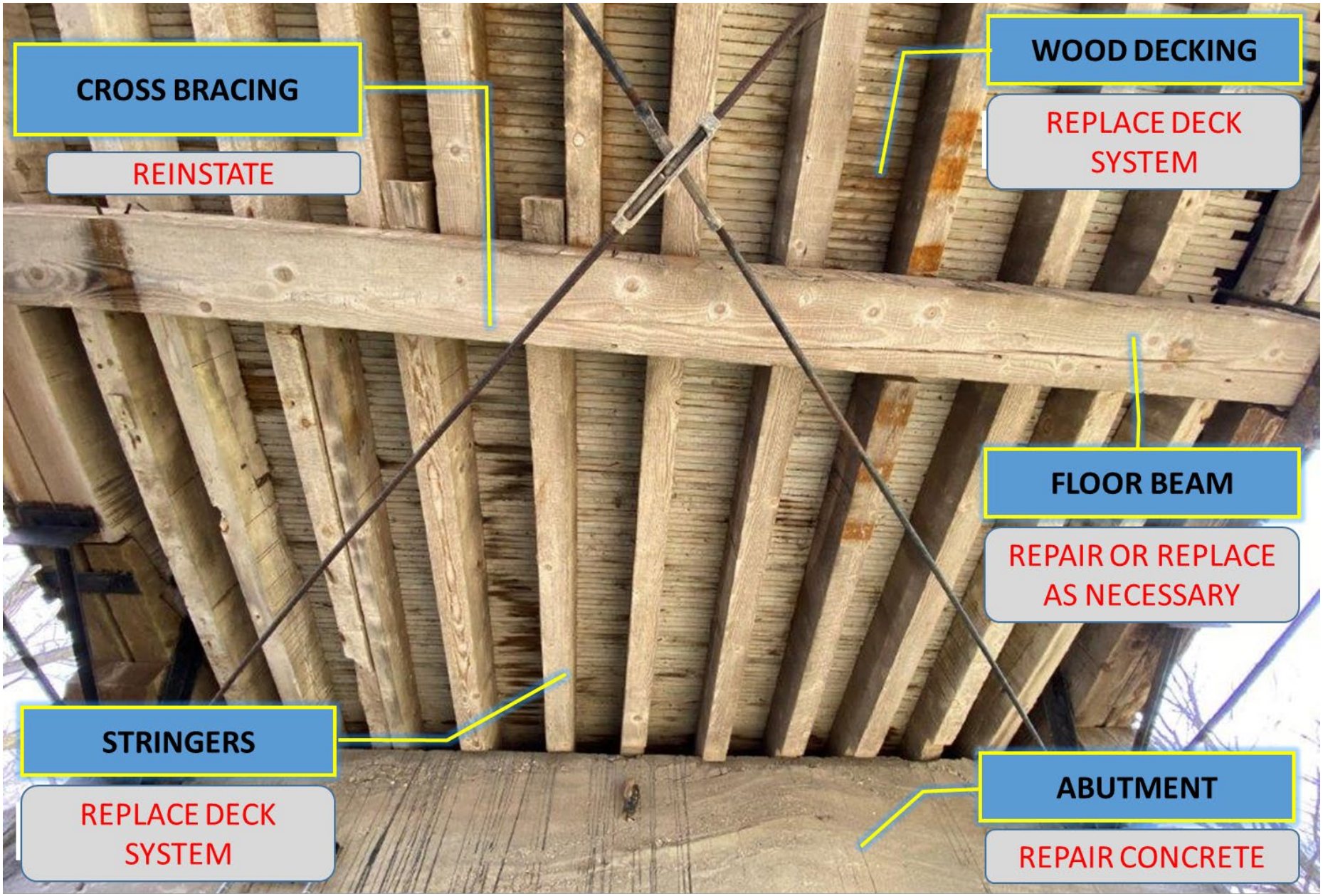


Figure B4: Underside View – Bridge Components and Proposed Rehabilitation

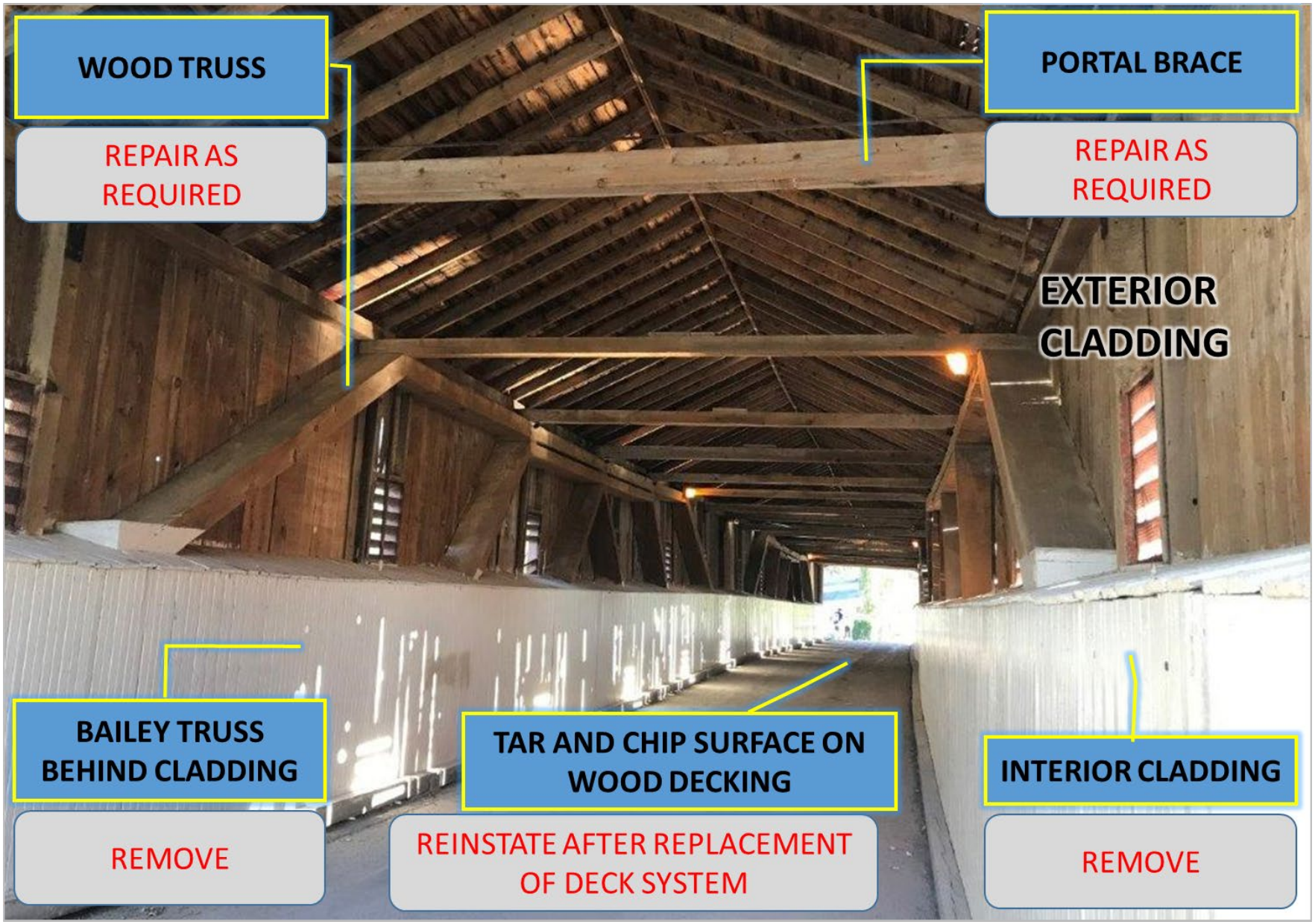


Figure B5: Interior View – Bridge Components and Proposed Rehabilitation

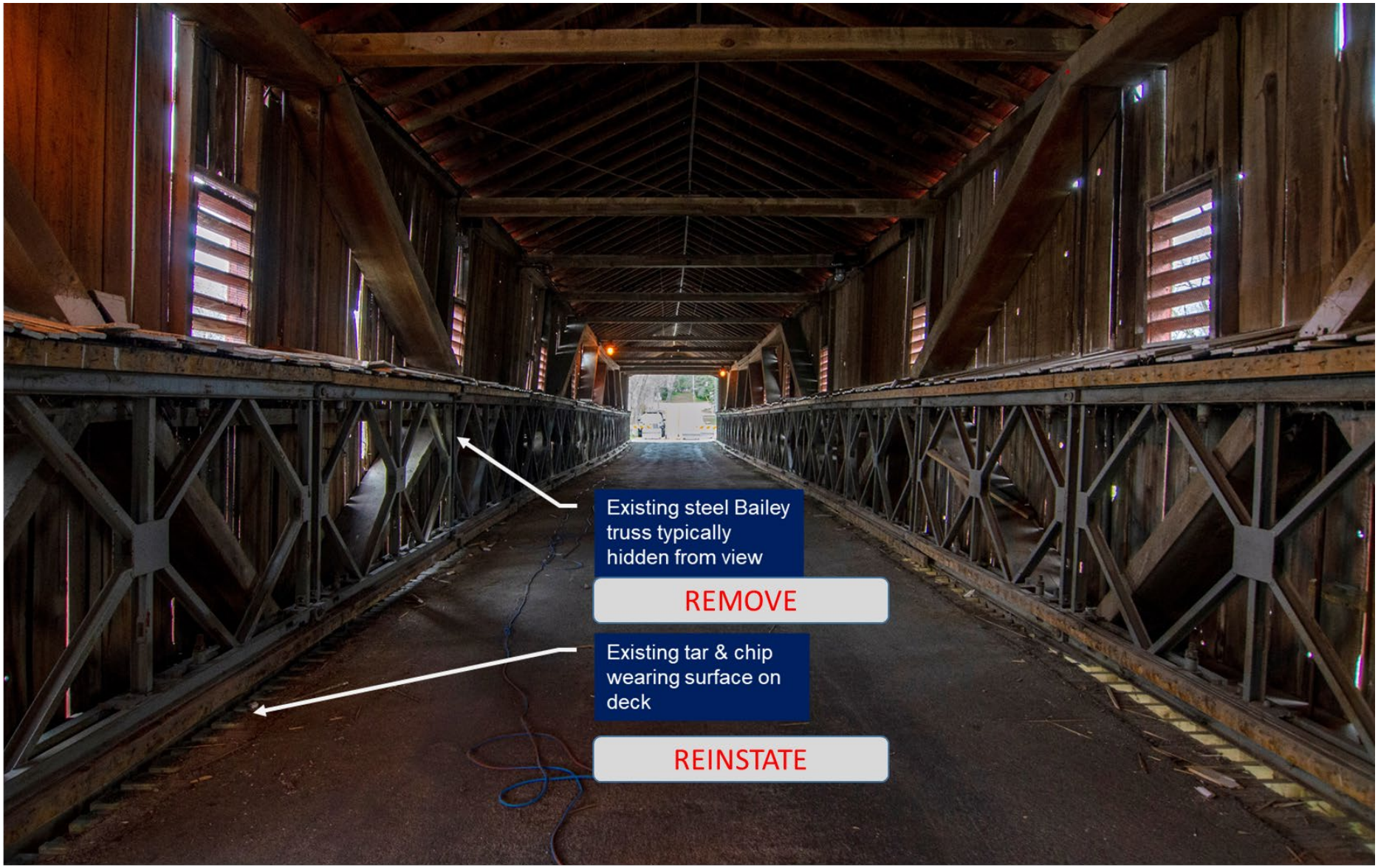


Figure B6: Interior View of Truss Systems – Existing – Interior Cladding Removed

APPENDIX C – REHABILITATION ALTERNATIVES

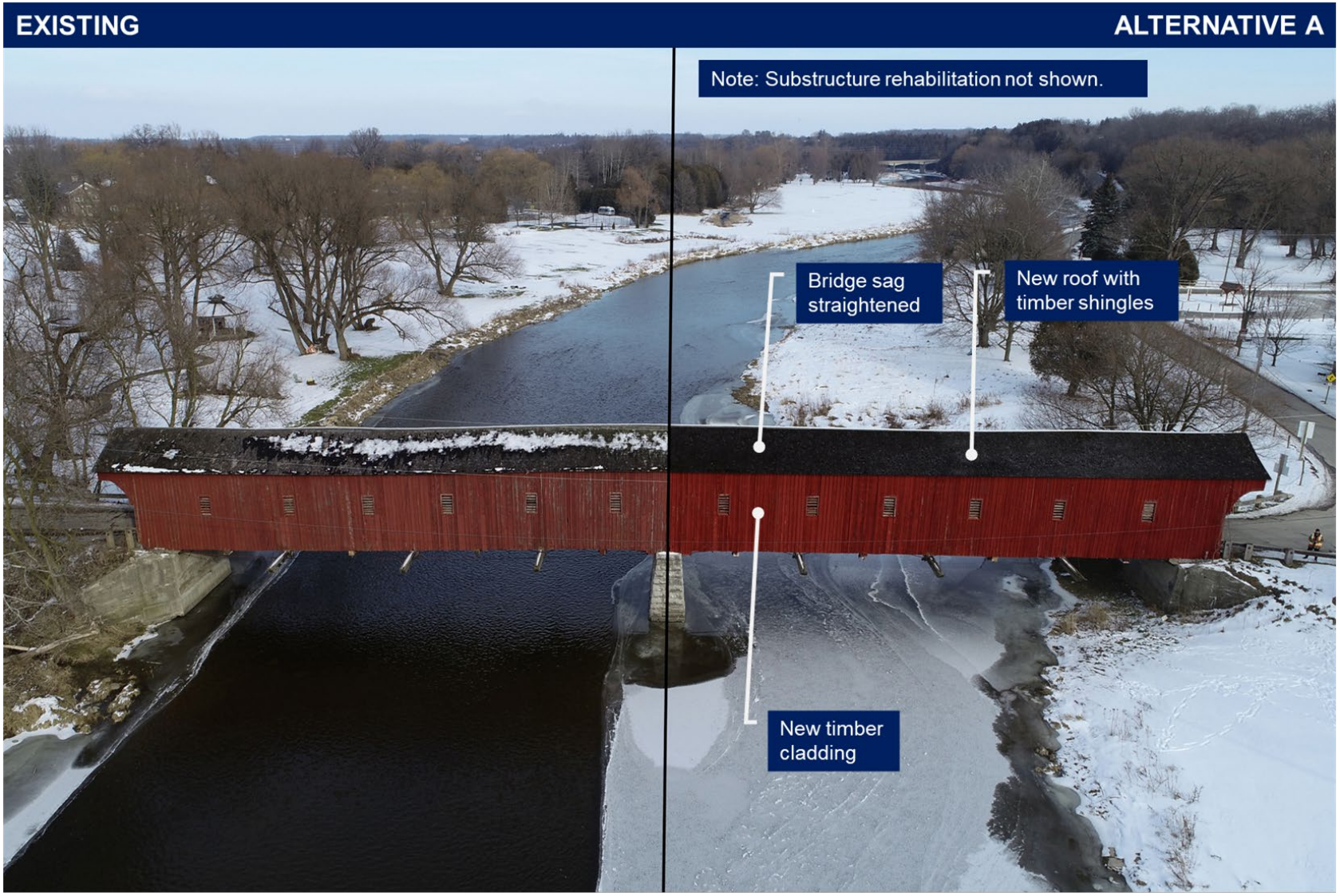


Figure C1: Elevation View – Existing and Alternative A (Steel Girder Reinforcement)

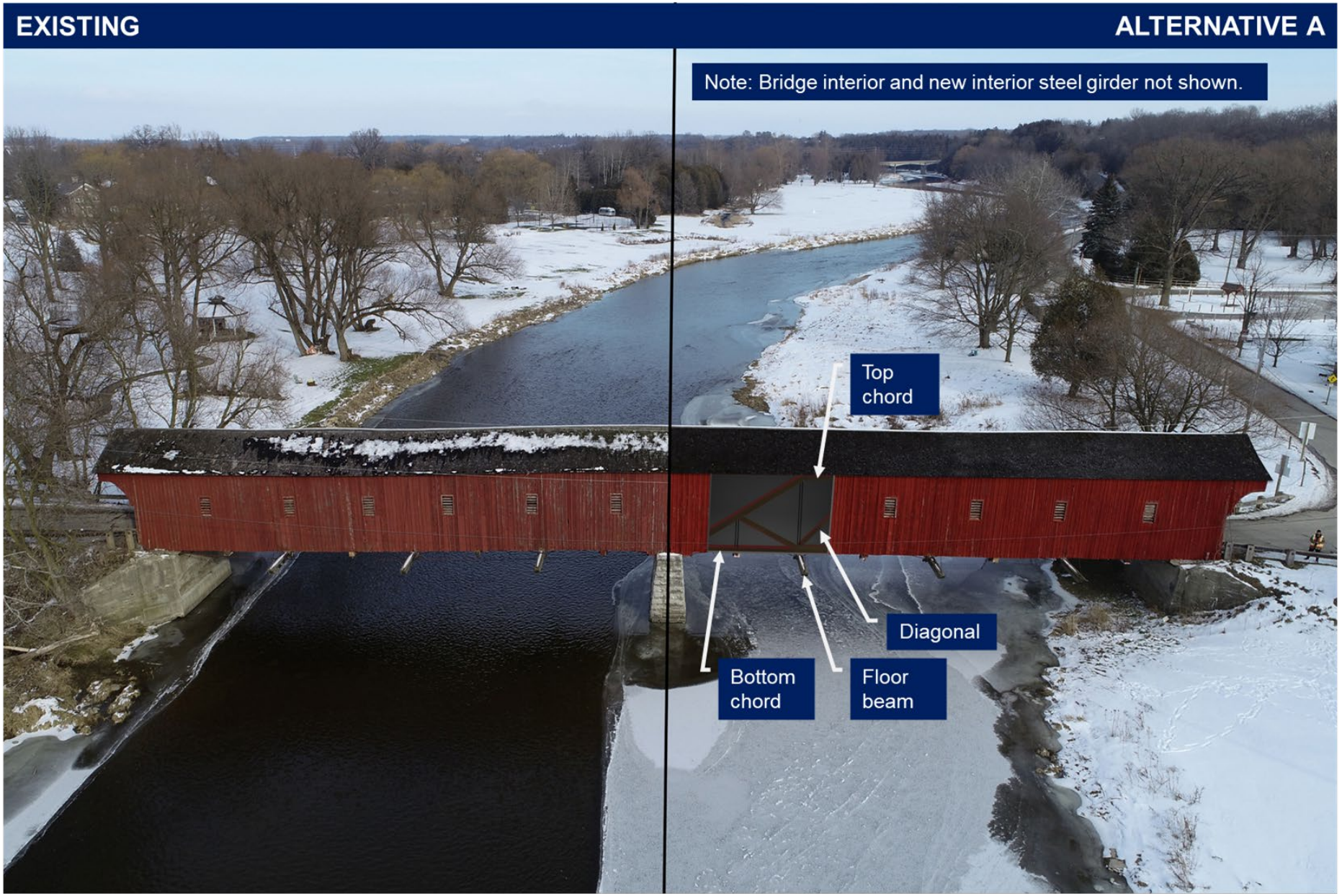


Figure C2: Elevation View – Existing and Alternative A (Steel Girder Reinforcement)

Figure C3: Elevation View – Existing and Alternative B (Timber Truss Reinforcement)

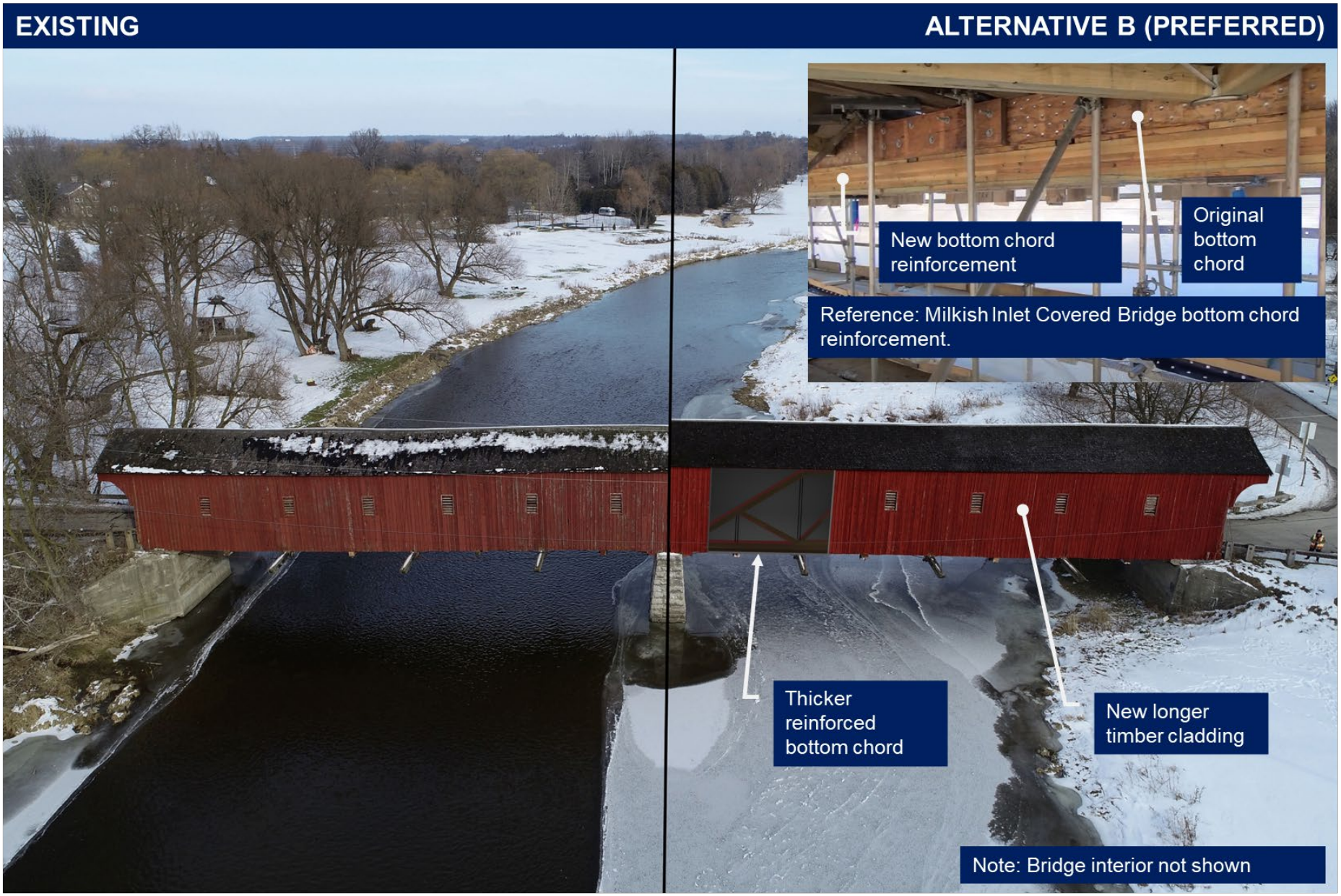


Figure C4: Elevation View – Existing and Alternative B (Timber Truss Reinforcement)

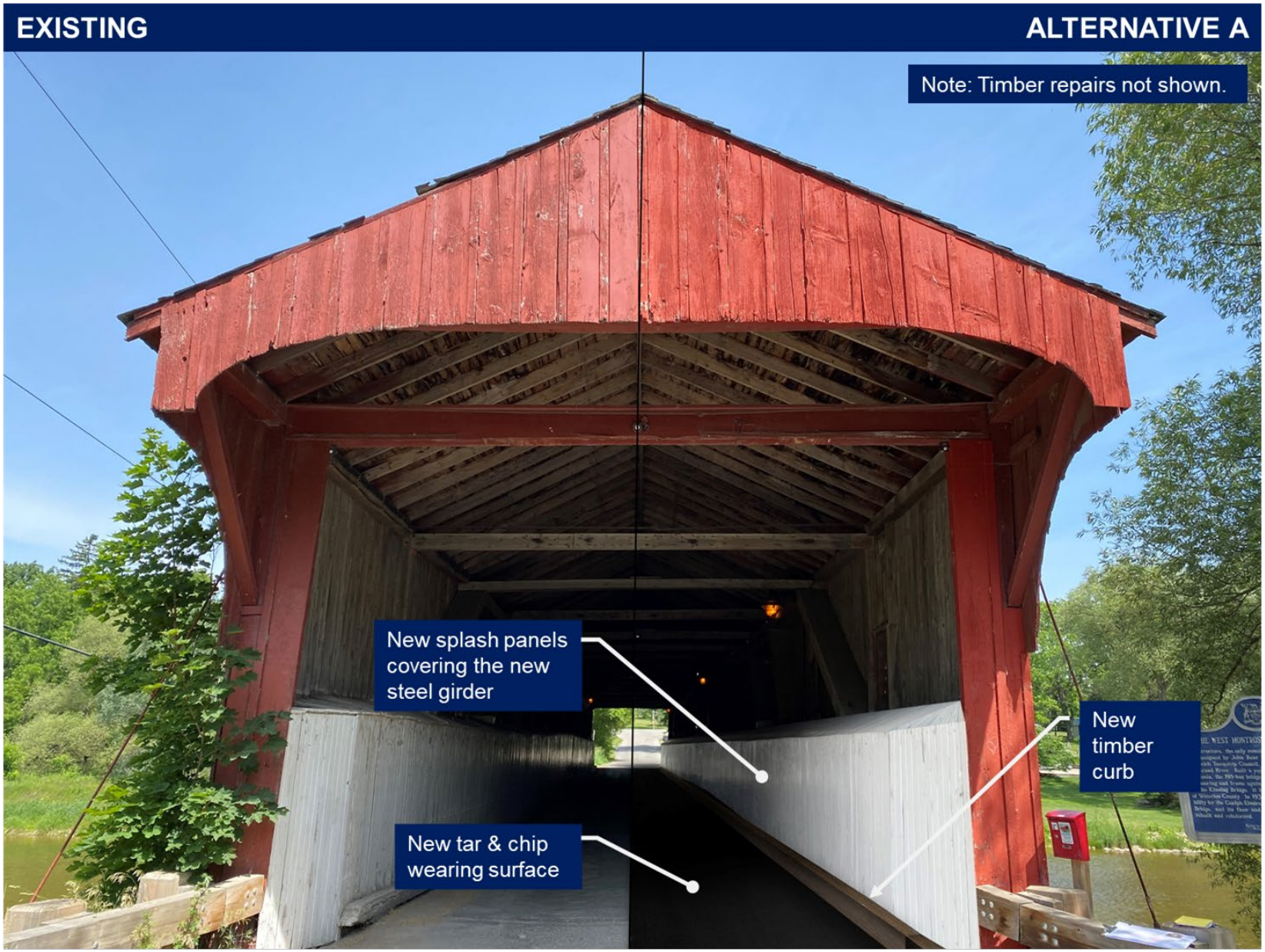


Figure C5: Front View – Existing and Alternative A (Steel Girder Reinforcement)

Figure C6: Front View – Existing and Alternative B (Timber Truss Reinforcement)

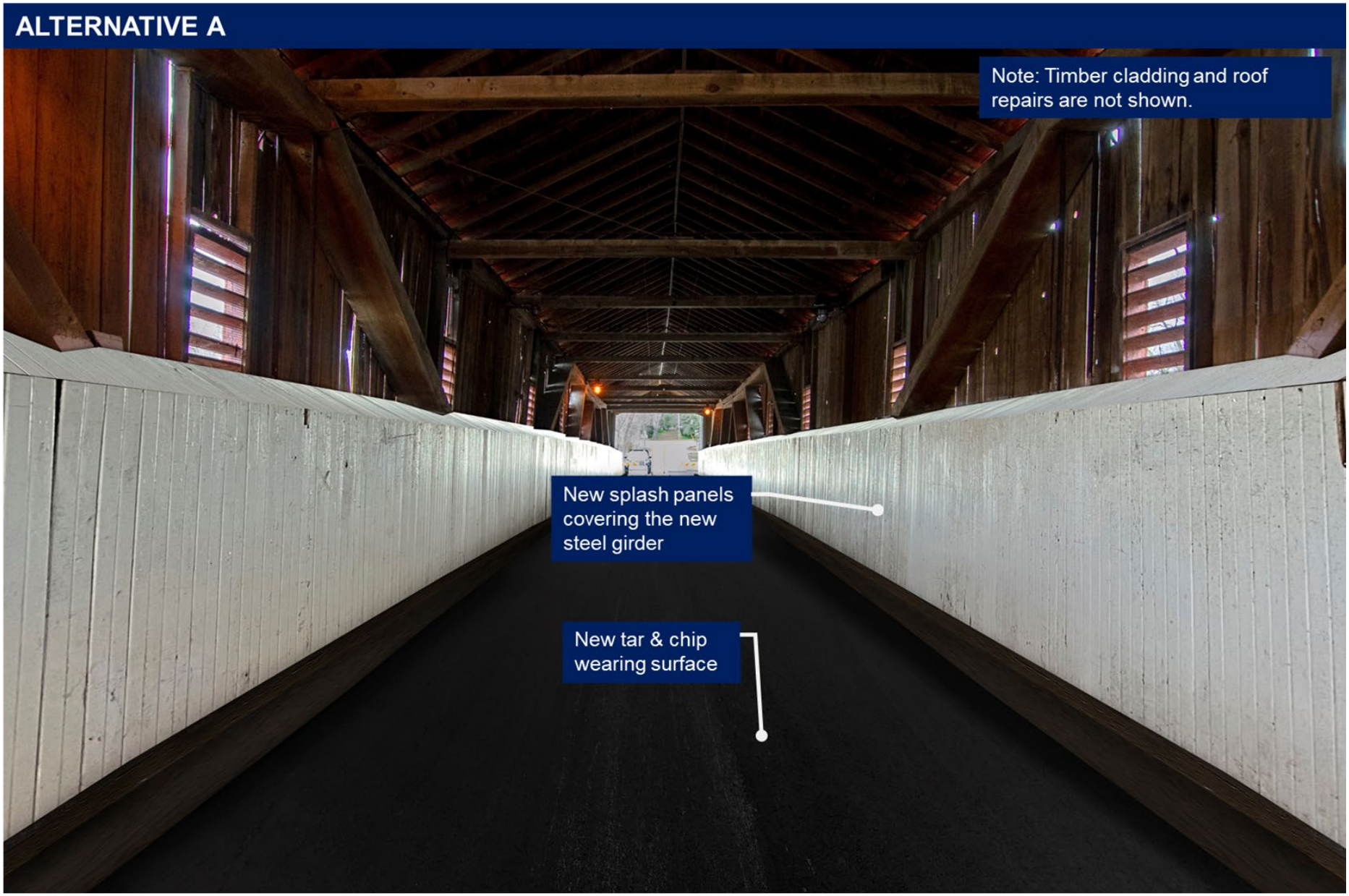


Figure C7: Interior View – Alternative A (Steel Girder Reinforcement)

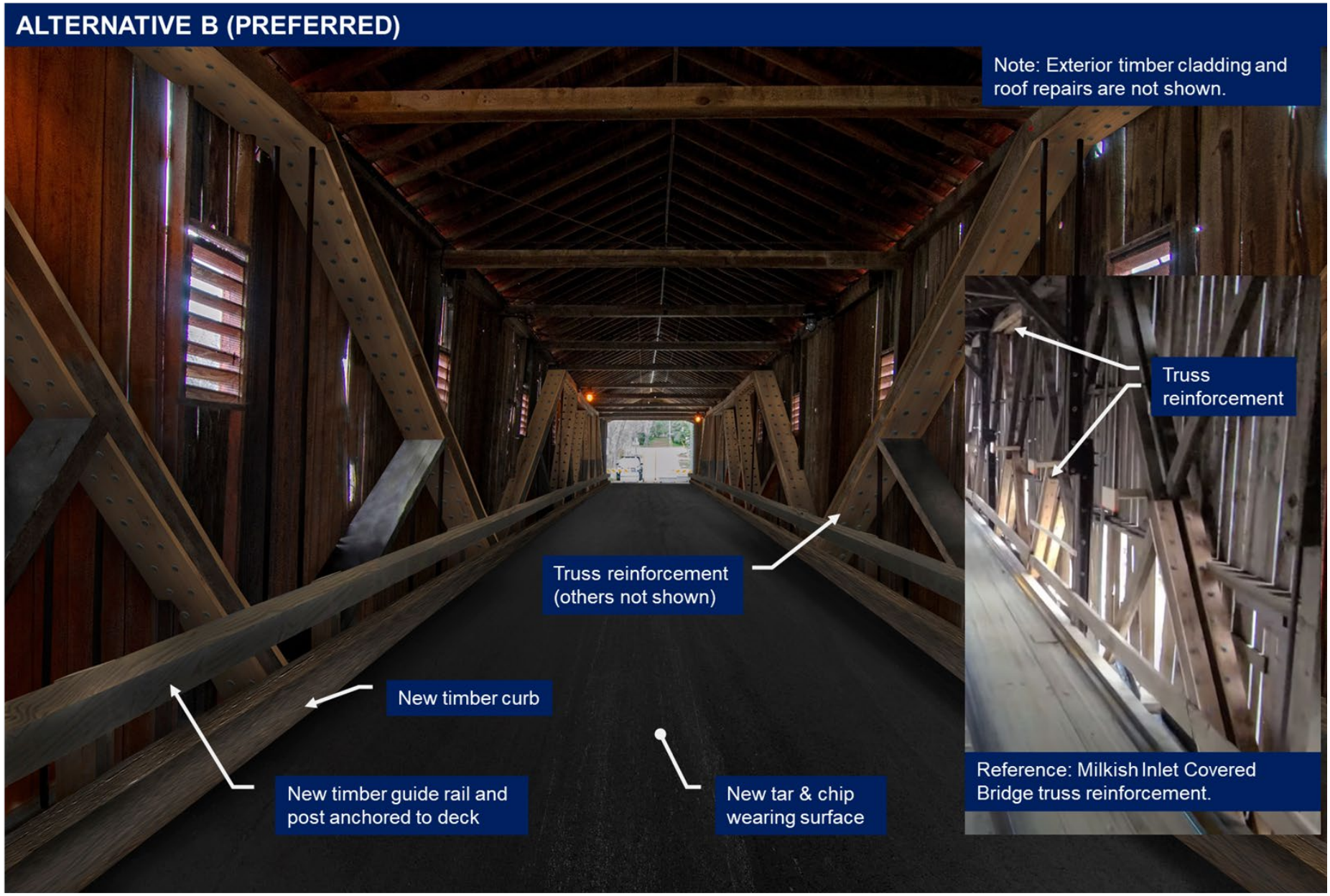


Figure C8: Interior View –Alternative B (Timber Truss Reinforcement)

APPENDIX D –DECK REPLACEMENT OPTIONS

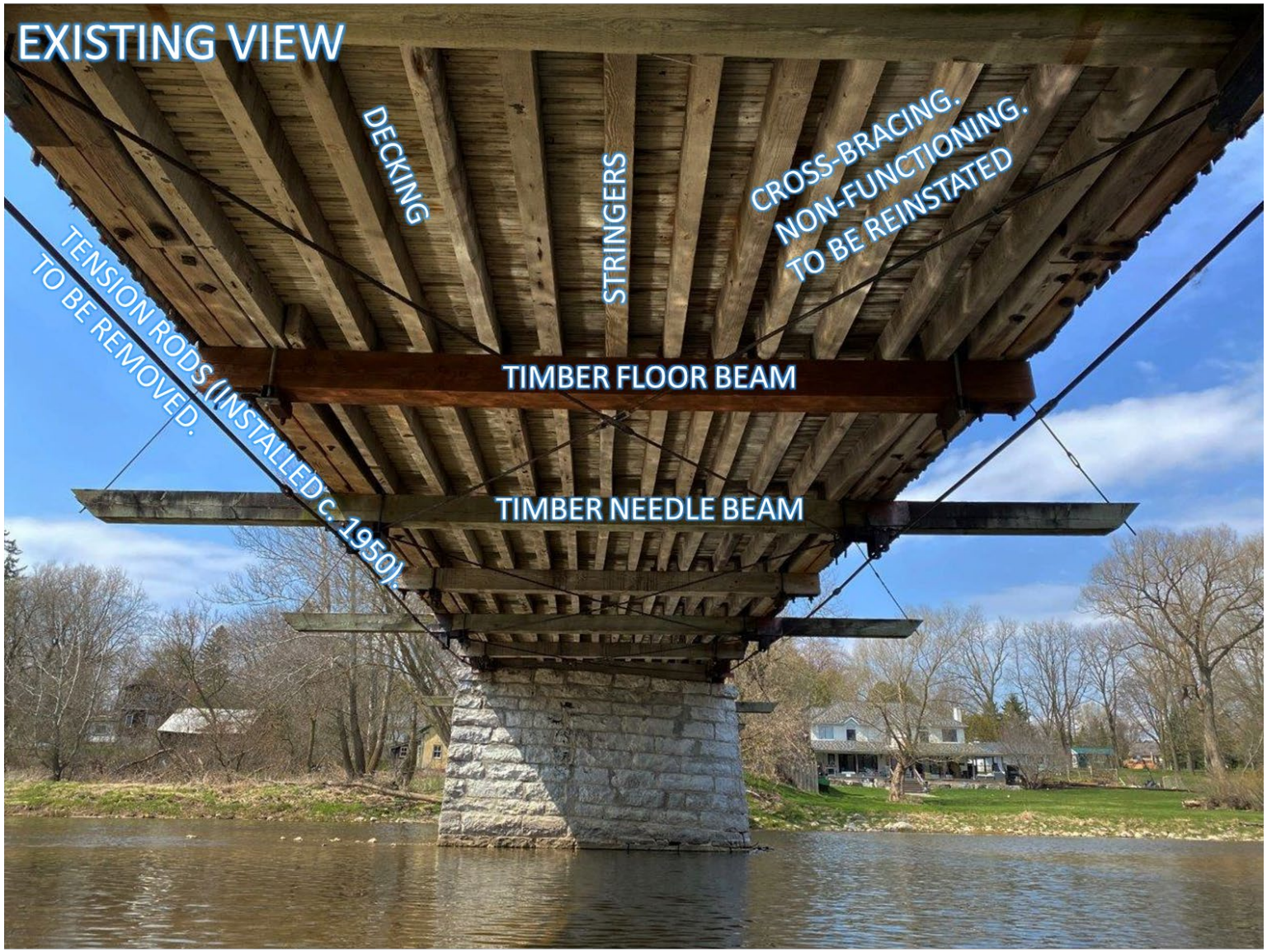
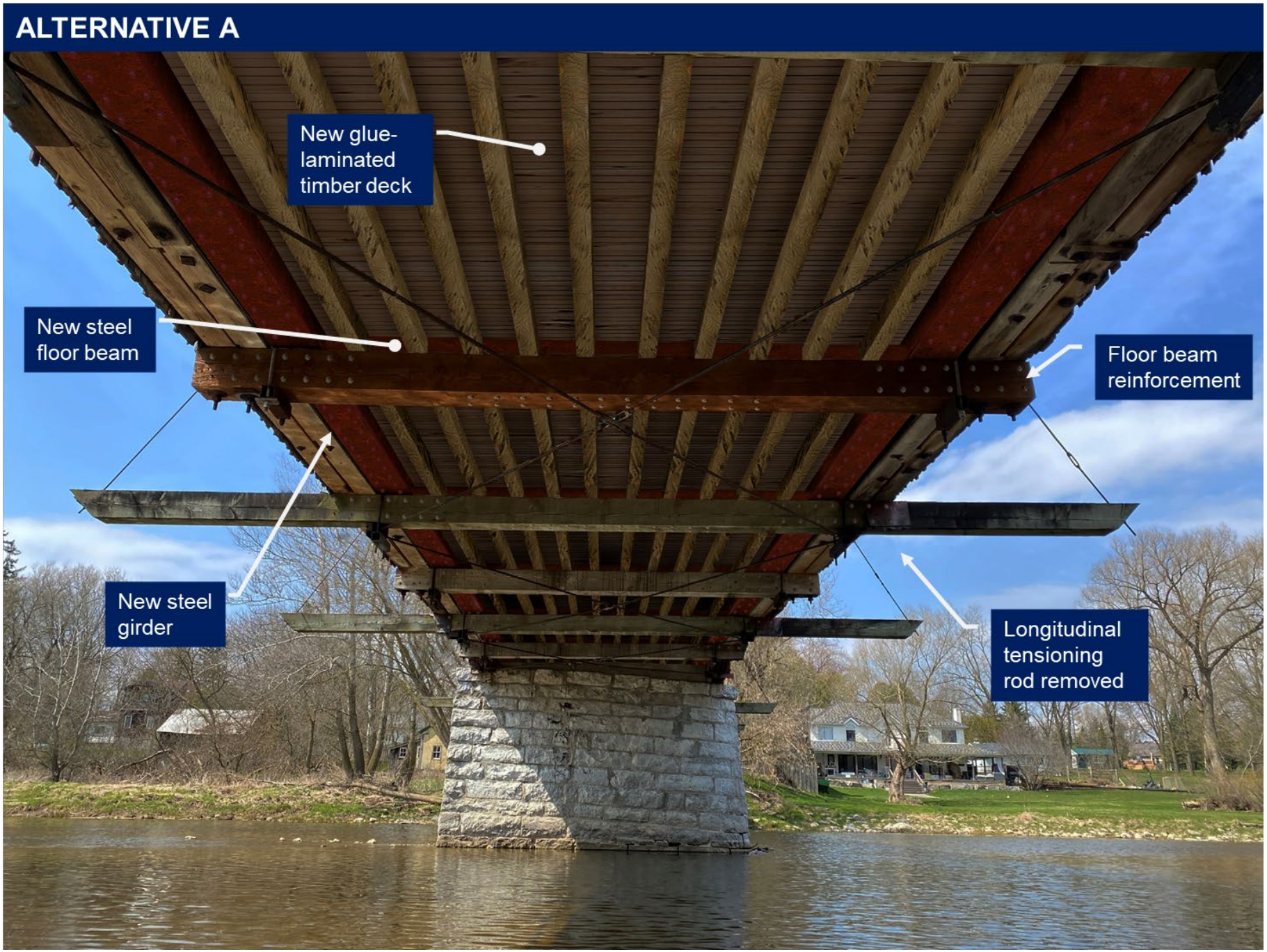
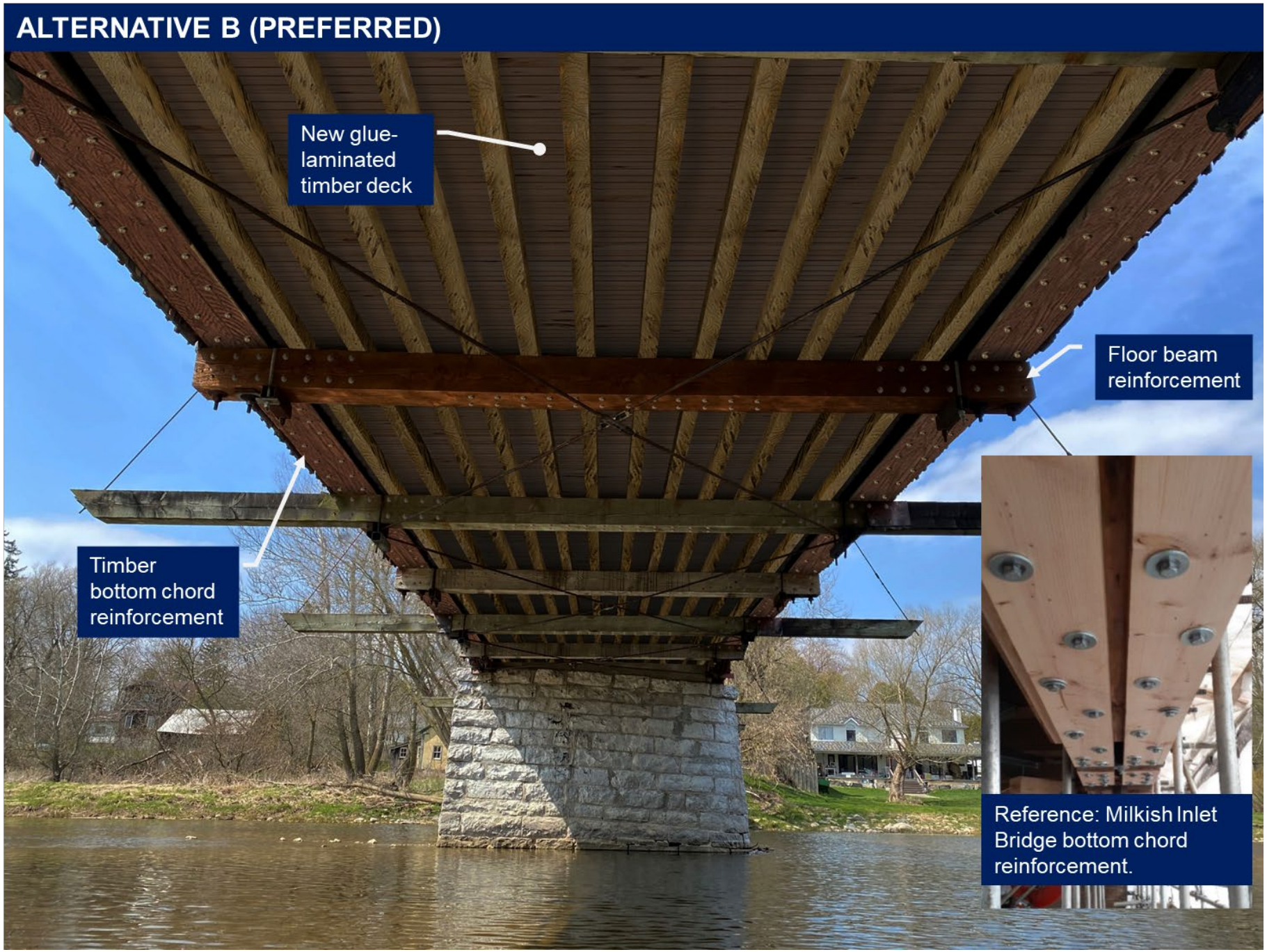


Figure D1: Under-side View – Existing


ALTERNATIVE A
New glue-laminated timber deck
New steel floor beam
Floor beam reinforcement
New steel girder
Longitudinal tensioning rod removed


ALTERNATIVE B (PREFERRED)
New glue-laminated timber deck
Floor beam reinforcement
Timber bottom chord reinforcement
Reference: Milkish Inlet Bridge bottom chord reinforcement.

APPENDIX E – Height Restrictor Bar Options

Figure E1: Height Restriction Bar – Option 1

Figure E2: Height Restriction Bar – Option 2

Figure E3: Proposed Location of Height Restriction Bars

APPENDIX F – Evaluation of Alternative Rehabilitation Methods

Structural: compliance with design standards, level of redundancy, structural integrity and longevity

ALTERNATIVE A STEEL GIRDER REINFORCEMENT	ALTERNATIVE B TIMBER TRUSS REINFORCEMENT
Pros: • Increased reliability as the structure will not rot or weather. • More ductile than Alternative B. Overloading of the structure will cause large deformation which can be observed. Cons: • Due to the two distinct material properties used in the structural system, the steel structural system may not behave in unison with the timber structural system, leading to secondary stress in the timber truss • Increased dead loads due to weight of steel	Pros: • Pure timber truss system of Alternative B is lighter than Alternative A. This means less force on the foundation due to dead load. The excess capacity from the foundation can be used to carry additional live load if desired. Cons: • The original truss is over 140 years old. While it is currently in acceptable condition, of any member would be detrimental to the bridge. Therefore, it is prudent to install a **height-restriction device** to limit large (and usually over-weight) vehicles from entering the bridge as part of this alternative.
●	◕

Constructability: Consideration for the complexity or ease of the construction process and approval requirements

ALTERNATIVE A STEEL GIRDER REINFORCEMENT	ALTERNATIVE B TIMBER TRUSS REINFORCEMENT
• Pedestrian traffic can be maintained by installing a platform on the temporary support beams, apart from a short period to allow the installation of the new deck. • Nature of the work requires the installation of a work platform beneath the entire span of the bridge for the duration of construction. • Lead time for both materials are similar. • Impact on natural environment similar for both alternatives	
◕	◕

Aesthetics: how visually appealing is the alternative?

ALTERNATIVE A STEEL GIRDER REINFORCEMENT	ALTERNATIVE B TIMBER TRUSS REINFORCEMENT
• Bridge interior will look similar to the way it does today • Due to larger sized steel girders, the cross-section width of the interior splash panel is now larger and the roadway driving width is reduced. • Steel girder and steel floor beam is observable from the soffit (underside) of the bridge.	• Exposed timber truss could be seen as more visually appealing • Existing **bridge height** will be marginally **increased** to accommodate new timber truss reinforcement. • Timber truss chords and diagonal reinforcement will be noticeable from the bridge interior.
◕	●

Cultural Heritage: Does the alternative preserve the cultural heritage of the bridge? Is the alternative reversible?

ALTERNATIVE A STEEL GIRDER REINFORCEMENT	ALTERNATIVE B TIMBER TRUSS REINFORCEMENT
Pros: • Structure appearance from the bridge approaches and bridge deck will look similar to existing. • No changes to existing bridge dimensions. • Similar to the current bridge which has the steel bailey truss.	Pros: • Pre-bailey truss bridge interior can be restored. • Restores the historical structural system of the bridge. Cons: • Likely not reversible. Removal of epoxy-adhered reinforcements would be impractical and there will be numerous lag bolt holes in the original truss.
●	●

Sustainability: which Alternative requires less energy to construct and produces the least amount of greenhouse gas emissions?

ALTERNATIVE A STEEL GIRDER REINFORCEMENT	ALTERNATIVE B TIMBER TRUSS REINFORCEMENT
➢Using timber is generally more sustainable than steel.	
◕	●

Life-cycle Cost: What is the total cost of the alternative, including construction costs and the costs for future maintenance requirements ?

ALTERNATIVE A STEEL GIRDER REINFORCEMENT		ALTERNATIVE B TIMBER TRUSS REINFORCEMENT	
Construction cost: (Project Setup, General construction, deck replacement, cladding replacement, roof replacement, substructure work, including contingency)	$2,800,000	Construction cost (project setup, general construction, truss reinforcement, localized timber repairs, deck replacement, cladding replacement, roof replacement, substructure work, includes contingency)	$2,600,000
Miscellaneous Items (Fire suppression system, utility duct)	TBD	Miscellaneous Items (Fire suppression system, utility duct	TBD
➢ Under timber covers, steel elements will be protected and can be expected to last for 75+ years.		➢ Replacement elements will be preservative treated to slow down future decay. ➢ Rehabilitation will be designed to provide 75+ years of design life, however, if the bridge is not properly maintained, the life-span of the bridge may be less than 75 years. ➢ Removal of interior splash panels will more readily allow individuals to climb the truss and open up more areas of the bridge interior to vandalism and graffiti.	
●		●	

CRITERIA	ALTERNATIVE A REPLACE EXISTING BAILEY TRUSS WITH STEEL GIRDER	ALTERNATIVE B REMOVE EXISTING BAILEY TRUSS AND REINFORCE TIMBER TRUSS
STRUCTURAL	●	◕
CONSTRUCTABILITY	◕	◕
CULTURAL HERITAGE	●	●
AESTHETICS	◕	●
SUSTAINABILITY	◕	●
LIFE-CYCLE COST	●	●
RECOMMENDED ALTERNATIVE	Not Carried Forward.	Carried Forward as the preferred rehabilitation alternative. ✓

APPENDIX G – Proposed Access and Staging Areas

West Montrose Covered Bridge – Responses to Comments Received during Public Consultation Centre #1

The public was invited to participate in a virtual Public Consultation Centre in October 2021 on engagewr.ca. Plans for the West Montrose Covered Bridge were presented for public information, discussion and comment. Comments were received on the Engage website, by mail and e-mail. The Region would like to thank everyone who participated in PCC#1. Comments received from the public and responses to these comments have been summarized by common themes, below.

Theme #1: If restoration of missing or deteriorated elements is undertaken, can the Bailey truss simply be removed? If not, can an "all-wood" rehabilitation be undertaken in lieu of replacement of the Bailey trusses with steel girders?

Project Team Response: The Ministry of Transportation Ontario added the steel Bailey trusses to supplement the pre-existing wood trusses in the 1950's (Figure B6). Even if restored to their original condition or replaced in-kind with exact replicas, the wood trusses would not meet current Code standards, even for relatively low load postings. Accordingly, some form of rehabilitation work is required above and beyond simple restorative work.

A total of 20 out of 36 survey respondents indicated support for removal of the Bailey trusses and replacement with a custom-built steel girder that would be hidden from view by the interior white cladding. This method would achieve the objective of restoring the bridge to the way it looks today, and based on that criteria the all-wood option was not presented as an alternative during PCC #1. The steel girder option is referred to as **Alternative A**.

During PCC#1, the Region received input regarding the possibility of an all-wood rehabilitation method. This rehabilitation alternative represents a departure from the initially proposed steel girder. The correspondence made reference to the Milkish Inlet Covered Bridge in New Brunswick, which has recently been rehabilitated and strengthened. Region staff had previously spoken with New Brunswick officials regarding the Milkish Inlet Bridge but did not pursue the alternative further as noted above.

In response to comments from the public during and after PCC#1, Region staff re-engaged New Brunswick officials and reached out to industry experts in the field of wood trusses to further discuss the rehabilitation method used for the Milkish Inlet and the potential applicability at West Montrose. The Region's consultant, Doug Dixon & Associates, subsequently conducted a preliminary assessment of this rehabilitation method and concluded this method is feasible at West Montrose. This method is referred to herein as **Alternative B**.

Alternative B involves strengthening of the critical bottom chord of the original wooden truss and other members as necessary. This method employs a sheet of high-strength carbon fibre reinforced polymer (CFRP), sandwiched between layers of new timber. This CFRP/timber sandwich is then affixed to the underside of the existing wooden truss chord.

The carbon-fibre reinforced polymer is the key to restoration and improvement of the truss strength (Figure C4, PCC#2 Information Package). This method would increase the depth of the bottom chord of the pre-existing truss by approximately 300 mm (1 foot). In order to maintain the existing hydraulic clearance to the river, the resulting truss would have to be lifted by a corresponding amount. The physical height of the truss observable to the public would increase (Figure C6, PCC#2 Information Package).

The Project Team supports the restoration of the bridge using Alternative B and this is recommended as the Preferred Rehabilitation Alternative. However, this Public Consultation is to ensure that the public fully understands all implications of this rehabilitation method. Additionally, the above-noted physical changes to the structure would need approval from the Region's and Township's Heritage groups.

Theme #2: Does the Region's Project Team have the requisite expertise to carry out an "all-wood" rehabilitation? Is specialist expertise widely available?

Project Team Response: Staff from the Region's prime consultant, Doug Dixon & Associates have extensive experience in a variety of bridge types, including timber truss bridges, as well as bridge strengthening using fibre reinforced polymers (FRP). Nonetheless, the Region and DDA believe that supplemental specialist expertise could be a benefit to the engineering design effort. The Region has spoken with a number of Canadian engineering firms with extensive specialist expertise in wood bridges, including the use of FRP in timber bridge strengthening. Several firms have expressed interest in joining the Project Team in this regard. The Region will add specialized expertise to the Project Team at the applicable time in the detailed design process, in accordance with the Region's Purchasing Policy.

Theme #3: Are any formal and/or informal guidelines available that can be referenced in the refinement of the rehabilitation design?

Project Team Response: The Region values the heritage of the West Montrose Bridge and has undertaken several projects to maintain the bridge since the Province transferred ownership of the bridge to the Region. The Region has retained a specialist Heritage consultant to undertake research and make recommendations regarding the West Montrose Bridge proposed rehabilitation. The Ontario Ministry of Heritage, Sport, Tourism and Cultural Industries (MHSTCI) is on the Region's Agency circulation list for this project. Heritage considerations were discussed in PCC #1; however, given the expansion of the project scope to consider the "all-wood" (wood + high-strength fibre) rehabilitation (Alternative B), staff believes that further public consultation is required.
In addition to the applicable Bridge Codes, there are various guidelines that can be consulted in the refinement of the rehabilitation design. The Region supports the use of available guidelines to the extent practical, with full consideration of the Region's obligations under applicable bridge Codes, as well as the general and lawful duties of care owed to the public.
In Ontario, the Ministry of Transportation (MTO) has published the bridge-specific document

Ontario Heritage Bridge Guidelines for Provincially Owned Bridges, or OHBG. While the West Montrose Bridge is no longer provincially owned, these guidelines are still of value. Section 4.3 of these Guidelines, Conservation Options, provides the following hierarchy of "levels of desirability" for heritage bridges.

1. Retention of existing bridge with no major modifications undertaken;
2. Restoration of missing or deteriorated elements where physical or documentary evidence (e.g. photographs or drawings) exists for their design;
3. Retention of existing bridge with sympathetic modification;
4. Retention of existing bridge with sympathetically designed new structure in proximity;
5. Retention of existing bridge no longer in use for vehicular purposes but adapted for a new use. For example, prohibiting vehicle or restricting truck traffic or adapting for pedestrian walkways, cycle paths, scenic viewing, etc.;
6. Retention of bridge as a heritage monument for viewing purposes only;
7. Relocation of smaller, lighter single span bridges to an appropriate new site for continued use (see 4) or adaptive re-use (see 5);
8. Bridge removal and replacement with a sympathetically designed structure.

The original 1880 trusses require some form of supplemental strengthening. Accordingly, Level 2 is not achievable given that simple restoration of missing or deteriorated elements will not result in a structure capable of safely handling current and future demands.

The various actions taken by the MTO over the years (addition of Bailey trusses, addition of longitudinal tension rods, etc.) currently place the bridge at Level 3. Replacement of the Bailey truss with a steel girder (rehabilitation Alternative A) would preserve the Level 3 designation.

The Preferred Alternative B involves "retention of existing bridge with sympathetic modification" through the sympathetic addition of new wood and high-strength fibre elements to the pre-existing bottom chord (Level 3).

Theme #4: What other rehabilitation Alternatives has the Region considered?

Project Team Response:
In addition to Alternatives A and B, the Region considered the installation of post-tensioning strands to strengthen the bottom chord of the truss as a rehabilitation method. This option was not carried forward for structural and aesthetic reasons. Restricting the bridge to pedestrians and cyclists only was also considered, however, the bridge will require some form of major rehabilitation even if vehicular traffic was restricted from the bridge. These options were not carried forward in the detailed evaluation of the Alternatives.

Theme #5: Should measures be enacted to physically prevent oversize vehicles from getting access to the bridge?

Project Team Response:
A total of 23 out of 36 PCC #1 survey respondents indicated support for physical barriers to prevent oversize vehicles from gaining access to the bridge.
The Project Team supports the installation of a physical barrier as an appropriate means to protect the Region's significant investment on this heritage bridge and to prevent costly and disruptive damage in the future.

Two preliminary concept options for physical barriers to restrict oversize vehicles have been developed and are presented in the PCC Info package for the public to provide input on.

Theme #6: Can security cameras be installed on the bridge?

Project Team Response:
The Region does not support the installation of security cameras at this time. The Project Team would prefer to enact physical measures to prevent oversized vehicles from using the bridge. There are also privacy issues related to the installation of security cameras making the information difficult to enforce.

Theme #7: Can the capacity of the bridge be increased?

Project Team Response: The Project Team is not recommending an increase to the bridge capacity. The Project Team is instead recommending the use of height restriction devices to prevent heavy vehicles from using the bridge, as supported by the public in PCC#1.

The current posted capacity of the bridge is 3 tonnes (approximately 6,600 lbs). The current traffic volume on the bridge is approximately 250 vehicles per day. In recent years, the bridge has sustained localized damage to the transverse floor beams on a number of occasions when overweight vehicles have crossed the bridge. These floor beams, and their configuration, are considered to be an important heritage component of the bridge. Methods used to increase the capacity of the timber floorbeams could result in substantial aesthetic changes to these heritage elements.

Additionally, an increase in the global capacity of the structure could also require modifications to the top chords, diagonals and other elements. This could result in substantive aesthetic changes to the original truss. If the floorbeam capacity is increased substantively, it could allow for excessive loads to be transferred to the truss.
The loading on the abutments and pier will also be increased. Very little information exists regarding the foundation capacity of the abutments or piers. An increase in loading on the abutments and pier could require invasive investigation and strengthening methods that could have aesthetic impacts.
Finally, based on other examples (e.g., Milkish Inlet Bridge), if the capacity of the bridge is increased, it will attract more traffic and heavier traffic, even if the posted load limit is not changed.

Theme #8: In conjunction with the CFRP/Timber rehabilitation, could the interior white cladding be removed to expose the original truss?

Project Team Response:
The Preferred Alternative B proposes removal of the interior white cladding and the installation of a wooden guiderail to protect the truss. The interior white cladding is not original to the bridge. Archive photos show the cladding inside the bridge dating at least as far back as the early 1940s, before the installation of the steel Bailey truss. Staff has not found any documentation of the rationale for adding the cladding. The cladding was modified in the 1950's when the Department of Highways added the Bailey trusses.

Removal of the interior cladding would expose the critical truss elements to the risk of vehicle collision. In an extreme event, a major failure of the truss could occur. In order to mitigate this risk, some form of traffic rail is recommended, similar to that used on the renowned Hartland Covered Bridge in New Brunswick. This is depicted in Figure C6 of the PCC#2 Information Package.

Since the interior cladding is designated in the Heritage By-law, the above-noted physical changes to the structure would have to be approved by a number of Heritage groups.

Theme #9: Should the deck remain as a wood deck or be replaced with a steel deck with wearing surface?

Project Team Response:
The existing deck surface is transverse nail-laminated timber with a tar-and-chip wearing surface. A total of 27 out of 36 survey respondents indicated support for a wood deck. The Preferred Alternative B proposes a glue-laminated wooden deck, which is expected to have a lifespan of up to 50 years.

Theme #10: What type of wearing surface is proposed on the deck?

Project Team Response:
The Preferred Alternative proposes to reinstate the existing tar-and-chip wearing surface. The Project Team does not support the use of timber planks as a wearing surface due to:

- Compatibility of the timber planks for multiple users including motorists, motorcyclists, cyclists, horse-and-buggy drivers;
- Higher maintenance costs;
- Grip and friction, and implications on the safety of users under varied conditions including hot/cold, wet/dry, etc., and
- Public safety and liability issues.

It is noted that on the Milkish Inlet Bridge rehabilitation in New Brunswick, the deck surface employs an epoxy-grit mixture bonded to the deck for traction and protection.

Theme #11: Can the underdeck cross-bracing be retained?

Project Team Response:
The under-deck cross bracing will be retained as part of the preferred Alternative.

Theme #12: Should the external sag in the roof be eliminated?

Project Team Response:
A total of 24 out of 36 PCC #1 survey respondents indicated support for elimination of the sag. A key component of the preferred Alternative B (reinforcement of the timber truss) is the “re-cambering” of the bridge to its original profile. Accordingly, the sag in the bridge will be eliminated.

Theme #13: Should the internal sag in the traveled deck be eliminated?

Project Team Response: A total of 30 out of 36 PCC #1 survey respondents indicated support for elimination of the deck sag. Elimination of the deck sag and hump is also important in minimizing the vertical dynamic loads associated with these features. The sag in the bridge deck and the hump at the pier will be eliminated as part of the preferred Alternative B.

Theme #14: Can the lighting in the bridge be improved?

Project Team Response:
The existing lighting will be salvaged and reinstalled as part of this rehabilitation project. The bridge currently has 5 interior sodium vapour lamps. The lighting was upgraded in 2018 and public consultation was undertaken at the time surrounding the new lighting fixtures and intensity. The Region may look at supplier options for LED bulbs within the existing light fixtures, which was not available at the time of the lighting upgrades.

Theme #15: Can fire retardant materials be used on the bridge? Will the existing fire detection system be maintained? Will the fire response protocol be reviewed?

Project Team Response:
The bridge is currently equipped with a fire detection system coupled with an alarm system. The use of fire retardant materials will be considered as part of the preferred alternative.

The parties most qualified to comment on and refine a fire alarm response protocol are the local Fire Departments. The Region will request that the fire alarm response protocol be reviewed, including any roles that the Fire Departments wish the Region and/or Township to undertake.

Theme #16: Can a fire suppression system be installed as part of the main rehabilitation contract?

Project Team Response:
The Region will continue to investigate options for the installation of a fire suppression system. Since the local watermain does not have sufficient pressure and/or flow capacity to drive a fire suppression system, a more in-depth review of alternative water sources and potential budget requirements will be completed as a separate undertaking. The preferred alternative rehabilitation method will not preclude the installation of a sprinkler system at a later date.

The Region's contacts in New Brunswick have noted that fire suppression systems can be very expensive. New Brunswick officials note that only one of New Brunswick's 50 covered bridges is equipped with a fire suppression system (Hartland).

By investigating the feasibility of a fire suppression system in a follow-up contract, the design can be removed from the critical path for the rehabilitation work. This also provides more time for the Region to identify and retain a firm interested in providing the design of the system.

Theme #17: With climate change and increasing severity of storms and flooding, is the bridge at risk of being washed away in a flood? Can the bridge be raised to provide better flood clearance?

Project Team Response:
The bridge has always been susceptible to flooding and the risk will become greater in the coming decades. Over the past several years, Region staff have worked with GRCA to review historic Grand River flood levels at West Montrose. On a number of occasions over the past 50 years, flood waters have risen high enough to contact the bridge. In addition to the substantial force of water, a major risk for low bridges is the additional lateral force that will occur if major debris such as uprooted trees gets caught on the bridge and begins to accumulate other debris. The existing clearance from the known 100-year flood level to the bridge is substandard. The bridge would have to be raised by approximately 3 meters (10 feet) to meet current guidelines.

The existing abutments and stone masonry pier would have to be modified to increase the elevation of their respective abutment seats. This could significantly alter the look of the bridge. While raising the bridge would increase hydraulic capacity under the bridge, raising the adjoining roads would have the effect of placing added material within the flood plain. Ironically, this could exacerbate flooding. Additionally, placement of additional fill in the flood plain would require approval from multiple regulatory Agencies.
Raising the bridge would lead to a cascade of negative impacts to the surrounding roads and homes. The reduction in the annual probability of flood water impacting the bridge does not appear to justify this set of negative impacts.

The preferred design alternative will investigate means to provide enhanced lateral restraint

to the bridge to further mitigate the impacts of flood water.

Theme #18: I have noticed that the stone masonry pier appears to have a “tilt”. Is that why the Region is proposing to place a rock “protection collar” around the base of the pier? Will that increase the likelihood of flooding? Is there some other way to “fix” the pier?

Project Team Response:
Very little information exists regarding the stone masonry pier. The exact reason for the “tilt” is not known, but it is believed to be related to some localized settlement after the pier was constructed. The tilt in the pier has existed for many decades and there does not appear to be evidence of any ongoing settlement.

Given the uncertainty of the composition of the pier foundation and the potential for damage due to scour during flood events, placement of a rock protection collar around the base of the pier is proposed. Other methods to protect the pier are available; however, they tend to be invasive, unattractive and costly. The Region will work with the GRCA and the Region’s consultant to run before/after hydraulic models to determine whether the rock protection collar would influence river levels under various flow conditions.

Theme #19: Can the Region avoid the use of Letson Park and Gole Park as staging areas?

Project Team Response:
The Project Team will investigate if alternative staging areas are available and whether the parks need to be used for this purpose. If use of the parks is required, the Region will reinstate the areas to existing or better than existing conditions. If Letson Park is required as a staging area, mitigation measures will be installed so that the existing oak tree is not disturbed. Access to the mailboxes at Gole Park will be maintained.

Theme #20: Can the Region install fibre-optic cabling and bring high-speed internet to the village as part of this project?

Project Team Response:
The Region will investigate options for placing conduits on, under, or within the bridge, such that these conduits are available in the event that a telecommunications firm wishes to install fibre-optics on the bridge. Township staff have noted that there are telecommunication companies interested in bringing service to the area that could make use of this conduit.

Theme #21: Can issues with visitor parking be addressed, both during and after construction?

Project Team Response:
Region staff will investigate alternative staging areas other than the parks so as to not

impact visitor parking in Gole and Letson Parks during construction. It appears that the demand for parking often exceeds the available spots in the parks.

While the Region of Waterloo owns the West Montrose Covered Bridge, the area roads are all local Township of Woolwich Roads.

Theme #22: Can safety on Line 86 be improved, especially for horse and buggy users?

Project Team Response:
Rehabilitation of the West Montrose Covered Bridge will require full closure of the bridge to motorists and horse-and-buggy users for a period of up to one year. The Line 86 bridge over the Grand River will be the nearest alternate route.

There are currently paved shoulders on Line 86 between Middlebrook Road/Covered Bridge Drive and Katherine Street North to accommodate horse and buggies and cyclists through this detour.

Theme #23: Can anything be done about cyclists travelling too quickly and recklessly on the bridge and adjoining road?

Project Team Response:
The actions of cyclists, motorists and other bridge users is not expected to be altered by the bridge rehabilitation project.

Region of Waterloo

Planning, Development and Legislative Services

Community Planning

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Summary Report of Development Application Activity for 2021

---

1. Recommendation:

For information.

2. Purpose / Issue:

The purpose of this briefing note is to provide a summary report of development application activity for 2021.

Strategic Plan:

Strategic focus area: Environment and climate action. Strategic objective 3.5: Promote the efficient use of urban land, and protect and enhance agricultural and natural areas.

3. Key Considerations:

Regional Council By-law 17-035 delegated certain Planning Act functions to the Commissioner (or delegate) of Planning, Development and Legislative Services. In accordance with Regional By-law 17-035, as amended, the Commissioner (or delegate) has:

- Approved 9 official plan amendments;
- Received applications for 11 plans of subdivision and 34 plans of condominium (including City of Kitchener applications);
- Draft approved 10 plans of subdivision and 25 plans of condominium (including City of Kitchener draft approvals);
- Released for registration 18 plans of subdivision and 24 plans of condominium (including City of Kitchener registrations);
- Provided comments and recommendations on 65 zoning by-law amendments, 224 consent applications and 344 site plan applications; and
- Commented on 228 pre-submission applications.

Further, Regional staff approved 56 access permits on Regional Roads.

A detailed table summarizing the 2021 development activity is attached as Appendix A.

4. Background:

The Region of Waterloo is the approval authority for official plan amendments and draft plans of subdivision and condominium (except in Kitchener where delegated), and is responsible for providing release of these plans for registration purposes. The Region also provides comments and/or recommendations with respect to Regional and/or Provincial interests on zoning by-law amendments, consent applications and site plans.

Regional Council delegated approval authority to staff as per Regional By-law 17-035, A By-law to Delegate Certain Authority under the Planning Act. The delegation by-law provides the authority for the Commissioner (or delegate) to issue decisions provided they conform to Regional policies, do not substantially differ from the recommendation of the Area Municipality and do not create financial obligations otherwise not budgeted, among other matters.

5. Area Municipality Communication and Public/Stakeholder Engagement:

The planning approvals and releases summarized in this report, including consultations with Area Municipalities, were completed in accordance with the Planning Act. All approvals were supported by the Area Municipal Councils and/or staff.

6. Financial Implications:

Nil

7. Conclusion / Next Steps:

Regional staff will continue to track development activity and provide regular updates to Council.

8. Attachments / Links:

Appendix A: Detailed Table of 2021 Development Activity (DOCS # 4059062)

Appendix B: Comparison of Past Development Activity, 2019-2021

Prepared By: **Derrick Hambly,** Planning Data Analyst

Amanda Kutler, Manager, Development Planning

Reviewed By: **Danielle De Fields,** Director, Community Planning

Approved By: **Rod Regier,** Commissioner, Planning, Development and Legislative Services

Appendix B: Comparison of Past Development Application Activity, 2019-2021

	2019	2020	2021
Approved Official Plan Amendments	15	13	9
Received Plans of Subdivision [1, 2, 3]	5	13	11
Received Plans of Condominium [1, 2]	20	17	34
Draft Approved Plans of Subdivision [2, 3]	8	6	10
Draft Approved Plans of Condominium [2]	21	19	25
Registered Plans of Subdivision [2, 3]	27	19	18
Registered Plans of Condominium [2]	26	33	24
Zoning By-law Amendments [4]	76	59	65
Consent Applications [4]	164	149	224
Site Plan Applications [4]	266	205	344
Approved Regional Road Access Permits	64	58	56
Pre-Submission Applications	N/A [5]	118	228
Total Applications	**692 [5]**	**709**	**1,048**

Notes:

1. Received plans of subdivision and condominium are counted as of the date submitted rather than the date the application is deemed complete, as work on the file begins at the time of submission.
2. It is possible for a plan of subdivision or condominium to be received, draft approved and/or registered in the same year. In such cases, the plan in question will appear in multiple categories above.
3. Plans of subdivision include vacant land condominium plans.
4. The Region provides comments and/or recommendations but has no approval authority for zoning by-law amendments, consent applications and site plan applications.
5. Pre-submission applications were not tracked prior to 2020.

Appendix A: Detailed Table of 2021 Development Activity

Approved Official Plan Amendments

OPA No.	Municipality	Approval Date	Owner/Applicant	Location	Description
46	Cambridge	September 8, 2021	Nadam Investments Inc. - Blair Poole	42 Portland St	To allow the rezoning of 42 Portland Street, a Place of Worship (Institutional) to a four (4) unit Apartment House (RM1)
10	Kitchener	March 5, 2021	Max Becker Enterprises	1255-1291 Fischer-Hallman Rd	Redistribute and /or re-delineate the parkland and open space lands; redistribute the densities in the plan to higher densities and mixed use and medium densities in the northern portion of the plan
11	Kitchener	May 25, 2021	Milan Kovacevic, Dean Kovacevic, Keystone Developments	859 Frederick St	To redevelop site with a 12 storey multiple dwelling building containing 129 units, including 5 live-work units and some commercial space on the ground floor
113	Kitchener	July 2, 2021	Polocorp Inc	19-41 Mill St	176 residential units in an 8-10 storey building with a three and a half storey podium with townhouse units facing Mill St and the Iron Horse Trail
12	Kitchener	July 8, 2021	Allan Wong, Hospice of Waterloo Region c/o Thresholds Homes and Supports	298 Lawrence Ave	To add a special policy area to the Official Plan to allow the “residential care facility”
14	Kitchener	November 9, 2021	PDCP Block 5 Industrial GP Inc.	120 Bullock St	Change the urban structure from Arterial Corridor to Industrial Employment Area, Change the land use designation from Commercial to General Industrial Employment, Remove Special Policy Area #30
116	Kitchener	December 24, 2021	Windermere Apartments Inc. & Roy Street Investment Inc.	61 & 65 Roy St	Add a special policy area to the Official Plan to allow the “Multiple Dwelling – 5 Units

OPA No.	Municipality	Approval Date	Owner/Applicant	Location	Description
28	Waterloo	March 9, 2021	Beechwood Co-operative Homes	693 Beechwood Dr	To permit an increase in building height from 12 metres to 16 metres
31	Waterloo	August 18, 2021	West Haven Limited	28 Westhill Dr	To request a maximum permitted height of 13.0 metres whereas Policy 10.1.3.11 of the Official Plan permits a maximum height of 12.0 metres for apartment buildings in the Low Density Residential design

Received Plans of Subdivision (including Vacant Land Condominium)

Received plans of subdivision are counted as of the date submitted rather than the date the application is deemed complete, as work on the file begins at the time of submission.

File No.	Municipality	Application Date	Owner/Applicant	Location	Description
30T-21102	Cambridge	January 8, 2021	River Mill Development Communities (Phase 5)	1134 Hunt Club Road, 1285 Speedsville Road, Part of 800 Briardean Road	170 townhouses
30T-21101	Cambridge	January 8, 2021	River Mill Development Communities	1134 Hunt Club Road, 1285 Speedsville Road, Part of 800 Briardean Road	147 singles, 387 townhouses, 690 apartments
30CDM-21103	Cambridge	April 29, 2021	Schout Vision Limited	147 Elgin Street North	Vacant land condominium with 29 townhouses
30CDM-20208	Kitchener	February 28, 2021	Elev8 Properties Inc.	942-950 Doon Village Road	Vacant land condominium with 7 units and a common element area. Application was withdrawn March 26, 2021.
30CDM-21206	Kitchener	March 31, 2021	Will-O Homes	450 Bridgeport Road	Vacant land condominium with 8 units

File No.	Municipality	Application Date	Owner/Applicant	Location	Description
30CDM-21207	Kitchener	April 16, 2021	Elev8 Properties Inc.	60 Trussler Road	Vacant land condominium which will consist of 5 single detached dwelling units
30T-21302	North Dumfries	April 30, 2021	Hallman Construction Limited	Part of Lots 13 and 14, Concession 11 and Part of Road Allowance b/t Concessions 11 and 12	197-238 singles, 52-77 street townhouses, 59-185 cluster townhouses
30T-21301	North Dumfries	April 30, 2021	Brian Domm	1024 Roseville Rd, Township Rd 1 West	114-134 singles, 0-12 townhouses
30T-21402	Waterloo	August 12, 2021	11390821 Canada Inc./YingJun Xu	287-291 Woolwich Street	1 single detached and 28 townhouses
30T-21601	Wilmot	May 18, 2021	Snyder's Road (Baden) GP Inc.	1012 Snyder's Road West	257-273 residential units
30T-21702	Woolwich	June 18, 2021	Activa Holdings Inc.	Part of Lot 105 GCT	662-803 dwelling units

Received Plans of Condominium

Received plans of condominium are counted as of the date submitted rather than the date the application is deemed complete, as work on the file begins at the time of submission.

File No.	Municipality	Application Date	Owner/Applicant	Location	Description
30CDM-21101	Cambridge	February 24, 2021	2539982 Ontario Ltd. (Maison Canada)	48 George Street North	20 condominium units
30CDM-21102	Cambridge	March 3, 2021	FAE Development, Construction Inc.	264 Blair Road	10 townhouse units
30CDM-21106	Cambridge	June 11, 2021	Branthaven Belmont Pinebush Inc.	0 and 112 Pinebush Road	Common elements condo

File No.	Municipality	Application Date	Owner/Applicant	Location	Description
30CDM-21104	Cambridge	June 29, 2021	Reid's Heritage Homes Ltd.	340-360 River Road	10 townhouse blocks with a total of 50 units
30CDM-21105	Cambridge	June 29, 2021	Activa Holdings Ltd.	25 Isherwood Avenue	138 residential units in 2-storey townhouses and 3 storey stacked townhouses
30CDM-21107	Cambridge	July 5, 2021	Woodhouse Investments Inc.	180 Shearson Crescent	To convert the existing 9-unit Industrial/commercial rental building to an industrial standard plan
30CDM-21108	Cambridge	October 25, 2021	2802013 Ontario Inc.	721 Franklin Boulevard	20 townhouse units in a 3-storey building
30CDM-21109	Cambridge	November 1, 2021	HIP Southworks Inc.	15 Glebe St and 50 Grand Ave S	392 residential units
30CDM-21201	Kitchener	January 20, 2021	Activa Holdings Inc.	124 Seabrook Drive	148 townhouse dwelling units
30CDM-21202	Kitchener	February 12, 2021	KT29 Inc.	60 Centreville Street	To convert an existing 29 unit multiple residential development within 3 buildings
30CDM-21204	Kitchener	March 24, 2021	24 Gaukel St. GP Inc, Momentum Developments	60 Charles Street West	Mixed use building with 305 apartment units
30CDM-21205	Kitchener	March 30, 2021	2479664 Ontario Incorporated	1241 Strasburg Road	Standard condominium with 17 non-residential units. 15 of the units are commercial units within 1 building
30CDM-21208	Kitchener	April 28, 2021	Crescent Haven Homes Inc.	235 Chapel Hill Drive	66 street fronting townhouses
30CDM-21212	Kitchener	April 30, 2021	Melrich Holdings Inc. & Aberdeen Homes Limited	1331 Countrystone Drive	32 townhouse dwelling units
30CDM-21210	Kitchener	May 12, 2021	Parkside Towns (Phase 1) Inc.	83 Elmsdale Drive	116 stacked townhouse units

File No.	Municipality	Application Date	Owner/Applicant	Location	Description
30CDM-21211	Kitchener	May 26, 2021	114-120 Victoria Street South Inc.	108 Garment Street	319 apartment units, 4 commercial units
30CDM-21209	Kitchener	May 28, 2021	IN8 Development	60 Frederick Street/26-32 Duke Street East	494 residential units, 9 commercial units
30CDM-21214	Kitchener	May 28, 2021	Reids Heritage Homes Ltd.	205 West Oak Trail	92 townhouses
30CDM-21213	Kitchener	May 28, 2021	Bridgeport at Lancaster	544 Bridgeport Road	50 total units. 48 units are apartment units, and 2 units are to be commercial units.
30CDM-21203	Kitchener	May 28, 2021	Fusion Homes	2-108 Wheat Lane	108 stacked townhouses
30CDM-21215	Kitchener	June 23, 2021	Savic Homes	414 Prospect Avenue	24 townhouses
30CDM-21216	Kitchener	September 23, 2021	Otis on the Parc – 51 David Street Limited	51 David Street	32 dwelling units
30CDM-21217	Kitchener	November 10, 2021	Savic Homes Ltd.	1430 Highland Road West	346 dwelling units, 4 commercial units
30CDM-21301	North Dumfries	March 26, 2021	Ayr Meadows Development Inc.	150 Northumberland Street	82 townhouses
30CDM-21303	North Dumfries	March 26, 2021	Ayr Meadows Development Inc.	180 Northumberland Street	4 storey apartment building with 31 units
30CDM-21302	North Dumfries	March 26, 2021	Ayr Meadows Development Inc.	170 Northumberland Street	4 storey apartment building with 31 units
30CDM-21304	North Dumfries	June 3, 2021	Reid’s Heritage Homes	88 Gibson Street, Ayr	39 apartments
30CDM-21305	North Dumfries	December 2, 2021	Freure Riverstone Limited	Greenfield and Northumberland	61 townhouses
30CDM-21401	Waterloo	April 22, 2021	Activa Holdings Inc.	311 Woolwich Street	8 townhouse blocks with a total of 47 residential units

File No.	Municipality	Application Date	Owner/Applicant	Location	Description
30CDM-21402	Waterloo	August 10, 2021	Village on Clair Creek	461 Columbia Street	Amalgamation of 11 condo corporations into one corporation
30CDM-21403	Waterloo	August 30, 2021	Drazen Prica, 239 Albert Inc.	239 Albert Street	193 apartment units with one commercial unit
30CDM-21404	Waterloo	August 31, 2021	CTN King Inc.	128 King Street North	144 apartments
30CDM-21405	Waterloo	December 2, 2021	Piercorp Holdings Inc. c/o Antonio Bagnara	611 Davenport Road	161 apartments
30CDM-21501	Wellesley	April 1, 2021	2046680 Ontario Inc.	1016 & 1018 Doering Street	50 units including 46 townhouse dwellings, 2 semi-detached dwellings, and the two existing single detached dwellings

Draft Approved Plans of Subdivision (including Vacant Land Condominium)

File No.	Municipality	Date of Draft Approval	Owner/Applicant	Location	Description
30T-18102	Cambridge	March 17, 2021	Intermarket & John & Maria Hofstetter	105 Allendale Road and 245 Riverbank Drive	Creation of primarily employment lots and 20 single detached lots.
30T-13101	Cambridge	June 25, 2021	LVH (MC) Developments Inc.	1395 Main Street East	To permit the development of 136 single detached, 219 townhouse and 117 multi-residential units
30T-20101	Cambridge	October 15, 2021	Grand Ridge Estates Limited	215 Blenheim Road	12 townhouses, 152 multi
30CDM-21103	Cambridge	December 23, 2021	Schout Vision Limited	147 Elgin Street North	Vacant land condominium with 29 townhouses
30CDM-21206	Kitchener	July 29, 2021	Will-O Homes	450 Bridgeport Road	Vacant land condominium with 8 units
30CDM-21207	Kitchener	September 21, 2021	Elev8 Properties Inc.	60 Trussler Road	A vacant land condominium which will consist of 5 single detached dwelling units

File No.	Municipality	Date of Draft Approval	Owner/Applicant	Location	Description
30CDM-20206	Kitchener	September 21, 2021	Elev8 Properties Inc.	99-109 North Hill Place & 29 Chicopee Terrace	Vacant land condominium with 14 single detached units and a common element area
30T-20401	Waterloo	August 27, 2021	Westhaven Limited	28 Westhill Drive	19 singles, 74 apartments
30T-19602	Wilmot	March 17, 2021	New Hamburglrs Inc	Part of Lot 19 German Block North of Bleams Road	The creation of 13 separate blocks to accommodate industrial uses, municipal streets and an emergency access
30T-19601	Wilmot	March 17, 2021	Badenview Developments Inc	Pt Lot 20, German Block North of Bleams Road	The creation of 6 separate blocks to accommodate industrial uses, a Storm Water Management facility and municipal roads

Draft Approved Plans of Condominium

File No.	Municipality	Date of Draft Approval	Owner/Applicant	Location	Description
30CDM-20105	Cambridge	May 31, 2021	River Mill Development Corporation	314 Equestrian Way (Block 247, 58M-617)	Common elements tied to 50 townhouse units
30CDM-20107	Cambridge	July 6, 2021	Cambridge Main Street Limited Partnership	51 Sparrow Avenue	Common elements condo to create 96 townhouses in 10 blocks
30CDM-21104	Cambridge	December 3, 2021	Reid's Heritage Homes Ltd.	340-360 River Road	10 townhouse blocks with a total of 50 units
30CDM-21102	Cambridge	December 3, 2021	FAE Development, Construction Inc.	264 Blair Road	10 townhouse units
30CDM-20207	Kitchener	January 20, 2021	Pretis Canada Inc.	374-384 Prospect Avenue	Standard plan of condominium consisting of 28 townhouse dwelling units
30CDM-21201	Kitchener	February 25, 2021	Activa Holdings Inc.	124 Seabrook Drive	148 townhouse dwelling units

File No.	Municipality	Date of Draft Approval	Owner/Applicant	Location	Description
30CDM-20209	Kitchener	March 3, 2021	Freure Promontory Inc.	30 Saddlebrook Court	Common elements condominium consisting of 96 units (parcels of tied land) within 20 buildings
30CDM-21205	Kitchener	May 20, 2021	2479664 Ontario Incorporated	1241 Strasburg Road	Standard condominium with 17 non-residential units. 15 of the units are commercial units within 1 building
30CDM-21204	Kitchener	May 26, 2021	24 Gaukel St. GP Inc, Momentum Developments	60 Charles Street West	Mixed use building with 305 apartment units
30CDM-21212	Kitchener	June 28, 2021	Melrich Holdings Inc. & Aberdeen Homes Limited	1331 Countrystone Drive	32 townhouse dwelling units
30CDM-21214	Kitchener	July 12, 2021	Reids Heritage Homes Ltd.	205 West Oak Trail	92 townhouses
30CDM-21203	Kitchener	July 12, 2021	Fusion Homes	2-108 Wheat Lane	108 stacked townhouses
30CDM-21210	Kitchener	July 21, 2021	Parkside Towns (Phase 1) Inc.	83 Elmsdale Drive	116 stacked townhouse units
30CDM-21213	Kitchener	July 23, 2021	Bridgeport at Lancaster	544 Bridgeport Road	50 total units. 48 units are apartment units, and 2 units are to be commercial units.
30CDM-21211	Kitchener	August 9, 2021	114-120 Victoria Street South Inc.	108 Garment Street	319 apartment units, 4 commercial units
30CDM-21215	Kitchener	August 31, 2021	Savic Homes	414 Prospect Avenue	24 townhouses
30CDM-21209	Kitchener	October 5, 2021	IN8 Development	60 Frederick Street/26-32 Duke Street East	494 residential units, 9 commercial units

File No.	Municipality	Date of Draft Approval	Owner/Applicant	Location	Description
30CDM-21208	Kitchener	December 2, 2021	Crescent Haven Homes Inc.	235 Chapel Hill Drive	66 street fronting townhouses
30CDM-21216	Kitchener	December 3, 2021	Otis on the Parc – 51 David Street Limited	51 David Street	32 dwelling units
30CDM-21304	North Dumfries	October 8, 2021	Reid's Heritage Homes	88 Gibson Street, Ayr	39 apartments
30CDM-21301	North Dumfries	October 29, 2021	Ayr Meadows Development Inc.	150 Northumberland Street	82 townhouses
30CDM-20404	Waterloo	February 11, 2021	JD Development Group Phillip Street Limited	252 Phillip Street	21-storey multiple residential building with 119 residential units
30CDM-20405	Waterloo	May 11, 2021	256 Lester Inc. c/o Zeljko Prica	256 Lester Street	122 apartments
30CDM-21401	Waterloo	September 8, 2021	Activa Holdings Inc.	311 Woolwich Street	8 townhouse blocks with a total of 47 residential units
30CDM-20701	Woolwich	March 2, 2021	Josephs Place Breslau LP	208 Woolwich Street	4-storey, 78 unit apartment building

Registered Plans of Subdivision (including Vacant Land Condominium)

Registered Plan No.	Municipality	File No.	Date of Registration	Owner/Applicant	Description
58M-669	Cambridge	30T-17101	March 22, 2021	Branthaven Pinebush Inc.	255 townhouse and 220 apartment units
58M-676	Cambridge	30T-19101	August 30, 2021	MHBC Planning on behalf of Greengate Village Limit	102 unspecified units

Registered Plan No.	Municipality	File No.	Date of Registration	Owner/Applicant	Description
58M-677	Cambridge	30T-12104	September 20, 2021	River Mill Development Corporation	70 townhouse units
58M-681	Cambridge	30T-03102	December 22, 2021	Greengate Village Limited	37 single detached units
58M-670	Kitchener	30T-08203	May 27, 2021	Activa Holdings Inc.	94 single detached and 71 multi units
58M-673	Kitchener	30T-08203	May 28, 2021	Activa Holdings Inc.	24 multi units
58M-672	Kitchener	30T-08203	May 28, 2021	Activa Holdings Inc.	31-49 single detached and 158 multi units
58M-671	Kitchener	30T-08203	May 28, 2021	Activa Holdings Inc.	90-135 single detached and 35 multi units
WVLCP-726	Kitchener	30CDM-21206	September 29, 2021	Will-O Homes	Vacant land condominium with 8 single detached units
58M-678	Kitchener	30T-08206	October 26, 2021	Mattamy (South Estates) Limited	281 single detached, 2 semi-detached and 139 townhouse units
WVLCP-728	Kitchener	30CDM-19205	November 10, 2021	Hallman Construction Ltd.	Vacant land condominium with 21 single detached units
58M-682	Kitchener	30T-07205	December 23, 2021	Schlegel Urban Developments Corp. (Formerly Becker	182 single detached, 154 townhouse and 44-45 multi units
58M-667	Waterloo	30T-05402	January 22, 2021	Activa Holdings	61 single detached units
58M-668	Waterloo	30T-05403	January 22, 2021	Wm J. Gies Construction Ltd. / Clair Creek	17 single detached units
58M-674	Waterloo	30T-05402	August 5, 2021	Activa Holdings Inc.	38 single detached, 28 townhouse and 42-86 multi units
58M-679	Waterloo	30T-91002	November 24, 2021	Cook Homes Limited	22 single detached and 33 townhouse units
58M-680	Waterloo	30T-97024	November 26, 2021	Polocorp Inc. / Vista Hills	5 single detached units

Registered Plan No.	Municipality	File No.	Date of Registration	Owner/Applicant	Description
58M-675	Woolwich	30T-13701	August 30, 2021	Riverland Area II GP Ltd.	104 single detached and 13 townhouse units

Registered Plans of Condominium

Registered Plan No.	Municipality	File No.	Date of Registration	Owner/Applicant	Location/Description
WCP-717	Cambridge	30CDM-18102	March 18, 2021	Brookpoint Estates Inc / Crystal Homes	755 and 740 Linden Dr – Common elements condominium for the purposes of private road, visitor parking, landscaped areas
WCP-721	Cambridge	30CDM-19108	July 7, 2021	River Mill Development Corporation	1905 Maple Grove Rd and 124 Compass Trail – Common elements condominium for 88 townhouse units
WCP-694.3	Kitchener	30CDM-19210	February 12, 2021	Huron Gardens Inc.	160 Rochefort St – 56 townhouse units
WCP-716	Kitchener	30CDM-20203	March 3, 2021	Marann Homes Limited	54 Bridge St W – 18 townhouse units
WCP-702.2	Kitchener	30CDM-19208	March 25, 2021	Activa Holdings Inc.	665 Blair Creek Dr – 28 townhouse units
WCP-718	Kitchener	30CDM-20202	April 28, 2021	Cook Homes Ltd.	24 Morrison Rd – 68 townhouse units
WCP-707.1	Kitchener	30CDM-20201	June 7, 2021	VanLegend Fergus GP & VanLegend Fergus LP	110 Fergus Ave – 24 townhouse and 123 apartment units
WCP-716.1	Kitchener	30CDM-20203	June 7, 2021	Marann Homes Limited	54 Bridge St W – 12 townhouse units
WCP-720	Kitchener	30CDM-15202	June 14, 2021	RJVW Windale Holdings Inc.	185 Windale Cres – 36 apartment units
WCP-670.2	Kitchener	30CDM-18202	August 10, 2021	100 VIC GP INC.	100 Victoria St S – 179 apartment units

Registered Plan No.	Municipality	File No.	Date of Registration	Owner/Applicant	Location/Description
WCP-725	Kitchener	30CDM-20204	September 23, 2021	Strawberry Park Inc.	142 Rosemount Dr – Common elements condominium consisting of 76 units (parcels of tied land) within 12 buildings
WCP-730	Kitchener	30CDM-21204	December 29, 2021	24 Gaukel St. GP Inc, Momentum Developments	60 Charles St W – 305 apartment units
WCP-729	North Dumfries	30CDM-21304	November 18, 2021	RTZ Properties Inc.	88 Gibson St – 39 apartment units
WCP-712.1	Waterloo	30CDM-20401	January 4, 2021	Activa Holdings Inc.	245 Grey Silo Rd – 32 apartment units
WCP-713	Waterloo	30CDM-89018	January 7, 2021	2683569 Ontario Inc.	155 Frobisher Dr – 39 commercial units, 40 sign units
WCP-714	Waterloo	30CDM-19406	January 13, 2021	2430290 Ontario Inc.	181 King St S – 187 apartment units
WCP-715	Waterloo	30CDM-20406	January 18, 2021	Waterloo Condo Corp 338, 353, 360, 370, 387	460 Woolwich St – Amalgamate existing condos
WCP-710.1	Waterloo	30CDM-20403	April 7, 2021	255 Northfield LP / Urban Legend Development Ltd.	251 Northfield Dr (Building B) – 116 apartment units
WCP-719	Waterloo	30CDM-19402	June 4, 2021	U Style Development Inc.	246 Lester St – 85 apartment units
WCP-712	Waterloo	30CDM-20401	June 7, 2021	Activa Holdings Inc.	247-249 Grey Silo Rd – 64 apartment units
WCP-723	Waterloo	30CDM-14408	July 14, 2021	Spring Village Inc.	208 Sunview St – 57 apartment units
WCP-710.2	Waterloo	30CDM-20403	September 14, 2021	255 Northfield LP / Urban Legend Development Ltd.	251 Northfield Dr (Buildings C and D) – 137 apartment units
WCP-724	Waterloo	30CDM-21402	September 14, 2021	Village of Clair Creek	461 Columbia St – 73 townhouse units (Condo Exemption)

Registered Plan No.	Municipality	File No.	Date of Registration	Owner/Applicant	Location/Description
WCP-722	Woolwich	30CDM-20701	July 13, 2021	Joseph's Place Breslau LP (Reid's Heritage Homes)	208 Woolwich St – 78 townhouse units

Zoning By-law Amendments

Regional staff circulated, reviewed and provided comments/recommendations on 65 zoning by-law amendments in 2021.

Consent Applications

Regional staff circulated, reviewed and provided comments/recommendations on 224 consent applications in 2021.

Site Plan Applications

Regional staff circulated, reviewed and provided comments/recommendations on 344 site plan applications in 2021.

Approved Regional Road Access Permits

Regional staff reviewed and provided comments/recommendations on 56 Regional Road access permits in 2021.

Pre-Submission Applications

Regional staff reviewed and provided comments on 228 pre-submission applications in 2021.

Region of Waterloo

Transportation and Environmental Services

Design and Construction

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	C2021-30 - Consultant Selection for Kitchener Wastewater Treatment Plant New SCADA Control, Operations and Regional Laboratory Building

1. Recommendation:

That the Regional Municipality of Waterloo enter into an Agreement for Professional Consulting Services with R.V. Anderson Associates Limited, for the detailed design and services during construction for the Kitchener Wastewater Treatment Plant New SCADA Control, Operations and Regional Laboratory Building in the amount of $3,210,645.00 plus all applicable taxes, as described in report TES-DCS-22-21, dated June 7, 2022.

2. Purpose / Issue:

Purchasing by-law 16-032 Part VI, section 19 (2) requires Council to approve consultant proposals in excess of $500,000 provided that the proposal is compliant and that it best meets the established criteria.

3. Key Considerations:

An engineering consultant is required to complete the detailed design, contract administration, and construction inspection services for a New SCADA Control, Operations and Regional Laboratory Building at the Kitchener Wastewater Treatment Plant.

A consultant selection process was conducted in accordance with the Region's Purchasing by-Law. R.V. Anderson Associates Limited scored the highest. Therefore, the Consultant Evaluation Team recommends that R.V. Anderson Associates Limited be retained to undertake the detailed design, and contract administration and construction inspection services for this assignment.

The upset fee limit proposed by R.V. Anderson Associates Limited to complete the detailed design, contract administration and construction inspection services is $3,210,645.00 plus applicable taxes. The fee provided is within the expected range of fees for this type of assignment. A description of the consultant selection process is included in Appendix A.

4. Background:

SCADA stands for Supervisory Control and Data Acquisition, and is a computer-controlled network used to monitor and control the operations at all of the Region's wastewater and water treatment plants. The Kitchener Wastewater Treatment Plant New SCADA Control, Operations and Regional Laboratory Building project will provide the following benefits:

1) Due to the growing needs of the Region and the Ontario Clean Water Agency (OCWA, the plant operator), the existing SCADA Control and Operations Building has outgrown its available space.

2) The existing SCADA Control and Operations Building is located within the floodplain of the Grand River.

3) In order to meet space requirements and provide flood protection, a new SCADA Control and Operations Building is required to be built above the flood level.

4) The current Regional Laboratory is located at the Maple Grove Road Operations Centre and will surpass its estimated service life within the next five years. The existing laboratory facility is housed in a combination of an aging building that is too small and a portable building. Therefore, a new Regional Laboratory is required.

5) A Needs Assessment Study (October 2019) concluded that combining the SCADA Control and Operations functions and the Regional Laboratory in a single building located at the Kitchener Wastewater Treatment Plant site is the most cost-effective approach to meet the Region's needs.

5. Area Municipality Communication and Public/Stakeholder Engagement:

Nil

6. Strategic Plan:

This project meets the 2019-2023 Corporate Strategic Plan Objective 3.1 to reduce greenhouse gas emissions and Objective 3.4 to protect our water resources.

7. Financial Implications:

There are sufficient funds in the 2022-2031 Wastewater Capital Program to complete the work. Detailed tables are included in Appendix B.

8. Conclusion / Next Steps:

Subject to Regional Council's approval of this consultant assignment, the proposed schedule for this project is as follows:

- Detailed Design 2022 – 2024
- Construction 2025 – 2027

9. Attachments / Links:

Appendix A: Consultant Selection Process

Appendix B: Detailed Financial Implications

Prepared By: **David Brook**, Project Manager, Design and Construction

Chad Schwartzentruber, Head, Design and Construction

Reviewed By: **Phil Bauer**, Director, Design and Construction

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Appendix A

Consultant Selection Process

A Request for Proposal to provide engineering consulting services was advertised in the Record, and on both the Region and Ontario Public Buyers Association websites. Ten (10) Proposals were submitted and evaluated by the Region's selection team.

The criteria used to evaluate the Proposals and Upset Fee Estimates were in accordance with the Region's Purchasing By-law and included price as a factor in the selection process. These evaluation criteria and their respective weightings were as follows:

Quality Factors

- Project Approach and Understanding (30%)
- Experience of the Project Manager (20%)
- Experience of the Project Support Staff (15%)
- Experience on Similar Projects (20%)

Price Factor

- Upset Limit Fee (15%)

After evaluation of the proposals for quality factors, the evaluation team shortlisted and received Work Plans and Upset Limit Fee estimates from the following three (3) highest scoring consultants:

- R.V. Anderson Associates Limited
- AECOM
- WalterFedy

When considering all Quality and Price Factors, the submission from R.V. Anderson Associates Limited scored the highest overall score.

Appendix B

Detailed Financial Implications

C2021-30	$3,210,600
Plus: Applicable Net HST of 1.76%	$56,500
Total	$3,267,100

Note: All figures are rounded to the nearest $100.

The Region's approved 2022-2031 Wastewater Capital Program includes $10,108,000 in 2022, $14,335,000 in 2023 and $43,735,000 from 2024-2027 (total $68,178,000) for Kitchener Process Upgrades (project #08797) to be funded from the Wastewater Capital Reserve (47.8%; $32,610,900), non-growth related debentures (23.5%; $16,000,000), growth related debentures (18.9%; $12,878,000) and the Wastewater Development Charge Reserve Fund (9.8%; $6,689,100). The total estimated consulting services cost of $3,267,100 is within budget for consulting services included as part of the $32,000,000 budget allocated for the Kitchener Wastewater Treatment Plant New SCADA Control, Operations and Regional Laboratory Building.

Region of Waterloo

Transportation and Environmental Services

Design and Construction

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Amendment to Consultant Engineering Services Agreement for Galt Wastewater Treatment Plant Upgrades - Contract 1

---

1. Recommendation:

That the Regional Municipality of Waterloo approve an amendment to the existing Consulting Services Agreement with CH2M HILL Canada Limited, for the detailed design and services during construction for the Galt Wastewater Treatment Plant Upgrades – Contract 1, City of Cambridge, in the amount of $468,300.00 for a total contract price of $2,466,331.00 plus all applicable taxes, as outlined in report TES-DCS-22-23 dated June 7, 2022.

2. Purpose / Issue:

Purchasing by-law 16-032 Part XI, section 35 (1) requires Council to approve disbursement of additional funds in an amount greater than ten percent of the original contract price.

3. Strategic Plan:

This project meets the 2019-2023 Corporate Strategic Plan Objective 3.1 to reduce greenhouse gas emissions and Objective 3.4 to protect our water resources.

4. Key Considerations:

An engineering consultant is required to complete the contract administration and construction inspection services for upgrades to the Galt Wastewater Treatment Plant - Contract 1. CH2M Hill Limited has been performing these tasks well since commencement of construction in August 2020. Additional fees are required to support the following additional scope of work:

a. The scope of services, outlined in C2017-35, for contract administration and construction inspection to substantial completion provided for 18 months of services. The construction contract as awarded requires 24 months of services. A review of the required services has been completed and an additional 6

months of contract administration and construction inspection is required.

b. During construction, unknown conditions within the existing plant were discovered that required changes to the consultants design resulting in additional design related services.

c. The contractor's construction phasing strategy provided in accordance with the contract to ensure construction phasing maintained compliant plant operation requires additional supervision and testing services of the consultant.

In order to provide ongoing contract administration and construction inspection services to enable the successful completion of construction work, staff has negotiated an increase of $468,300.00 plus applicable taxes with CH2M Hill Limited, for a revised upset engineering fee of $2,458,031.00 plus applicable taxes. This represents 11% of the construction cost, which is within the typical range for a project of this magnitude and complexity. Staff recommends that the Region approve an amendment to the existing consulting services agreement with CH2M Hill Limited to add contract administration and site inspection services required for the Galt WWTP Upgrades project for an upset fee increase of $468,300.00 plus applicable taxes.

5. Background:

In March 2017, a Facility Plan and Conceptual Design were completed for the Galt Wastewater Treatment Plant (Galt WWTP) that identified a series of refurbishments and upgrades to ensure the plant can reliably meet performance objectives for flows up to the current rated plant capacity (Stage 1 flows). The plan identified two major contracts to be undertaken. Contract 1 (T2020-123) is currently in construction.

On October 11, 2017 C2017-35 Consultant Engineering Services for Detailed Design and Services during Construction for the Galt Wastewater Treatment Plant Upgrades– Contract 1, was approved by Regional Council in the amount of $1,998,031.00 plus all applicable taxes as detailed in report TES-DCS-17-20.

On June 24, 2020 T2020-123 for the Galt Wastewater Treatment Plant Upgrades - Contract was awarded to Maple Reinders Constructors Ltd. by Regional Council in the amount of $22,548,900 plus applicable taxes in report COR-TRY-20-62.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Nil

7. Financial Implications:

There are sufficient funds in the 2022 Wastewater Capital Program to complete the work. Detailed tables are included in Appendix A.

8. Conclusion / Next Steps:

Subject to Regional Council's approval, the Agreement for Professional Consulting Services will be amended.

9. Attachments / Links:

Appendix A: Detailed Financial Implications

Prepared By: **Chad Melitzer**, Project Manager, Design and Construction

Chad Schwartzentruber, Head, Design and Construction

Reviewed By: **Phil Bauer**, Director, Design and Construction

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Appendix A

Detailed Financial Implications

C2017-35	$468,300
Plus: Applicable Net HST of 1.76%	$8,200
Total	$476,500

Note: All figures are rounded to the nearest $100.

The Region's approved 2022-2031 Wastewater Capital Program includes a budget of $45,354,000 for Galt WWTP Upgrades (project #08289) to be funded from the Wastewater Capital Reserve (75.3%; $34,151,600), growth related debentures (19.4%; $8,800,000) and the Wastewater Development Charge Reserve Fund (5.3%; $2,402,400). For Contract 1, a budget of $7,508,000 is allocated between 2022 and 2024. There is sufficient budget in Contract 1 to accommodate CH2M Hill Limited additional upset fee of $476,500 including applicable taxes.

Region of Waterloo

Transportation and Environmental Services

Water Services

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Notice of Second Virtual Public Consultation Centre for the Heidelberg Water Supply System Optimization – Class EA and Conceptual Design

---

1. Recommendation:

For information.

2. Purpose / Issue:

A virtual Public Consultation Centre (PCC2) for the Heidelberg Water Supply System (WSS) Class Environmental Assessment (Class EA) and Conceptual Design will be available from June 16, to July 18, 2022 on the Region's website. The purpose is to provide the public with an update on the proceedings of the study provide an overview of the evaluation of the alternative solutions and present the preliminary preferred alternative. PCC2 will also solicit input from the public and invite feedback on the preferred alternative.

3. Strategic Plan:

The Heidelberg Class EA supports the Environment and Climate Action focus area in the 2019-2023 Strategic Plan by protecting our water resources (Objective 3.4).

4. Key Considerations:

Problem Statement Definition: Many components of the Heidelberg Water Treatment Plant are nearing the end of their useful service life and a major capital investment would be required to maintain the facility moving forward. The intent of this Class EA Study is to establish a long-term water servicing solution for the community of Heidelberg that meets all Ministry standards and objectives, is cost-effective and is environmentally sustainable. This includes assessing the current system as well as alternative water supply options.

Evaluation Criteria: The evaluation criteria that was presented in PCC1 are grouped into environmental, technical, social, and financial considerations.

Identification of Alternative Solutions: Four alternative solutions were identified for detailed evaluation and summarized below:

a) '**Do Nothing'** – In accordance with the Class EA requirements a 'Do Nothing' alternative must be examined whereby no upgrades to the Heidelberg water treatment plant or supply network would occur. This alternative is not feasible as it does not ensure a reliable, future supply of drinking water to the community of Heidelberg.
b) '**Upgrade Heidelberg WTP'** – Implement upgrades to the existing Heidelberg WTP to allow the plant to continue supplying the community in the long term.
c) **'Supply Water from St.Clements to Heidelberg and Decommission the Heidelberg WTP'** – The neighbouring St. Clements water supply system would supply Heidelberg through the construction of a new ~1.1 km transmission main. The Heidelberg WTP would be decommissioned.
d) **'Connect the St.Clements Distribution Network to the Existing Heidelberg WTP Storage Tank'** – The neighbouring St. Clements water supply system would supply Heidelberg to the existing Heidelberg Treated Water Reservoir via a ~3 km transmission main. Treated water would then be supplied to Heidelberg using new high lift pumps. Obsolete portions of the existing Heidelberg WTP would be decommissioned.

Summary of Evaluation of Alternatives: The four alternatives described above were evaluated and the preliminary preferred solution was found to be **'Supply Water from St. Clement to Heidelberg and Decommission the Heidelberg WTP'** due to reduced complexity to operate the system, the positive impacts on climate change, and the lowest overall cost.

5. Background:

Currently, water for the community of Heidelberg is supplied by the Heidelberg Water Treatment Plant. A condition assessment of the Heidelberg water treatment facility was completed in 2018. The building structure was found to be in generally good condition, however much of the process equipment is nearing the end of its service life and a major capital investment will be required for replacement within the next five (5) years.

The Region has identified and evaluated several water supply alternatives through the Class EA process. These will be presented to the public as part of PCC # 2.

Supplying the community of Heidelberg from the nearby St. Clements water supply system presents a significant opportunity to improve operational efficiency, lower operations and maintenance costs as well as greenhouse gas emissions associated with operating and maintaining two separate treatment facilities, and ensures the reliability of the drinking water supply to the community for the foreseeable future.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Area Municipality Communication: The project contact list consists of several members of both the Townships of Woolwich and Wellesley staff who have been notified of this project and kept informed with the ongoing Class EA findings.

Public/Stakeholder Engagement:

This is the second Public Consultation Centre. Any public and stakeholder feedback received will be used as part of the Class EA process.

Virtual Public Consultation Centre: https://regionofwaterloo.ca/CurrentWaterProjects
Through the Region website, the public is invited to view the PCC2 boards with video narration. A transcript of the video will also be provided. Comment sheets will be available for the public to provide feedback on the information presented in the virtual PCC.

7. Financial Implications:

Nil

8. Conclusion / Next Steps:

After the commenting period, the project team will review input received and incorporate them into EA Draft Project File Report. The Notice of Study completion and 30-day public comment period is scheduled for late summer or early fall of 2022. A conceptual design will be completed after completion of the Class EA.

Attachments / Links:

Attachment A: Class Environmental Assessment and Conceptual Design of the Heidelberg Water Supply System Virtual PCC2 boards DOCS 4052892.

Prepared By: **Ayman Khedr**, Engineering Intern, Water Services
Pam Law, Manager of Engineering and Planning, Water Services

Reviewed By: **Nancy Kodousek**, Director, Water Services

Approved By: **Thomas Schmidt**, Commissioner Transportation and Environmental Services

Class Environmental Assessment and Conceptual Design of the Heidelberg Water Supply System

Schedule B Municipal Class Environmental Assessment
Virtual Public Consultation Centre #2

Region of Waterloo

Stantec

Welcome!

Goals of this Public Consultation Centre

Provide an update on the Study since Public Consultation Centre (PCC) 1

Provide an overview of the Evaluation of Alternative Solutions

Provide an overview of the Preliminary Preferred Alternative

Provide an opportunity for you to learn about the project and get involved

https://www.regionofwaterloo.ca/CurrentWaterProjects/

https://www.youtube.com/user/regionofwaterloo

Project Overview

What are we doing?

We are planning a long-term water servicing solution for the community of Heidelberg.

Why are we doing it?

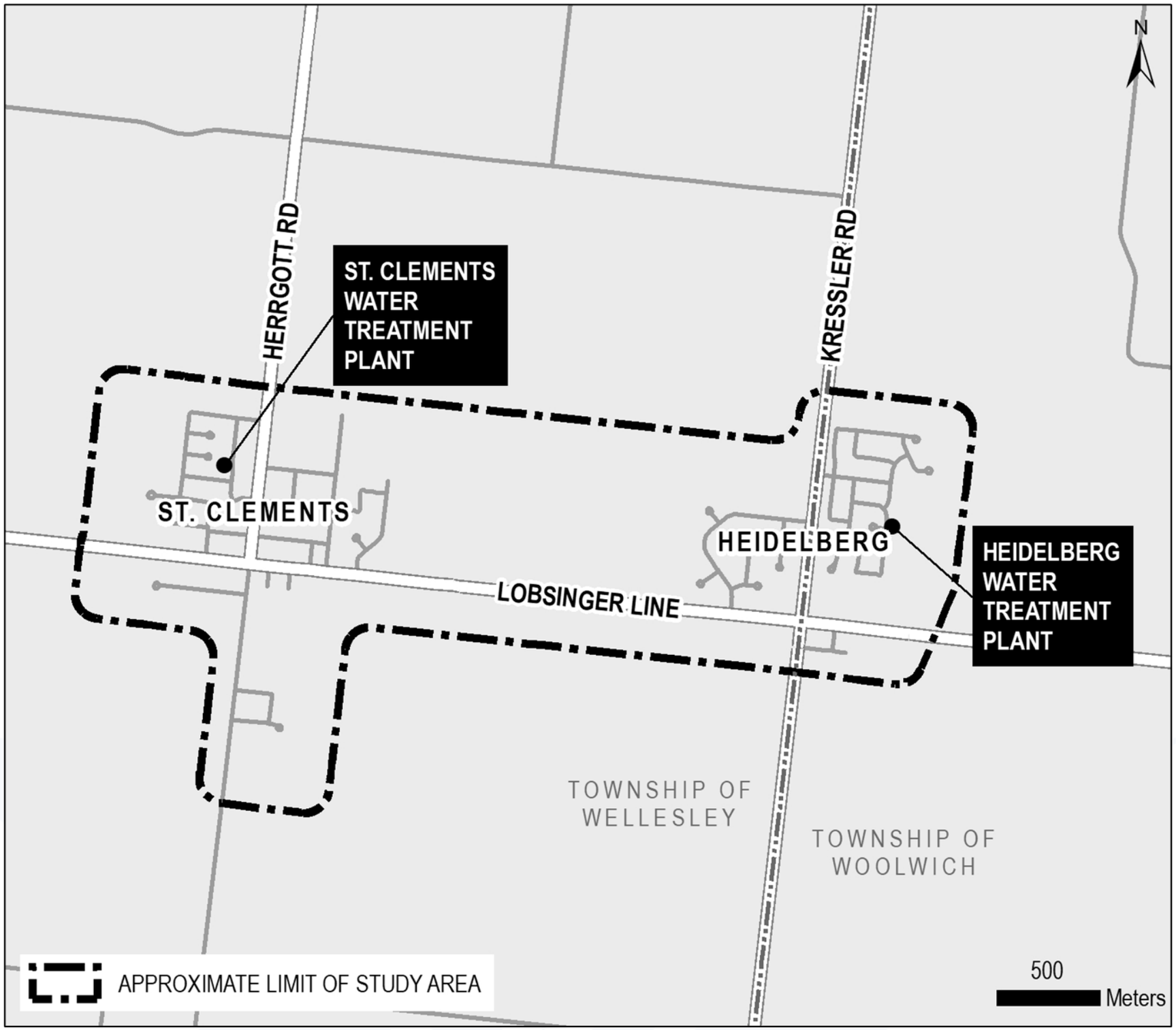
The current water supply system serves Heidelberg. A recent condition assessment identified that significant components will reach the end of their service life within the next five years. We are taking steps now to ensure we are ready to provide ongoing water servicing to the community.

What does it mean to you?

In addition to exploring the potential to upgrade the existing Heidelberg Water Treatment Plant, the project is also assessing alternative opportunities to supply drinking water. One such opportunity is to supply Heidelberg from the St. Clements water supply system. The project will not add municipal water supply servicing to areas where it is not currently provided.

Study Area

This figure shows the extent of the Study Area that encompasses the communities of Heidelberg and St. Clements.



Overview of PCC #1 Feedback

The PCC 1 video presentation was available for viewing online between May 28 to June 30, 2021. The following feedback received was incorporated into the evaluation:

- Provide efficient water treatment while protecting the natural environment, reducing greenhouse gas emissions, and maintaining drinking water quality including aesthetic considerations (taste and smell).

- Minimize impact on environmental features and property; reduce noise or property disruptions where possible.

- Consider operational and climate change. Plan backup power for power failures.

- Confirm capacity is available to address current and future water supply needs.

- Efficient investments needed.

Municipal Class Environmental Assessment Process

This project is classified as a **Schedule B project**, which includes the completion of Phases 1 and 2 of the Class EA process.

Public Consultation Centre #1

Phase 1

Identify the problem/ opportunity.

Public Consultation Centre #2

Phase 2

Develop/ evaluate alternative solutions and identify preferred solution

30-day public review period

Summarize the project in a Project File Report.

Continuous Stakeholder Engagement

We are here

Evaluation Criteria

Alternative solutions have been assessed based on these criteria presented in PCC#1:

Social/Cultural

- Minimizes impacts on existing residences, businesses, and community features (short-term & long-term)
- Potential effects on approved/ planned land uses
- Protects cultural heritage & archaeological features
- Protects public health and safety

Technical

- Minimizes land requirements
- Provides reliable & resilient service
- Meets existing and future needs
- Aligns with existing and planned infrastructure improvements
- Aligns with existing and future land use
- Constructability

Natural Environment

- Protects environmental features
- Protects wildlife and species at risk
- Protects groundwater, streams, and rivers
- Minimizes climate change impacts

Financial

- Provides low lifecycle costs

Identification of Alternative Solutions

Alternative 1: Do Nothing: Involves conducting no upgrades to the Heidelberg WTP. Carried forward for comparison purposes and in accordance with EA requirements.

Alternative 2: Upgrade Heidelberg WTP: Implement upgrades to the existing Heidelberg WTP. Allow the plant to continue supplying Heidelberg in the long-term.

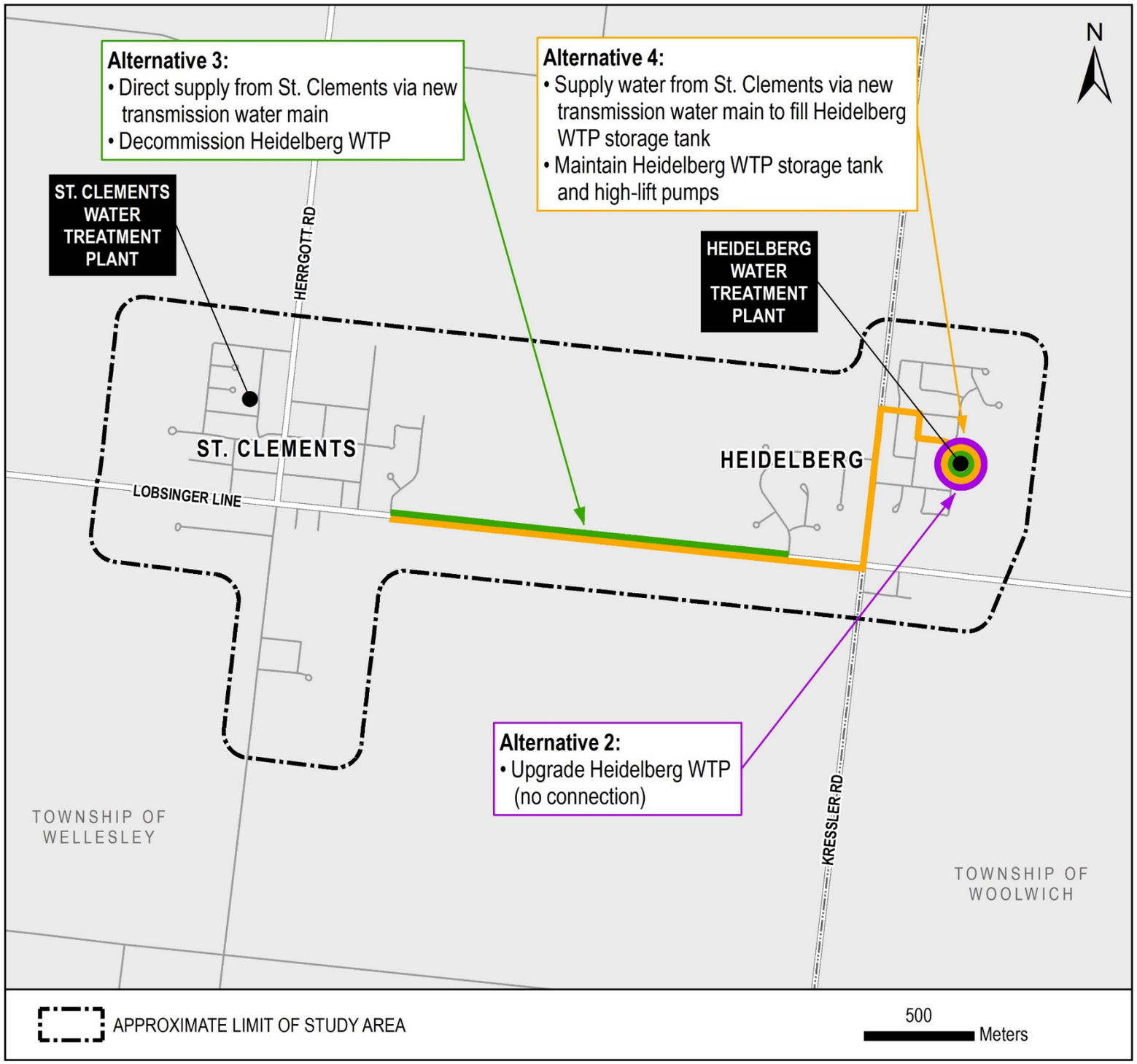
Alternative 3: Supply Water from St. Clements to Heidelberg via a new Transmission Main and Decommission the Heidelberg WTP (1.1 km connection): Use a new transmission main to connect the St. Clements and Heidelberg Water Supply Systems (WSS)

Alternative 4: Connect the St. Clements distribution system and the existing Heidelberg WTP storage tank (3 km connection): Partial decommissioning of the treatment processes at Heidelberg WTP, but maintains the existing storage tank, high-lift pumps, and direction of flow in the distribution system.

Alternative Solutions

The figure identifies the location of the alternatives.

- **Alternative 2:** upgrades at the existing Heidelberg Water Treatment Plant (WTP).
- **Alternative 3:** Lobsinger Line connection.
- **Alternative 4:** uses Lobsinger Line, Kressler Road as well as local streets.



Summary of the Evaluation of Alternatives

Evaluation Criteria	Alternative 1: Do Nothing	Alternative 2: Upgrade Heidelberg WTP	Alternative 3(A): Supply from St. Clements distribution system (DS) to Heidelberg distribution systems (DS); Decommission Heidelberg WTP	Alternative 4: Supply water from St. Clements DS to fill Heidelberg storage tank
Social/Cultural				
Environmental				
Technical				
Financial				
Overall Score				

Legend

Very well aligned with criteria

Well aligned with criteria

Somewhat aligned with criteria

Not well aligned with criteria

Low alignment with criteria

Preliminary Preferred Alternative

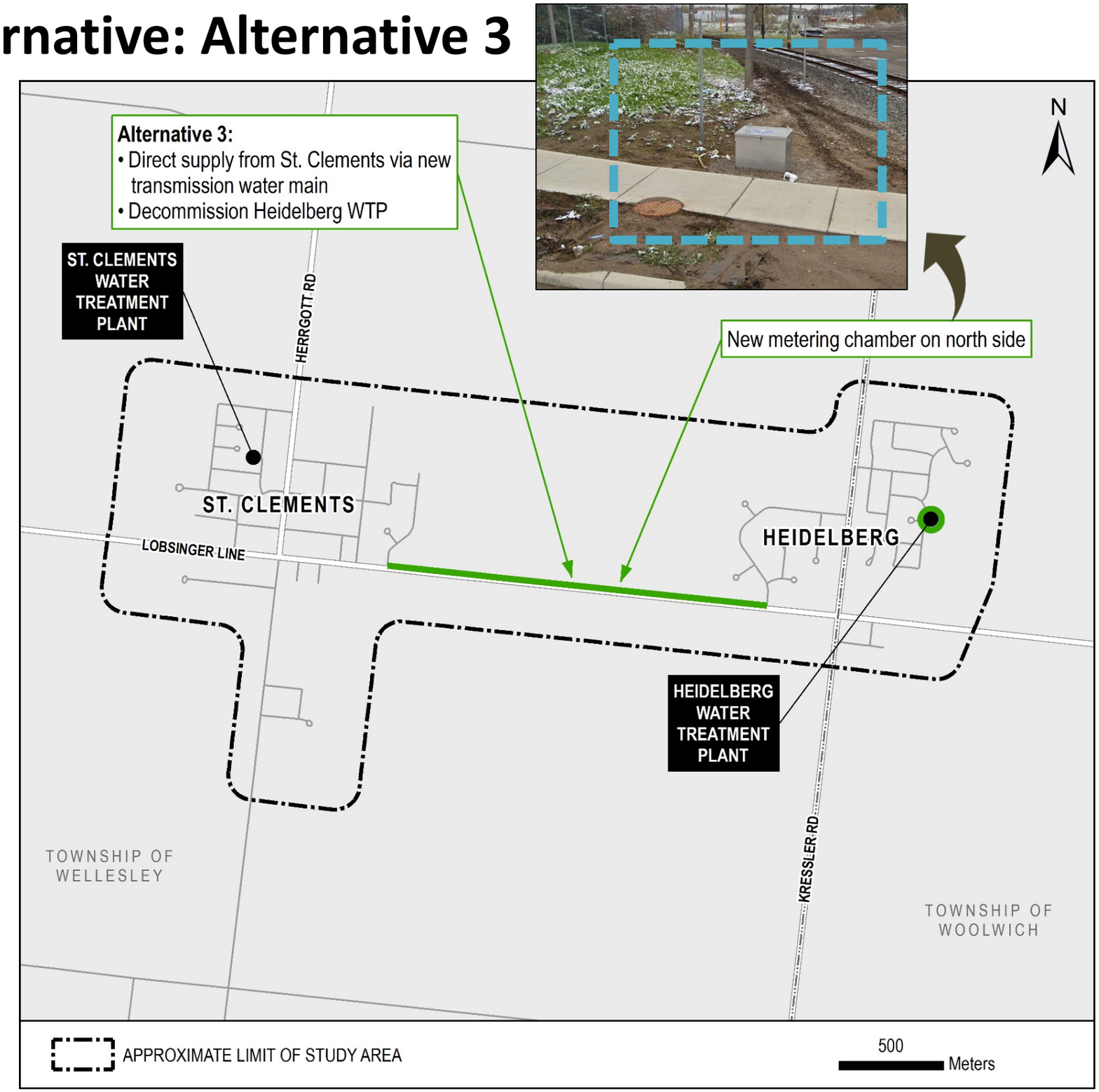
Preliminary Preferred Alternative: Alternative 3

Key features:

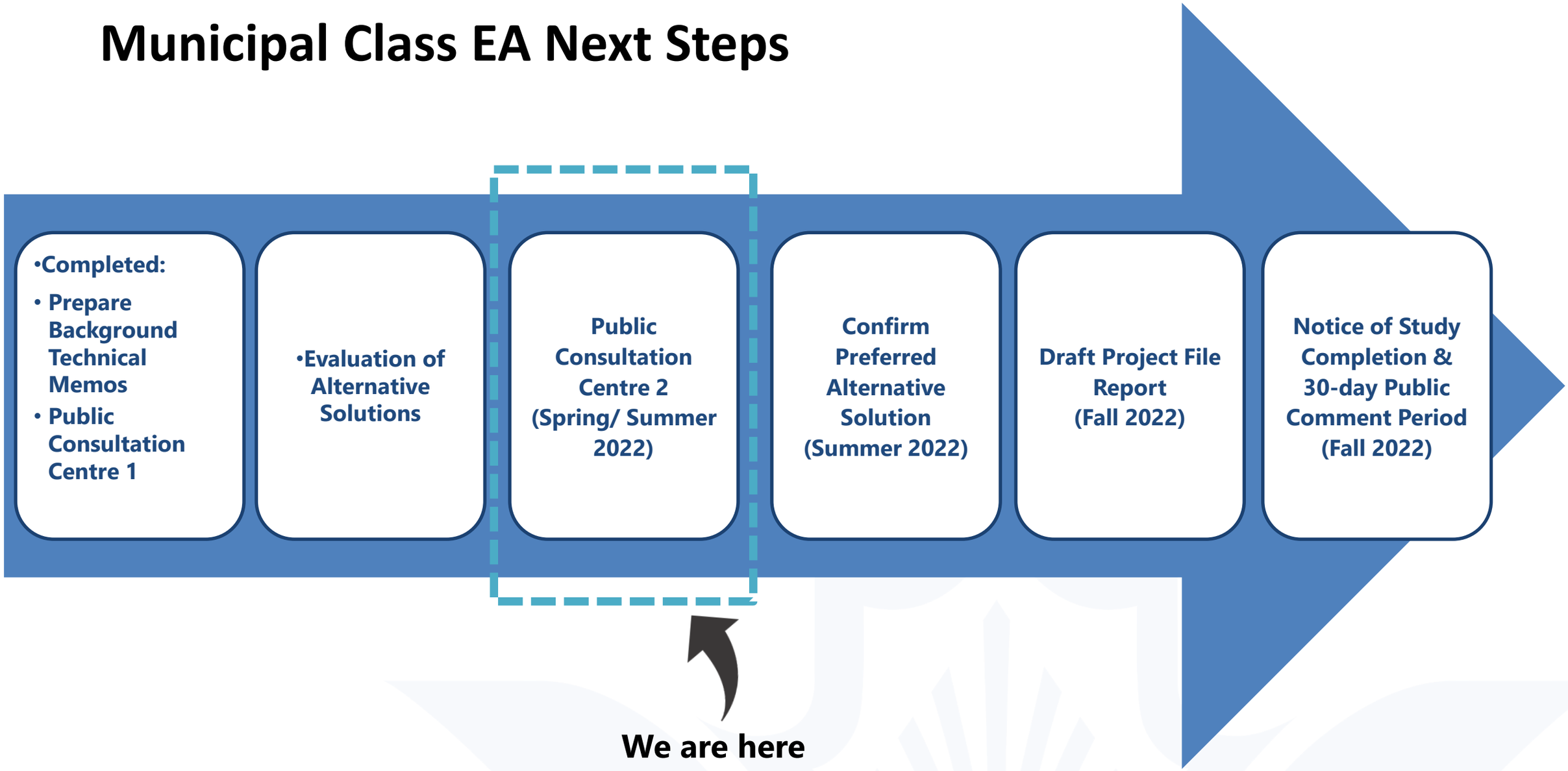
- Connection of the St. Clements and Heidelberg Distribution Systems via ~1.1 km transmission watermain along Lobsinger Line
- Metering Chamber on Lobsinger Line – location to be confirmed (see photo)
- Decommission existing Heidelberg Water Treatment Plant

Discussion:

- Lower operational and maintenance costs – only one plant needed
- Lower greenhouse gas emissions
- St. Clements has enough capacity to provide the water supply for both communities
- Shorter transmission main results in a smaller footprint.



Municipal Class EA Next Steps



Upon completion of the Class EA Study, the following will be undertaken:

Conceptual Design: Fall 2022
Detail Design: early 2023
Construction: late 2023 - 2024

Thank you!

Please fill out a comment sheet found at the Region of Waterloo website below, or send any comments to the team members by **July 18, 2022**

Ayman Khedr, P.Eng.
Engineering and Planning
Region of Waterloo, Water Services
Phone: 519-575-4400, ext.4412
AKhedr@regionofwaterloo.ca

Nelson Oliveira, P.Eng.
Vice President, Regional Business Leader,
Water - Canada East
Stantec Consulting Ltd.
Phone: 519-675-6620
Nelson.Oliveira@stantec.com

https://www.regionofwaterloo.ca/CurrentWaterProjects/

https://www.youtube.com/user/regionofwaterloo

Region of Waterloo

Transportation and Environmental Services

Water Services

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Notice of Third Virtual Public Consultation Centre for the Baden-New Hamburg Water and Wastewater System Servicing Review

---

1. Recommendation:

For information.

2. Purpose / Issue:

A third virtual Public Consultation Centre (PCC3) for the Baden-New Hamburg Water and Wastewater System Servicing Review will be available from June 7, 2022 to July 6, 2022 on the Region's website. The purpose is to present the evaluation of water and wastewater servicing alternatives for the Wilmot Township communities of Baden, New Hamburg and Foxboro Green, and to invite public input on the material.

3. Strategic Plan:

The Baden-New Hamburg Water and Wastewater System Servicing Review supports the Environment and Climate Action focus area in the 2019-2023 Strategic Plan by protecting our water resources (Objective 3.4).

4. Key Considerations:

Study Process: This study follows the Municipal Class Environmental Assessment process, satisfying Phases 1 and 2.

Build on PCC1 and PCC2: This PCC3 builds on PCC1 and PCC2, outlining the issues, developing alternatives, and allowing for public input on the highest scoring alternative.

Water System: Water Supply for the communities is sufficient however; the need for future water storage was identified. The highest scoring alternative was adding storage at the existing New Hamburg treatment plant.

Wastewater System: The New Hamburg Wastewater Treatment Plant was expanded

in 2020 and has sufficient capacity. An opportunity to improve wastewater conveyance from Baden was identified. The highest scoring alternative was to convey flows from Baden directly to New Hamburg Wastewater Treatment Plant with necessary pump station upgrades. An easement would be required in this alternative.

Foxboro Green: The capacity for water and wastewater infrastructure is sufficient at Foxboro Green however; the opportunity to improve the sustainability of services was explored. The highest scoring alternative was to supply water and convey wastewater using a direct route from Foxboro Green to Baden. An easement would be required in this alternative.

Virtual Public Consultation Centre: https://regionofwaterloo.ca/CurrentWaterProjects
Through the Region website, the public is invited to view the PCC3 boards with video narration. A transcript of the video and comment sheet will also be provided to allow the public to provide feedback to the Region.

5. Background:

The Region is responsible for water supply and treatment, as well as wastewater pumping and treatment in the communities of Baden and New Hamburg. Based on growth identified in the Region Official Plan and Township Official Plan, demand for water, and wastewater production will increase.

The Baden-New Hamburg Water and Wastewater System Servicing Review assessed the current state of the Region's water and wastewater infrastructure in the communities of Baden and New Hamburg. Preferred solutions were identified to ensure servicing is available now and in the future. Opportunity to service the community of Foxboro Green was also part of this review.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Area Municipality Communication: Wilmot Township was provided with project notices. Furthermore, Township staff attended regular progress meetings and planning workshop with the Project team to provide input.

Public/Stakeholder Engagement:

Public/Stakeholder engagement includes the issuance of notices to Ministries, agencies, local interest groups and members of our local Indigenous communities. The Notice appeared twice in the New Hamburg Independent and Ayr News.

Financial Implications:

Nil.

7. Conclusion / Next Steps:

After the commenting period for the PCC, the project team will review input received and incorporate them in the Final Project File Report for the Baden – New Hamburg Water and Wastewater Servicing Review. A recommendation for 30 day public review will be made prior to finalizing the report.

8. Attachments / Links:

Attachment A - Baden-New Hamburg Water and Wastewater System Servicing Review Virtual Public Consultation Center #3 PowerPoint Slides (4065945)

Prepared By: **Kaoru Yajima**, Senior Engineer, Water Services
Pam Law, Manager of Engineering and Planning, Water Services

Reviewed By: **Nancy Kodousek**, Director, Water Services

Approved By: **Thomas Schmidt**, Commissioner Transportation and Environmental Services

Baden and New Hamburg Water and Wastewater System Servicing Review

Virtual Public Consultation Centre #3

June 7, 2022

Region of Waterloo

Public Consultation Centre #3

Welcome!

The goals of this final Public Consultation Centre (PCC#3):

- Provide an overview of the project
- Provide an update on the study since PCC #2
- Present the Preferred Alternative Solutions for the Water and Wastewater Servicing for the communities of Baden, New Hamburg and Foxboro Green
- Provide an opportunity for you to learn about the project and get involved

Comments received during this study will be used to develop the recommended approach for current and future water and wastewater infrastructure needs of the communities of Baden, New Hamburg and Foxboro Green.

Project Overview

What are we doing?

We are assessing the current water supply and wastewater treatment systems that serve the communities of Baden and New Hamburg. This study will look at the current and future infrastructure needs for the community. This study excludes the local watermain and sewer extensions which are the responsibility of Wilmot Township.

Why are we doing it?

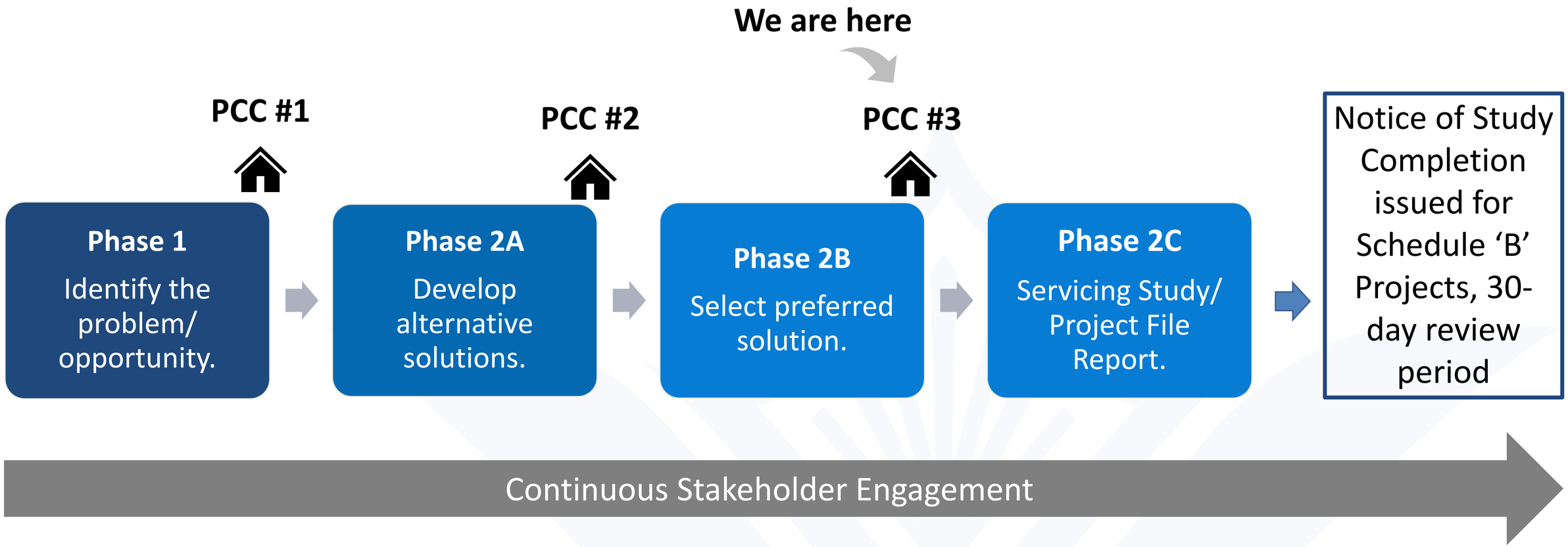
We are taking steps now to ensure we are ready to meet the future needs of Baden and New Hamburg through examination of the Region's infrastructure. We will also explore any opportunities for the Foxboro Green community.

What does it mean to you?

Current and future needs may require the construction of new water supply and wastewater infrastructure, or upgrades to existing facilities, which may also need land acquisition. This is your opportunity to get involved with the planning process.

Municipal Class Environmental Assessment Process

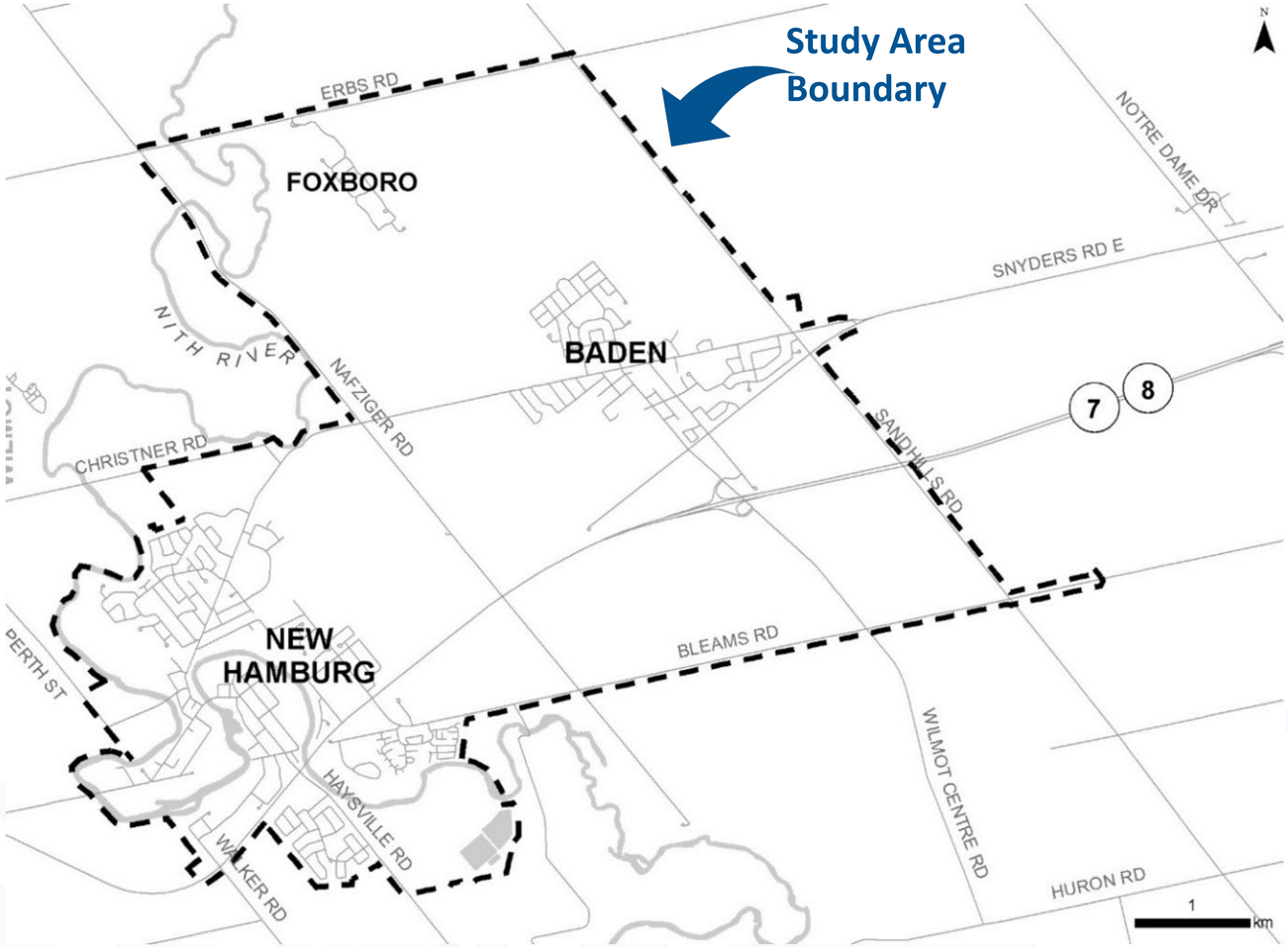
This Servicing Review will be completed to satisfy the first two phases of the Municipal Class EA process for projects which will be identified through the study.



Findings Presented in Previous Consultation

In PCC#2, the following areas requiring further study were presented:

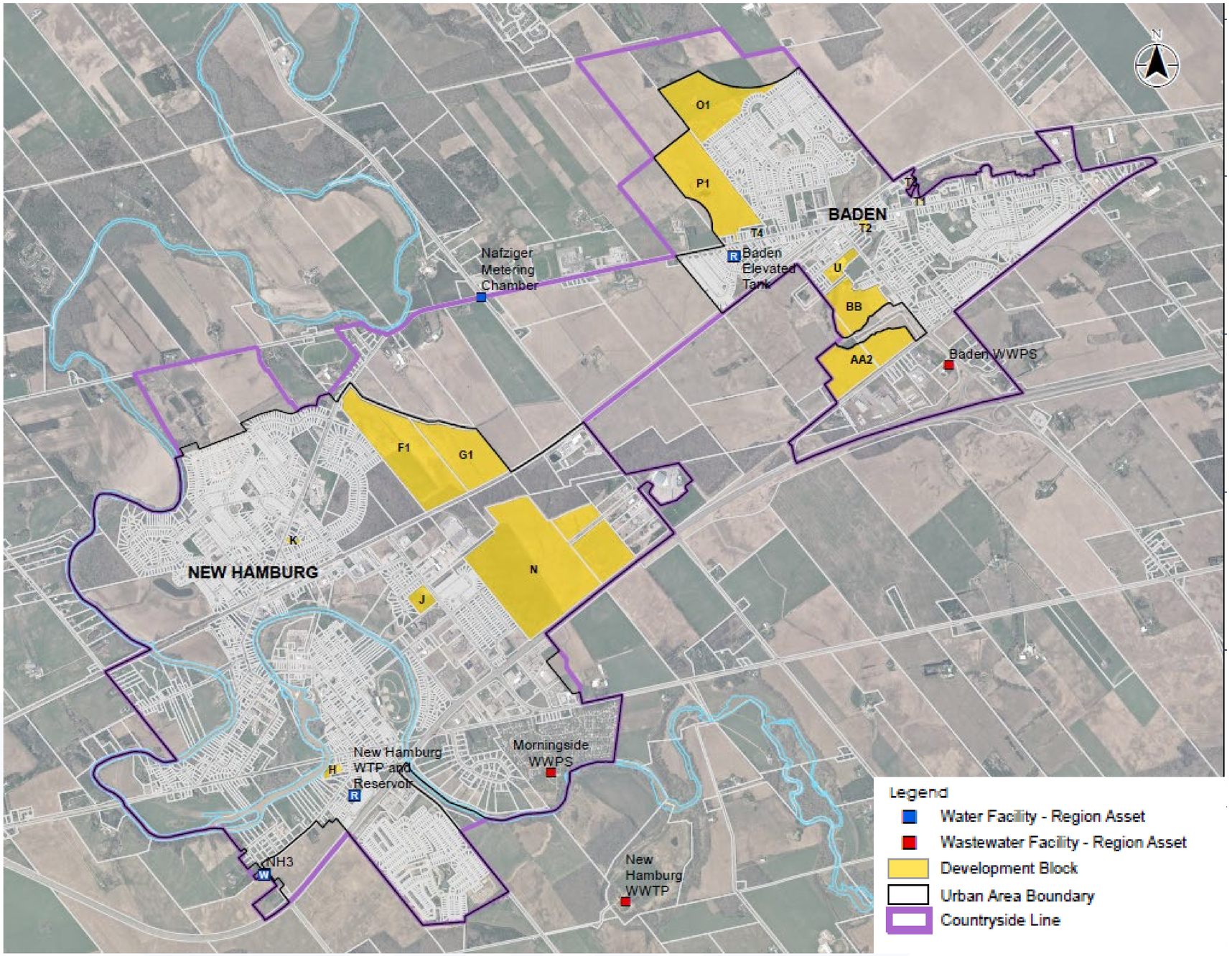
- Need for Future Water Storage
- Need for Wastewater Servicing in Baden
- Need to consider the future Water and Wastewater Servicing for the Foxboro Community



Evaluation of Needs

The study considered the future requirements of water and wastewater servicing for both the existing community as well as planned growth within the Urban Area Boundary under the current Official Plan.

Shown in yellow are development areas in the Official Plan.



Review of Alternative Solutions Presented at PCC#2

Requirement for Future Water Storage:

- Alternative WS1 - Do nothing
- Alternative WS2 - Provide increased storage at the New Hamburg Water Treatment Plant
- Alternative WS3 - Provide new storage at the Baden Wells site
- Alternative WS4 - Provide new storage at the Shingleton/K50 Wells site

Future Wastewater Servicing in Baden:

- Alternative WW1 - Do nothing
- Alternative WW2 - Upgrade system and maintain existing configuration
- Alternative WW3 - Upgrade system and convey directly to Morningside Pump Station
- Alternative WW4 - Upgrade system and convey directly to New Hamburg Wastewater Treatment Plant

Future Water and Wastewater Servicing for the Foxboro Community:

- Alternative F1 - Do nothing and carry out necessary upgrades
- Alternative F2 - Provide connection to the existing Baden sewer and water supply system using existing road allowances
- Alternative F3 - Provide connection to the existing Baden sewer and water supply system using a direct route
- Alternative F4 - Provide connection to the existing New Hamburg sewer and water supply system using existing road allowances

Evaluation of Alternative Solutions

The alternative solutions have been evaluated based on their performance against the following criteria categories:

- **Natural:** protecting significant natural and physical elements of the environment.
- **Social:** evaluates potential effects on residents, neighbourhoods, businesses, historical/archaeological and heritage components.
- **Technical:** considers compliance with regulations and policies, as well as the technical suitability and other engineering aspects.
- **Financial:** addresses the potential -servicing costs.

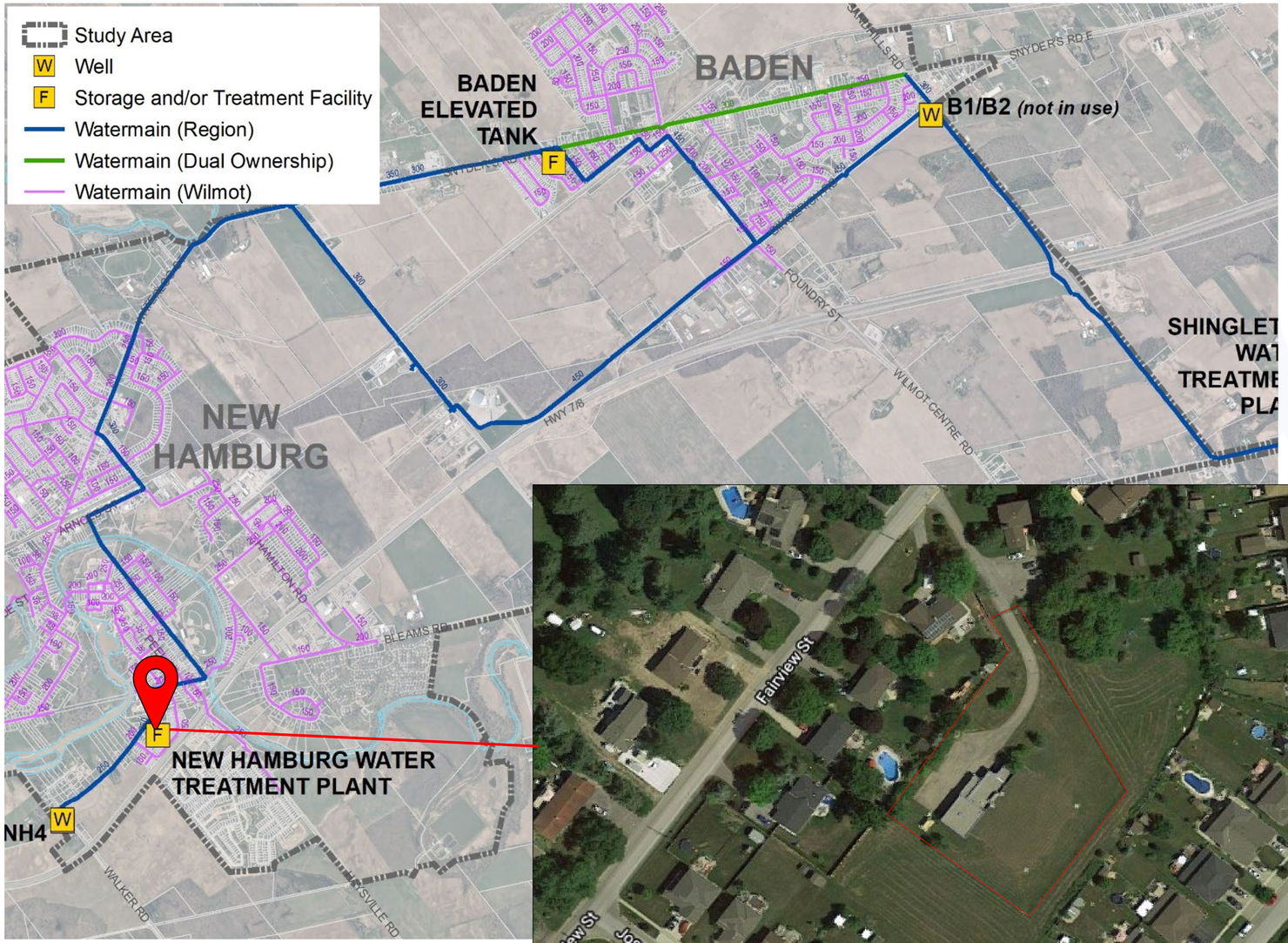
Legend for Evaluation Scoring

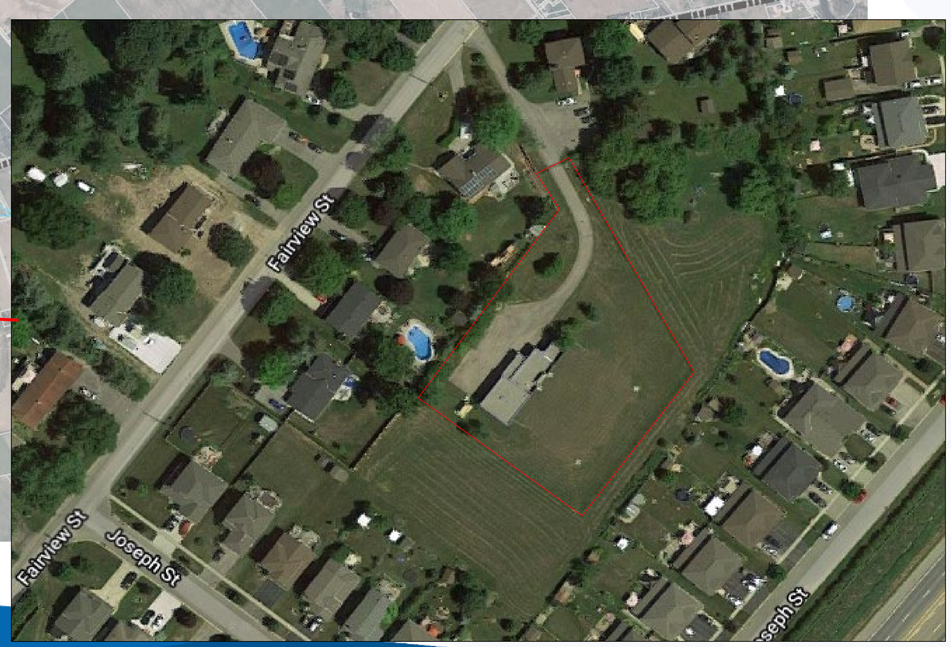
Graphic	Rating	Description
	5	Very well aligned with criteria
	4	Well aligned with criteria
	3	Somewhat aligned with criteria
	2	Not well aligned with criteria
	1	Low alignment with criteria

Evaluation of Alternative Solutions – Water Storage (WS)

Factors and Criteria	Alternative WS1 – Do Nothing	Alternative WS2 – Provide increased storage at the New Hamburg Water Treatment Plant	Alternative WS3 – Provide new storage at the Baden Wells site	Alternative WS4 – Provide new storage at the Shingletown/K50 Wells site
ENVIRONMENTAL				
SOCIAL				
TECHNICAL				
FINANCIAL **Provides low lifecycle costs** • Minimize capital, operation and maintenance (life cycle) costs over a 50-year period.	• Estimated Capital Cost: $0 • Estimated 50-Year Lifecycle Costs: $0	• Estimated Initial Capital Cost: $4M • Estimated 50-Year Lifecycle Costs: $4.3M	• Estimated Initial Capital Cost: $4.9M • Estimated 50-Year Lifecycle Costs: $7.0M	• Estimated Initial Capital Cost: $4.9M • Estimated 50-Year Lifecycle Costs: $6.1M
SUMMARY	**Not Recommended (does not address problems identified)**	**Preferred**	**Moderately Preferred**	**Moderately Preferred**

Preliminary Preferred Alternative – Increased Storage at New Hamburg Water Treatment Plant



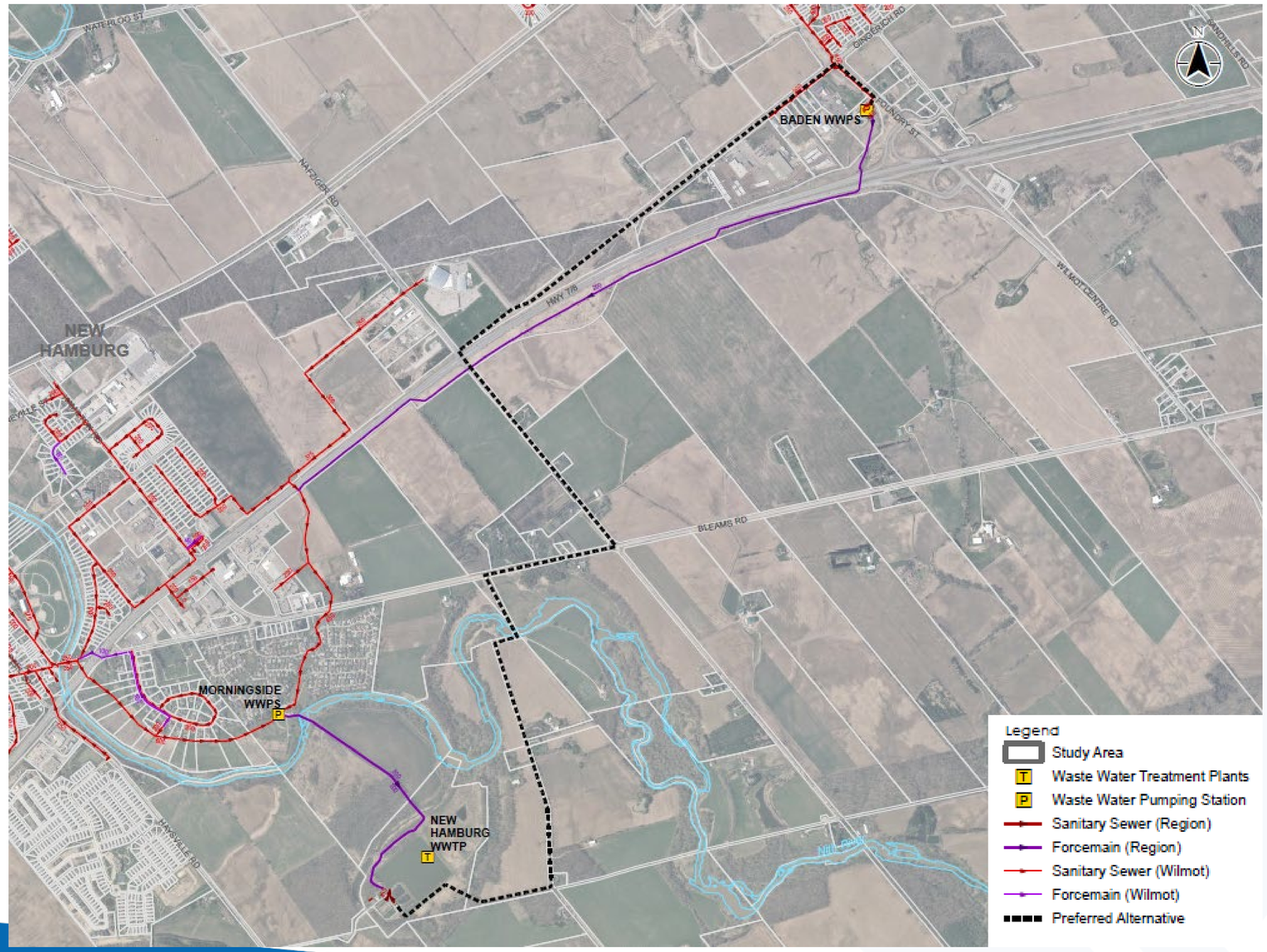


- Meets long term capacity requirements
- Provides redundancy with existing New Hamburg reservoir
- Can be accommodated within existing property, although existing open space site will be fenced off to the public
- Construction will result in temporary noise impacts to nearby-properties and increased truck traffic

Evaluation of Alternative Solutions – Wastewater Servicing in Baden (WW)

Factors and Criteria	Alternative WW1 – Do Nothing	Alternative WW2 – Upgrade system and maintain existing configuration	WW3 – Upgrade system and convey directly to Morningside Pump Station	Alternative WW4 – Upgrade system and convey directly to New Hamburg Wastewater Treatment Plant
ENVIRONMENTAL				
SOCIAL				
TECHNICAL				
FINANCIAL **Provides low lifecycle costs** • Minimize capital, operation and maintenance (life cycle) costs over a 50-year period.	• Estimated Initial Capital Cost: $1.2M • Estimated 50-Year Lifecycle Costs: $17.7M	• Estimated Initial Capital Cost: $16.1M • Estimated 50-Year Lifecycle Costs: $33.3M	• Estimated Initial Capital Cost: $13.4M • Estimated 50-Year Lifecycle Costs: $30.1M	• Estimated Initial Capital Cost: $11M • Estimated 50-Year Lifecycle Costs: $27.3M
SUMMARY	**Not Recommended (does not address problems identified)**	**Least Preferred**	**Moderately Preferred**	**Preferred**

Preliminary Preferred Alternative– Upgrade System and Convey Directly to New Hamburg Wastewater Treatment Plant



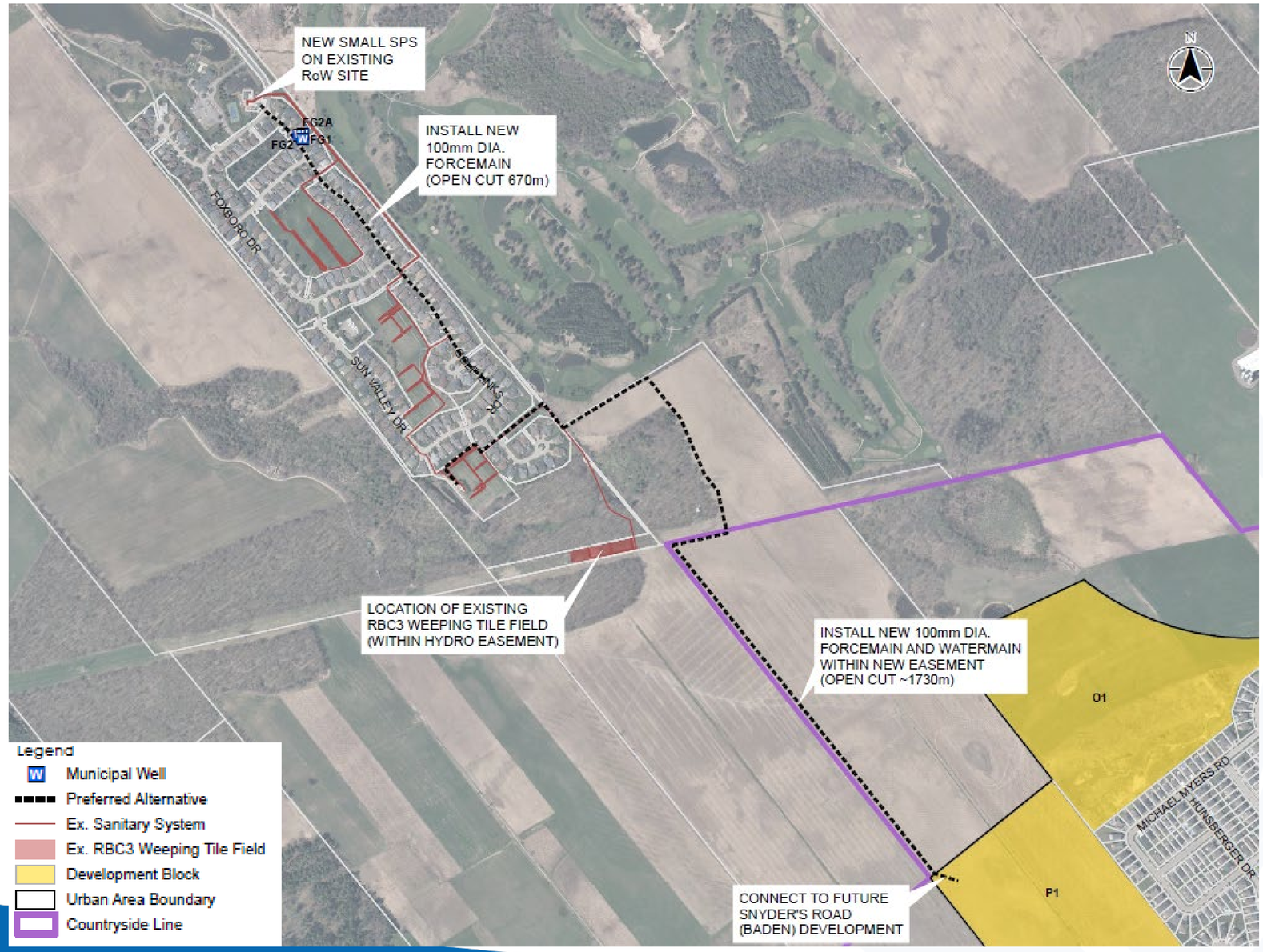
- Includes upgrades to the Baden Wastewater Pumping Station and a new forcemain (buried pipe) from the Baden Pumping Station to the New Hamburg Wastewater Treatment Plant
- Alignment options for the forcemain were reviewed and shown is the recommended
- The alignment avoids complex construction in the Morningside retirement community
- Crossing the Nith River would be accomplished by attaching the pipe to the existing bridge
- Optimizes existing infrastructure investments and requires least amount of infrastructure
- Easements/property access agreements will be required to accommodate new infrastructure

Evaluation of Alternative Solutions – Foxboro Green

Factors and Criteria	Alternative F1 – Do Nothing	Alternative F2 – Connect Foxboro to Baden via Existing Right-of-Ways	Alternative F3 – Connect Foxboro to Future Expand Baden Service Area using a Direct Route	Alternative F4 – Connect Foxboro to New Hamburg via Right-of-Ways
ENVIRONMENTAL				
SOCIAL				
TECHNICAL				
FINANCIAL **Provides low lifecycle costs** • Minimize capital, operation and maintenance (life cycle) costs over a 50-year period.	• Estimated Initial Capital Cost: $7.7M • Estimated 50-Year Lifecycle Costs: $35.1M	• Estimated Initial Capital Cost: $7.6M • Estimated 50-Year Lifecycle Costs: $17.7M	• Estimated Initial Capital Cost: $3.0M • Estimated 50-Year Lifecycle Costs: $9.9M	• Estimated Initial Capital Cost: $8.4M • Estimated 50-Year Lifecycle Costs: $19.0M
SUMMARY	**Least Preferred**	**Moderately Preferred**	**Preferred**	**Moderately Preferred**

Region of Waterloo Stantec C3 WATER

Preliminary Preferred Alternative– Connect Foxboro to Baden using a Direct Route



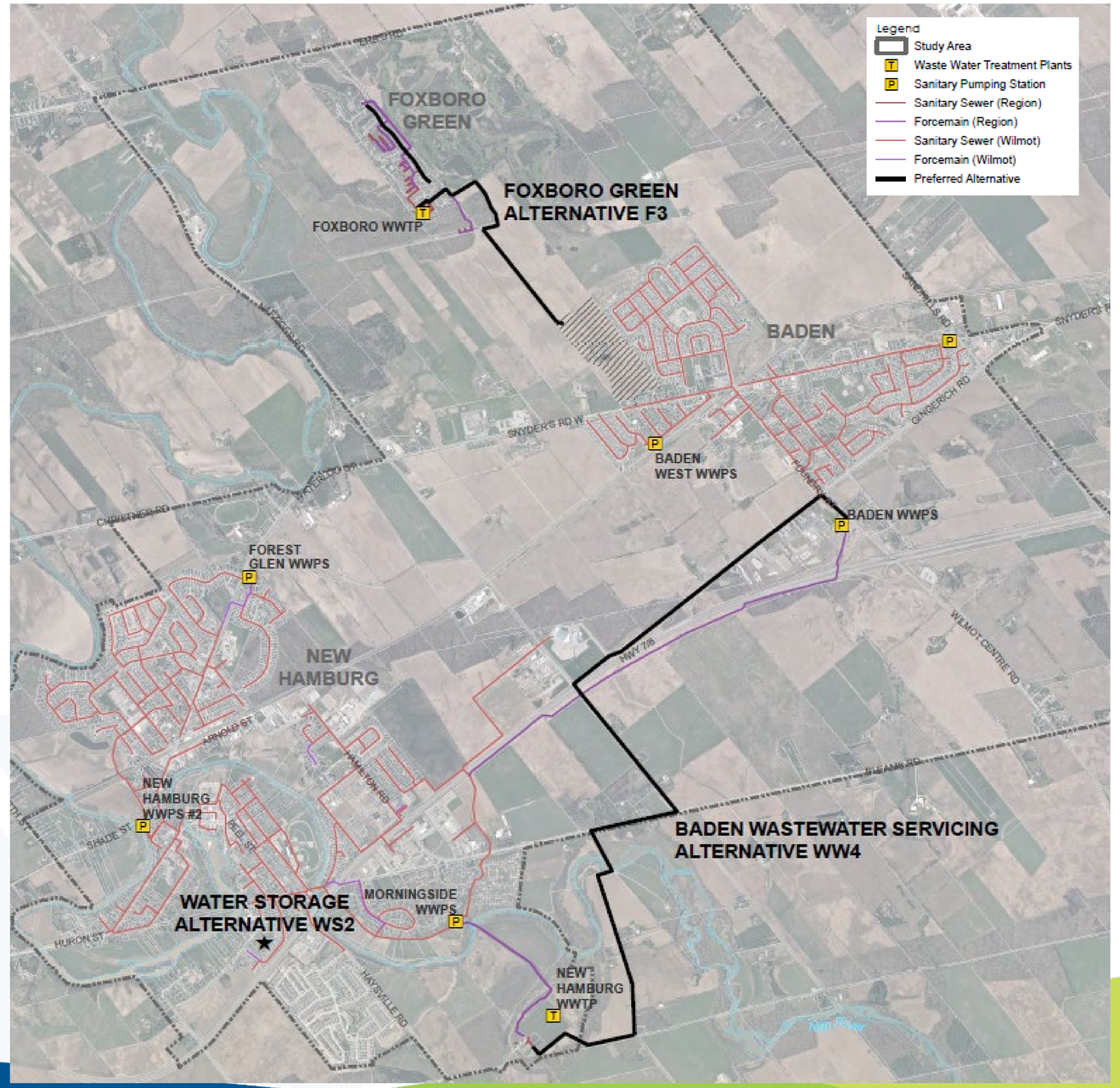
- Provides Foxboro with reliable water supply (by Baden supply system) and wastewater services (through the Baden-New Hamburg wastewater collection system)
- Road closures in the Foxboro community may be required during construction.
- Forcemain location would require agreements with property owners and stakeholders

Proposed Projects Addressed by this Study

In summary, the following projects are proposed:

1. Increasing water storage at the New Hamburg Water Treatment Plant.
2. Upgrading the Baden Pumping Station and new forcemain connecting directly to the New Hamburg Wastewater Treatment Plant.
3. Connect Foxboro to the Baden water supply system; also connect to the Baden-New Hamburg wastewater system.

The Schedule B Municipal Class EA study requirements will be deemed complete following the 30-day public review period of the Servicing Study/Project File Report. The Region may then proceed to the design phase and tender for construction.



Next Steps

Continuous Stakeholder Engagement

Review Background Information	•Collect data, review existing conditions and identify project constraints and opportunities
Public Consultation Centre #1	•Introduce the project
Develop and Evaluate Alternatives	•Develop and evaluate alternatives to address current and future servicing needs
Public Consultation Centre #2	•Obtain input on alternatives
Identify Preferred Alternative	•Identify preferred alternatives, develop and evaluate the design of the preferred alternatives
Public Consultation Centre #3	•Present preliminary preferred alternatives
Servicing Study/Project File Report (Summer/Fall 2022)	•Publish for 30-day public review
Future (late 2022/2023)	•Proceed to design and tender for construction

We are here

Represents an opportunity for the public to provide input

Region of Waterloo Stantec C3 WATER

Thank you for your participation!

We want your feedback

Do you have questions, feedback, comments, or want to stay up to date on what's being evaluated as part of this project?

Please contact:

Kaoru Yajima, P.Eng.
Sr. Engineer, Water Services
Region of Waterloo
150 Frederick Street, 7th Floor
Kitchener, Ontario N2G 4J3
Tel: 519-575-4757 ext. 3349
Email: kyajima@regionofwaterloo.ca

Jeff Paul, P.Eng.
Project Manager
Stantec Consulting Ltd.
171 Queens Ave #600
London, ON N6A 5J7
Tel: 519-675-6604
Email: Jeff.Paul@stantec.com

More information, including copies of project notices, comment sheet and Public Consultation Centre materials like a transcript of this virtual presentation can be found at:

https://www.regionofwaterloo.ca/waterprojects

Region of Waterloo

Transportation and Environmental Services

Water Services

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Acknowledging 20 Years of Research on the Grand River

---

1. Recommendation:

For information.

2. Purpose / Issue:

To acknowledge the commitment and investment by the Region over the past two decades to upgrade the wastewater treatment plants and improve the water quality in the Grand River as demonstrated though the collaboration with the University of Waterloo by Professor Mark Servos. After almost 20 years of research and collaboration with the Region, this research study confirmed the improvement in water quality in the Grand River. This was done through constant monitoring of the environmental characteristics of wastewater discharges into the Grand River.

3. Strategic Issue:

This report meets the 2019-2023 Corporate Strategic Plan objective to protect our water resources (drinking water and wastewater treatment) under Strategic Focus Area 3, Environment and Climate Action.

4. Key Considerations:

- Early research focused on assessing the Environmental Effect Monitoring (EEM) of wastewater discharges and the impact on local fish (Rainbow Darter) populations;
- This research was continued to align with the milestones of the significant capital upgrades at both the Kitchener and Waterloo Wastewater Treatment Plants (WWTP). The University of Waterloo (UW) and the Region of Waterloo (Region) collaborated to study the impact of improved wastewater effluent on the local fish populations;
- As the process upgrades were completed, there was an immediate improvement

in the water quality and positive response to the fish population in Grand River beginning in 2012.

- Within two years, the variety of effects noted in the fish population in the early research was almost non-existent and improvements in the downstream conditions of the Kitchener and Waterloo WWTPs confirmed the benefits of the Region's Wastewater capital program.

5. Background:

In 2003, the University of Waterloo Professor Mark Servos and his research team began studying the Grand River and the effects of wastewater discharges on the local fish populations.

These early studies were focused on assessing the Environmental Effect Monitoring (EEM) approach for wastewaters being proposed under the expected revisions to the Wastewater Systems Regulations (Fisheries Act). The EEM approach is a science-based framework used to evaluate the adequacy of wastewater effluent regulations in protecting fish, fish habitats and the usability of fisheries resources. These early studies documented fish responses (intersex male fish) associated with the outfalls of multiple wastewater treatment plants within the Region, primarily the Waterloo and Kitchener WWTPs.

As the treatment process upgrades were completed in phases at both Waterloo and Kitchener WWTP, there was an immediate reduction in the release of ammonia and estrogenic contaminants mainly due to the introduction of nitrification to the treatment process. Two years after the treatment upgrades, the intersex responses in the fish were reduced and reflected the monitored conditions upstream of the treatment plants. Laboratory studies proved that the upgrades had mostly eliminated the negative effects on the local fish populations.

Although there are many environmental stressors still potentially released from modern municipal wastewater treatment plants, the dramatic effects previously reported in the Grand River from the initial research studies has been mostly eliminated. Many other stressors (e.g., stormwater, agriculture, dams, habitat alterations) continue to influence the environmental quality of the Grand River, however the Region of Waterloo will continue to collaborate with research teams to ensure the Region continues to be a leader in the Water/Wastewater treatment industry and to protect our environmental resources.

One outcome from the Region's collaboration with the University of Waterloo and Mark Servos' team is the sharing of knowledge and outcomes through published papers and magazine articles. These articles further showcases the research collaboration and innovative approaches the Region uses to protect the environment. An example article from the Water Environment Association of Ontario (WEAO) Influents magazine is attached.

Marking 20 years of studying the Grand River, the Region of Waterloo would like to

recognize Professor Servos for supporting and collaborating with Water Services over this period. His team's work has been very insightful in helping to guide effluent requirements with the regulators, to demonstrating the improved health of the Grand River, and justifying the benefits of the Region's wastewater capital program. The Region of Waterloo continues to look forward to collaborating with his research team for many years to come.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Data and information generated from this UW research is also shared with the Grand River Conservation Authority (GRCA) and supports the Region's Surface Water Quality Monitoring Program conducted by consultant LGL Limited since 2008. Together, by sharing and collaboration between these three organizations helps assess the overall health of the Grand River and develop programs/measures to help protect our local water resources.

Financial Implications:

For information only.

7. Conclusion / Next Steps:

The Region of Waterloo continues to look for opportunities with University of Waterloo to collaborate on wastewater related research.

8. Attachments : Relationships between Estrogen and Intersex in a Major Lake Erie Tributary (DOCS# 4079631)

Prepared By: Trevor Brown, Manager, Engineering and Wastewater Programs, Water Services

Reviewed By: Nancy Kodousek, Director, Water Services

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services

Relationship between Estrogens and Intersex in a Major Lake Erie Tributary:

A Modeling Approach

Maricor Arlos, Department of Biology, University of Waterloo; Wayne Parker, Department of Civil and Environmental Engineering, University of Waterloo; Susan Andrews, Civil Engineering Department, University of Toronto; and Mark Servos, Department of Biology, University of Waterloo

Background

Since the signing of the Great Lakes Water Quality Agreement in 1972, many water management actions have been initiated to support Lake Erie's recovery, particularly in terms of improving the water quality of its tributaries (International Joint Commission 2014; Painter et al. 2000). The Grand River is the largest (~6,800 km^2) Canadian watershed that drains into eastern Lake Erie. It is faced with numerous pressures stemming from intensive agriculture and rapid population growth, which result in the release of several priority and emerging contaminants of concern. The Grand River Watershed Water Management Plan (2014) outlines numerous actions to "improve river health and reduce the river's impact on Lake Erie" while increasing its "resiliency to climate change." These actions include efforts to upgrade the infrastructure of municipal wastewater treatment plants (MWWTPs).

The Region of Waterloo, home to one of the fastest growing populations in Ontario, has made a $450M commitment to upgrade the Kitchener and Waterloo MWWTPs. A variety of changes are ongoing at both treatment plants (Bicudo et al. 2016). The Kitchener MWWTP installed partial upgrades to improve aeration and nitrification in late 2012, and similar upgrades are underway at the Waterloo MWWTP, which will be completed in 2017. The upgrades were targeted primarily at conventional endpoints (e.g., ammonia) but it is possible that the changes will produce many additional benefits, including improvements in the degradation of several contaminants of concern. Poor water quality conditions downstream of MWWTP outfalls in the Grand River, including high ammonia and low dissolved oxygen, have been a problem for a long time (Grand River Watershed Water Management Plan 2014). In addition, recent studies have shown impairments in the reproductive health of a sentinel fish species (rainbow darter, *Etheostoma caeruleum*) downstream of the wastewater outfalls in the Grand River (Fuzzen et al. 2016), and high incidences of intersex (presence of developing eggs in male reproductive tissue) have also been observed (Hicks et al. 2017). Before the recent partial upgrades, the intersex severity in darters downstream of the Kitchener outfall was very high, with visible eggs being observed in some fish (**Figure 1**). The presence of intersex in rainbow darter at these sites has been linked to reduced reproductive success (Fuzzen et al. 2015) and is therefore a concern.

Municipal wastewater effluents are complex mixtures, and the specific chemicals associated with the feminization of fish (e.g., intersex) have been difficult to identify, measure, and assess. However, a variety of endocrine-active compounds (EACs) have been associated with intersex and other reproductive health effects in fish exposed to municipal wastewaters (Jobling et al. 1998). EACs are chemicals that can interfere with normal endocrine (e.g., hormonal) processes, resulting in impairments to reproductive function such as altered mating behavior (Tyler et al. 1998). Many of these chemicals can bind to the estrogen receptor at varying potencies and mimic the function of natural hormones in fish (in other words, they are estrogenic). Although many chemicals can alter endocrine function, natural hormones (17β-estradiol [E2] and estrone [E1]) and the active ingredient in birth control pills (ethinylestradiol [EE2]) have been shown to be the primary contributors to the estrogenic activity in effluents. These chemicals are detected in very low concentrations in effluents but have high biological potency. In addition, they can act in an additive manner and thus the total estrogenicity (the combined activity of all estrogens expressed as the equivalent concentration of E2) in effluents can be quite high. For instance, the total estrogenicity in non-nitrifying effluents can exceed 10-20 ng/L (Hicks et al. 2017). *(Note that 1ng is one millionth of a mg/L.)* An environmental quality standard (EQS) of only 0.4 and 0.035 ng/L has been proposed for E2 and EE2 in surface waters in the European Union (Johnston et al. 2013). Unfortunately, with our current analytical methods, it is difficult to detect estrogens at these concentration levels in surface waters. Hence, the linkage between these key EACs and observed effects in wild fish (i.e., intersex) is difficult to establish.

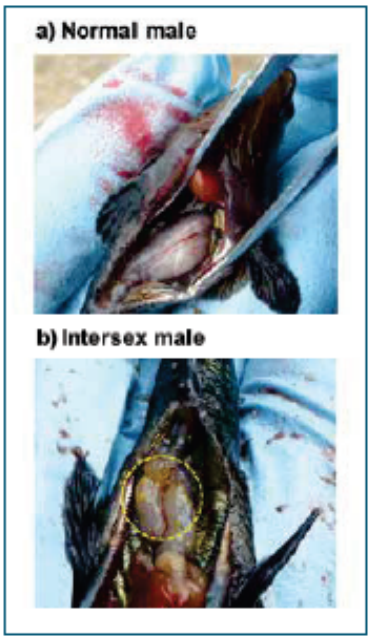


Figure 1 – Photograph of (a) normal male and (b) intersex male rainbow darter in the Grand River. The intersex male is characterized by the presence of eggs (encircled in yellow) in male testis.

Water quality models have been increasingly employed to address the

limitations of chemical measurements. In addition to supporting environmental risk assessment, models provide insights into field surveys and elucidate significant mechanisms for the transport and fate of chemicals in rivers. In this study, we employed a fate and transport model to estimate the temporal and spatial variability of the concentrations of estrogens (currently below our analytical detection limits in surface water) in the Grand River watershed. The predicted concentrations were compared with the actual intersex incidence measured in rainbow darter (2007-2015) over the period when some of the treatment upgrades were made to the Kitchener MWWTP. This work is important as it not only provides a tool for quantifying the emissions of significant EACs into the Great Lakes, but also assesses the concentration thresholds and targets relevant to their future remediation.

Modeling of Estrogen in the Grand River

The modeling exercise was completed in three major steps (**Figure 2**): (1) the effluent concentrations of key estrogens (E1, E2, and EE2) in the MWWTPs were predicted using population demographics, excretion/consumption rates, and removal through the plant; (2) these estimates were incorporated in a mechanistic water quality model to simulate the fate and transport of the target compounds in an ~80 km reach of the Grand River watershed; and (3) the predicted river concentrations were converted to total estrogenicity (E2 equivalence) and compared with the intersex observed in rainbow darter from 2007 to 2015.

Estrogen Concentrations in Effluent

Loadings into the plants were estimated on the basis of the amounts released by each population demographic (using literature-derived excretion rates for males, menstruating females, pregnant females, etc.). The removals through the Kitchener and Waterloo MWWTPs were estimated using data from an effects-directed analysis. This type of analysis is an environmental diagnostic that analyzes biological effects and chemical data collectively to determine which substances contribute to the observable effect (e.g., estrogenicity) in a complex mixture such as MWWTP effluent. Effects-directed analysis indicated that removals through the Kitchener MWWTP were different before and after the upgrades.

Before the upgrades, the predicted concentrations of E1, E2, and EE2 in Kitchener MWWTP effluent were 22, 7, and 2 ng/L, respectively; these concentrations dropped to an average of 4, 2, and 0.4 ng/L after the upgrades (**Figure 3a**). This result is consistent with the finding that total estrogenicity (measured using a yeast estrogen screen) declined in the Kitchener effluent after the upgrades (Hicks et al. 2017). The estrogen concentrations in Waterloo MWWTP effluent remained relatively constant over the study period (during which time no major treatment changes were made), with predicted average concentrations of 14, 0.7, and 0.9 ng/L for E1, E2, and EE2, respectively (**Figure 3b**). Although the Kitchener MWWTP services a larger population and receives higher estrogen loadings than the Waterloo MWWTP, the Kitchener MWWTP upgrades were predicted to reduce the effluent concentrations of all estrogens. These estimates were incorporated as inputs to the water quality model.

Predicting River Concentrations

When a trace organic contaminant enters a riverine environment, its movement in the system is driven by transport mechanisms (e.g., mixing and advection) and it is subjected to dilution downstream. While being transported, the contaminant can partition to several environmental compartments (bed sediments or air) and/or can be mass transformed during chemical reactions (biodegradation or photolysis). For the initial simulations of this study,

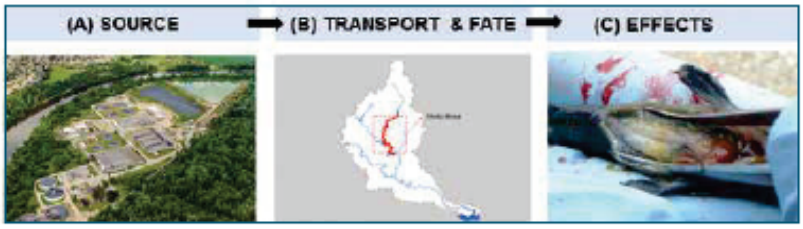


Figure 2 – Water quality modeling strategy employed for the study. (a) The major source of target EACs were the MWWTPs. (b) Their transport and fate was simulated within an ~80 km reach of the Grand River watershed from 2007-2015. (c) The predicted concentrations were compared to the intersex data.

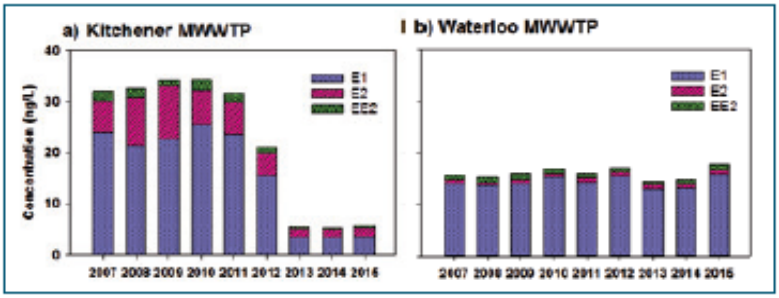


Figure 3 – Estimated concentrations of E1, E2, and EE2 at (a) Kitchener and (b) Waterloo MWWTPS.

we assumed that advection was mainly responsible for the distribution of estrogens in the Grand River. This conservative approach implied that contaminant loss via mass transfer (partitioning to solids) and transformation (biodegradation) was insignificant, as suggested by prior studies (Balaam et al. 2010; Vermierssen et al. 2006). The Water Quality Simulation Program (WASP 7.5) developed by the US Environmental Protection Agency was employed to simulate the one-dimensional transport of EACs in the Grand River using 50 river segments from 2007 to 2015.

Before the upgrades, the average river concentrations of E1, E2, and EE2 immediately below the Kitchener MWWTP outfall (500 m downstream) were predicted to be 3.51, 1.03, and 0.26 ng/L, respectively. The predicted average concentrations of E2 and EE2 were above the EQS set by the European Union (0.4 and 0.035 ng/L, respectively), but after the upgrades the predicted concentrations dropped to an average of 0.85, 0.19, and 0.08 ng/L, respectively. The average E2 concentration after the upgrades was well below the EQS, but the concentration of EE2 would still exceed the proposed standard. However, follow-up studies have shown that the reproductive health of rainbow darters is recovering to normal conditions in response to the upgrades at the Kitchener MWWTP (Hicks et al. 2017; Marjan et al. 2017). Additional treatment upgrades (tertiary filtration) are planned for the plant, so further improvement in effluent quality is anticipated.

The predicted concentrations did not substantially change downstream of the Waterloo MWWTP from 2007 to 2015 as no major changes were made to the plant during the study period (**Figure 4**). These concentrations were also lower than what had been predicted downstream of the Kitchener MWWTP (average of 0.19, 0.05, and 0.05 ng/L for E1, E2, and EE2, respectively). The predicted

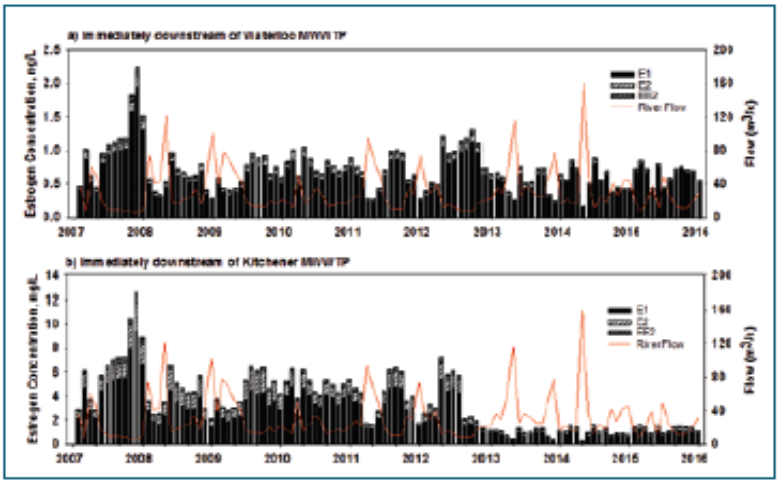


Figure 4 – Monthly averaged contribution of E1, E2, and EE2 to the total estrogenicity immediately downstream of (a) Waterloo and (b) Kitchener MWWTPs. The measured flow conditions from 2007-2015 are also shown.

average concentration for EE2 exceeded the EQS set by the European Union, but the Waterloo MWWTP is currently being upgraded to improve effluent quality.

Linking Predicted Concentrations to Observed Intersex

Hicks et al. (2017) assessed the intersex incidence at nine sites from 2007 to 2015, including the period when the Kitchener MWWTP underwent partial process upgrades. It was hypothesized that the critical window of exposure for adult rainbow darters is during post-spawn (typically late spring to summer), when they are building their gonadal tissue (ovary or testis) in preparation for the next spawning season. The predicted concentrations from May to July at the nine sites were therefore averaged to provide the typical exposure conditions for fish collected in the fall season and the spring sampling period of the following year. The total burden of estrogens was determined by calculating the total estrogenicity on the basis of a relative potency of 0.3, 1, and 1.23 for E1, E2, and EE2, respectively. The relationship between the predicted total estrogenicity concentrations and observed intersex incidence was then characterized by fitting a concentration-response curve (four-parameter Hill equation) as shown in **Figure 5**.

Although many assumptions were used throughout the modeling exercise, a satisfactory concentration-response curve was derived ($R^2 = 0.76$) (**Figure 5**). This suggests that the assumptions made to the model were appropriate and describe the key linkage between estrogen exposure and intersex well. An effects concentration of 10% of the maximal response (EC10) for estrogenicity was calculated to be ~0.1 ng/L E2 equivalence. This value suggests that low levels of intersex will be

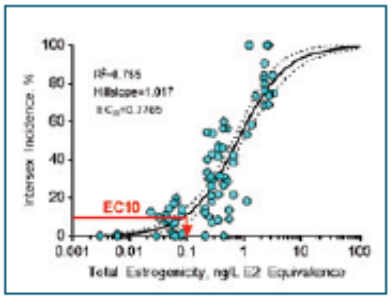


Figure 5 – Dose-response relationship between intersex incidence and total estrogenicity. EC10 (low level effect) was calculated to be ~0.1 ng/L. The dotted lines are the 95% confidence interval.

associated with many effluents, including those in the Grand River, until upgrades such as those at the Kitchener MWWTP are implemented. However, the relatively steep dose-response curve also suggests that improved treatment can dramatically reduce intersex occurrence and severity in watersheds. Many tributaries to the Great Lakes have been found to elicit estrogenic activity (Baldwin et al. 2016), but investments in wastewater treatment across the Great Lakes will probably reduce the potential for estrogenic effects such as intersex.

Moving Forward

Models can now be used to test scenarios related to the potential effectiveness of treatment, impacts of population growth, or changes in hydrology (e.g., related to climate change). The risks of intersex occurrence as a result of exposure to low levels of estrogenicity in effluents remain ambiguous despite a decade of studies. The need for further mitigation strategies also remains unclear. However, the upgrades implemented at the Kitchener treatment plant to date have had a positive effect and dramatically reduced the occurrence and severity of intersex in the fish inhabiting the receiving waters. Studies that are continuing to follow changes in the Grand River in response to the on-going major MWWTP upgrades will be very informative and have significant implications for the protection of the Great Lakes Basin.

Acknowledgments

We would like to acknowledge the help of Pam Law and José Bicudo from the Region of Waterloo in reviewing this article and providing the MWWTP data required to complete this study. We also thank Keegan Hicks and Meghan Fuzzen for providing access to the intersex data and Leslie Bragg and Katie McCann for providing access to the effluent estrogenicity data. We also acknowledge the copy editing assistance provided by Jennifer Thomas.

References

Balaam, J.L., Grover, D., Johnson, A.C., Jürgens, M., Readman, J., Smith, A.J., White, S., Williams, R. and Zhou, J.L. (2010). The use of modelling to predict levels of estrogens in a river catchment: How does modelled data compare with chemical analysis and in vitro yeast assay results? *Science of the Total Environment 408*, 4826-4832.

Baldwin, A.K., Corsi, S.R., De Cicco, L.A., Lenaker, P.L., Lutz, M.A., Sullivan, D.J. and Richards, K.D. (2016). Organic contaminants in Great Lakes tributaries: Prevalence and potential aquatic toxicity. *Science of the Total Environment 554–555*, 42-52.

Bicudo, J.R., Brown, T., Waller, M., Saint, W., Summach, D. (2016). Addressing ammonia levels in the Grand River through nitrification upgrades at the Kitchener WWTP. *Influents, 11*, 54-57.

Fuzzen, M.L.M., Bennett, C.J., Tetreault, G.R., McMaster, M.E. and Servos, M.R. (2015). Severe intersex is predictive of poor fertilization success in populations of rainbow darter (*Etheostoma caeruleum*). *Aquatic Toxicology 160*, 106-116.

Fuzzen, M.L., Bragg, L.M., Tetreault, G.R., Bahamonde, P.A., Tanna, R.N., Bennett, C.J., McMaster, M.E. and Servos, M.R. (2016). An assessment of the spatial and temporal variability of biological responses to municipal wastewater effluent in rainbow darter (*Etheostoma caeruleum*) collected along an urban gradient. *PLoS One, 11*, p.e0164879.

Grand River Watershed Water Management Plan. (2014). Prepared by the Project Team, Water Management Plan. Grand River Conservation Authority, Cambridge, ON. 137p. + appendices *https://www.grandriver.ca/en/our-watershed/resources/Documents/WMP/Water_WMP_Plan_Complete.pdf*

Hicks, K.A., Fuzzen, M.L.M., McCann, E.K., Arlos, M.J., Bragg, L.M., Kleywegt, S., Tetreault, G.R., McMaster, M.E. and Servos, M.R. (2017). Reduction of intersex in a wild fish population in response to major municipal wastewater treatment plant upgrades. *Environmental Science & Technology 51*, 1811-1819.

International Joint Commission. (2014). *A balanced diet for Lake Erie: reducing phosphorus loadings and harmful algal blooms.* Report of the Lake Erie Ecosystem Priority. ISBN: 978-1-927336-07-6 *http://www.ijc.org/files/publications/2014%20IJC%20LEEP%20REPORT.pdf*

Jobling, S., Nolan, M., Tyler, C.R., Brighty, G. and Sumpter, J.P. (1998). Widespread sexual disruption in wild fish. *Environmental Science & Technology 32*(17), 2498-2506.

Johnson, A.C., Dumont, E., Williams, R.J., Oldenkamp, R., Cisowska, I. and Sumpter, J.P. (2013). Do concentrations of ethinylestradiol, estradiol and diclofenac in European rivers exceed proposed EU environmental quality standards? *Environmental Science & Technology, 47*, 12297-12304.

Marjan, P., Martyniuk, C.J., Fuzzen, M.L., MacLatchy, D.L., McMaster, M.E. and Servos, M.R. (2017). Returning to normal? Assessing transcriptome recovery over time in male rainbow darter (*Etheostoma caeruleum*) liver in response to wastewater-treatment plant upgrades. *Environmental Toxicology and Chemistry*, doi:10.1002/etc.3741.

Painter, S., Meyers, D. and Letterhos, J. (2000). Characterization of data and data collection programs for assessing pollutants of concern to Lake Erie. Lake Erie Lakewide Management Plan (LaMP) *Technical Report Series. https://www.epa.gov/sites/production/files/2015-11/documents/characterization-data-assessing-pollutants-concern-lake-erie-20000623-74pp.pdf*

Tyler, C., Jobling, S. and Sumpter, J.P. (1998). Endocrine disruption in wildlife: a critical review of the evidence. *Critical Reviews in Toxicology 28*, 319-361.

Vermeirssen E.L.M, Suter M.J.F., Burkhardt-Holm P. (2006). Estrogenicity patterns in the Swiss midland river Lutzelmurg in relation to treated domestic sewage effluent discharges and hydrology. *Environmental Toxicology & Chemistry 25*, 2413–22.

Region of Waterloo

Planning, Development and Legislative Services

Innovation & Economic Development

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 7, 2022

Subject: 15 Charles Street West, Kitchener: Terminal Lands Visioning and Re-development Process Update

---

1. Recommendation:

For information.

2. Purpose / Issue

The purpose of this briefing note is to update Regional Council on the work undertaken and planned with respect to the Charles Street Terminal lands visioning and redevelopment process.

3. Strategic Plan:

The re-development of the Charles Street Terminal lands supports several Strategic Plan Focus Areas and Imperatives in the 2019-2023 Strategic Plan including: Thriving Economy Objective 1.1; Environment and Climate Action Objectives 3.1 and 3.5; Healthy, safe and inclusive communities Objective 4.2 and 4.5; and Responsive and engaging public service Objectives 5.1.

4. Key Considerations:

- **Technical Studies:** A series of technical studies are underway to establish baseline site conditions, which will inform the visioning process and development opportunities on the Site. This work will continue throughout 2022.To date, a community engagement consultant and the land surveyor have been engaged, with the Environmental, Geotechnical RFP to be awarded in June, and financial modelling and urban design analysis being initiated shortly thereafter.

- **Public Engagement:** Results from the first public survey on the Charles Street redevelopment, which garnered nearly 1000 responses, indicate that mechanisms to support climate action, affordable housing, economic prosperity, and equity, diversity and inclusion, all be incorporated into the vision for the site.

Commentary in the responses also indicate an emphasis on equity, and a strong desire for community-based, community-driven engagement opportunities.

Based on the feedback received, Regional staff, alongside City of Kitchener staff, are enhancing opportunities for community participation in the consultation process. Immediate next steps will include: expanding the consultation working group to include a facilitator(s) with diverse lived experience(s) to develop an engagement approach with members of priority communities, and inviting members of the community to work alongside the current working group to help guide the engagement process, with a focus on broadening reach into priority communities. Development of terms of reference, including a compensation mechanism, defined criteria for community participation on the working group, as well as roles and responsibilities, is currently in progress.

5. Background:

The Charles Street Terminal Site ("Site"), located in the heart of downtown Kitchener, has long been a center for gathering and travelling in and through our Region. It has been the first point of contact for newcomers, a transitional space for student populations, a long time landmark for local residents, and the entrance to Victoria Park. The redevelopment of this site presents the opportunity for the Region, in partnership with the City of Kitchener, to lead a transformational and progressive city-building process for this mixed-use development site.

On November 5 2019, the Planning and Works Committee authorized staff to initiate the development of a strategy for the future use(s) of the Charles Site as a mixed-use development outlined in Report PDL-ECD-19-03. On August 11, 2020, Planning and Works Committee authorized budget to commence the required technical site studies and community consultation to prepare the site for disposition, with a direction to report back with an updated community consultation plan outlined in Report PDL-ECD-20-07.

Located in downtown Kitchener, the Site was vested to the Region of Waterloo from the City of Kitchener when it assumed transit service on January 1, 2000, is approximately 1.186 Ha (11,869 square metres / 2.93 Acres) in area with frontages on Charles, Gaukel, Joseph and Ontario Streets shown in **Appendix 1.**

Ownership of the Site is shared with the Region owning 1.047 Ha. (10,470 square metres / 2.59 Acres) (88%), and the remaining 12% owned by the City of Kitchener (1,398 square metres / 0.1398 hectares / 0.34 acres) being the 31-space surface parking lot at the corner of Ontario and Charles street. The City also have easement rights over the water fountain feature at the corner of Charles and Gaukel Street.

Home to the Grand River Transit (GRT) terminal hub since 1988, the Site includes the terminal structure, which houses access platforms, public washrooms, municipal offices and a cafeteria, all now vacated. Bus access and queueing lanes make up the majority of the property. With GRT operations ceased in 2019 and its use as a COVID-testing facility ending in April 2022, the property, otherwise idle, is being considered as a temporary storage facility for donations to the Ukrainian appeal, as well as a location

accessible to local artists for public art installations.

Project Plan:

A preliminary project schedule was developed and presented in draft to Housing and Homelessness Committee in March 2022 outlining timelines for technical study work, financial modelling and design analysis to occur over the course of 2022 and run concurrently with the community engagement program.

This schedule assumes the necessity for considerable environment testing given the former uses on the land, include a gas station, a furniture factory, a glass company, a bus terminal, and historical association with the Kitchener Gas and Electric Light Works coal gasification plant. It also assumes a robust community outreach, and consideration of conversations around the future vision for Kitchener's downtown through the CRoZBy process set to commence this summer.

To date, the Region have worked closely with the City of Kitchener to set the framework for the next phase of engagement and analysis. Terms of reference for the technical studies and financial modelling are now developed, clarity on the environmental scope of work assured, and analysis of feedback through the Public survey now completed. Mapping of the decision-making process, community impact points, and key stakeholder groups is all underway, with a view to community input gained through other Regional and City initiatives (Community Safety and Well Being Plan, Children and Youth Planning Table Youth Impact Survey, etc.). As the work continues, the Working Group will continue listening and learning from the conversations underway on indigenous space needs, and Kitchener's downtown visioning process, alongside other planned project outreach.

Consensus building around the approach to all components of the work has been a priority of the Working Group through this initial phase of the project, in order to move forward cohesively.

The Working Group will continue to advance the technical studies and financial analysis concurrent to community and stakeholder engagement, and bring forward a recommendation to both Regional and City council for direction in 2023. Regional staff will report back to Council on specific dates once preliminary environmental work is completed, and the new components of the community engagement plan are in place.

Technical Studies:

A series of technical studies will be completed to establish baseline site conditions to inform the visioning process and development opportunities on the site. This work is underway, and will continue throughout 2022. A list and description of technical studies is included in **Appendix 2.**

Financial Proforma Modelling:

A market analyst will be engaged to assist the Working Group in the evaluation of preliminary development concepts, and assessment of the development potential on the

land. This work will inform baseline evaluation criteria for the RFP proposals, including but not limited to components such as the percentage of affordable housing; impact of parking reductions, the term of affordability, building use, including an analysis of various mixed-use scenarios, the ownership structure (freehold/leasehold), and the influence of financial grants, incentives on development outcomes.

Public Engagement – Survey Results

In November 2021, the first step of public engagement for the redevelopment of the Charles Street Terminal was launched via a brief survey on the Region's Engage platform.

The primary purpose of the survey was to gauge the value that community places on four principles meant to guide the vision for the redevelopment, as derived from the work in community through the Regional Strategic Plan process; those principles include climate action, affordable housing, economic prosperity, and equity, diversity and inclusion. The survey also sought commentary from respondents through open-ended prompts related to each of these four areas. Results of the survey will shape next phases in public engagement.

Respondents

In total, 994 individuals completed the survey. Of those who completed demographic information, 70.3% live within the downtown Kitchener core; 24.8% work in the core; 61.9% participate in leisure in the core.

Thirty-four percent (34.4%) of respondents identified as being a member of at least one equity-deserving, priority community. While individuals with disabilities and members of 2SLGBTQ+ communities responded at a rate of 16.2% and 15.7% respectively, our approach was unsuccessful in recruiting as high a rate of participation from individuals who identified as food/housing insecure (4.6%) and members of Racialized communities (11.6%). The latter includes 1.6% of people who identified as a member of a Black community and 2.7% of people who are a member of an Indigenous community.

Additional gaps in respondents by demographic include youth, who represented under 1% of respondents, and individuals who own or operate businesses in the downtown core (4.12%).

Results

The majority of survey respondents affirmed the importance of the areas of consideration presented in the survey. Below are the percentages of people who indicated through a Likert scale that they either 'Agree' or 'Somewhat Agree' that the following are important for the community:

- Affordable Housing: 83.20%
- Climate Action: 88.18%
- Equity, Diversity & Inclusion: 80.23%
- Economic Development: 69.14%

The majority of open-ended commentary consisted of wide-ranging ideas in support of the integration of these principles into the vision for the redevelopment. When asked open-ended questions about the project without a value-specific prompt, the most-mentioned topics included the need for Indigenous reconciliation to be part of the process, and the need to incorporate affordable housing in the redevelopment.

Key Learnings

- The guiding values proposed are valid among the majority of respondents.
- While climate action ranked highest in importance for community in the Likert scales, equity (Indigenous reconciliation and affordable housing) was the highest-ranking theme in commentary.
- There is a need to broaden reach to incorporate the voices that haven't had opportunity to participate.
- There is a need to center engagement in community, and empower members of priority communities to engage on their terms.
- There is a need to better define the technical processes that will lead to a redevelopment, the process that will lead to a vision for the redevelopment, how public input will impact decision-making and what the parameters of the project are.

Next Steps

An immediate next step for engagement will include inviting members of community to help guide the engagement process, alongside Region and City of Kitchener staff. This will help to broaden reach into priority communities, ensure more voices are heard, and ensure future participation takes place under the terms of members of priority communities.

While development of a compensation mechanism, defined roles and responsibilities, and criteria for participation is in progress, eligibility to participate on the working group will be based around the development's guiding principles. Expertise in affordable housing development, business and entrepreneurship, sustainable technologies and architecture, and work with equity-deserving, priority communities will be among criteria put forward, in addition to a demonstrated interest in community building work.

A first meeting of the re-centered Working Group will take place late summer 2022, with external stakeholder and community consultation progressing from there. Where there are opportunities to support engagement with identified industry and community stakeholders, including youth, over the course of the summer, the Working Group will look to do so.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Regional staff have established an integrated working group with the City of Kitchener with representation from Planning, Economic Development, Housing, Equity Services, and Communications. The group is comprised of seven (7) Regional staff, and six (6) City staff, and meets on a bi-weekly basis. As the next phase of the consultation

program moves forward, community involvement in the working group will be introduced along with a terms of reference for appointment. City staff on the Working Group were sent this report for information in advance of this meeting.

Regional Legal & Real Estate Services, Housing and Finance departments were consulted in the preparation of this report. A project update was also provided to the Housing and Homelessness Leads Committee in March 2022.

7. Financial Implications:

The Region's approved 2022-2031 Economic Development Capital Plan includes $800,000 (2022 - $575,000, 2023 - $225,000) for the Charles Street Disposition (project 99088) to be funded from the General Tax Supported Capital Reserve.

Expenditures to prepare the site for EOI / RFP and disposition will be incurred over the next 12-18 months, with the City of Kitchener contributing their proportionate share toward up front technical work, apportioned on the split in land ownership. Cost incurred to date on the project, amount to $53,000, with an estimated $463,000 expensed for technical studies and community consultation in the second half of 2022. Cost associated with additional consultation efforts will be absorbed within the current approved budget.

At the time of RFP Award, staff will provide recommendations on the allocation of proceeds of sale, which could include the refunding of the General Tax Supported Capital Reserve.

8. Conclusion / Next Steps:

The Working Group will continue to advance technical study work, financial modelling, urban design analysis, and community engagement over the course of 2022 to bring a recommendation to Regional and City Council on the vision for the lands, and RFP to the market in 2023.

Staff will report back to Council at key milestones in the project plan, relating to findings from the environmental site assessment, financial modelling considerations, and feedback through the next phase of community engagement.

9. Attachments / Links:

Appendix 1: Site Location Map

Appendix 2: Technical Studies Summary

Prepared By:

Sarah Millar, Manager, Land Portfolio (Economic Development and Housing)

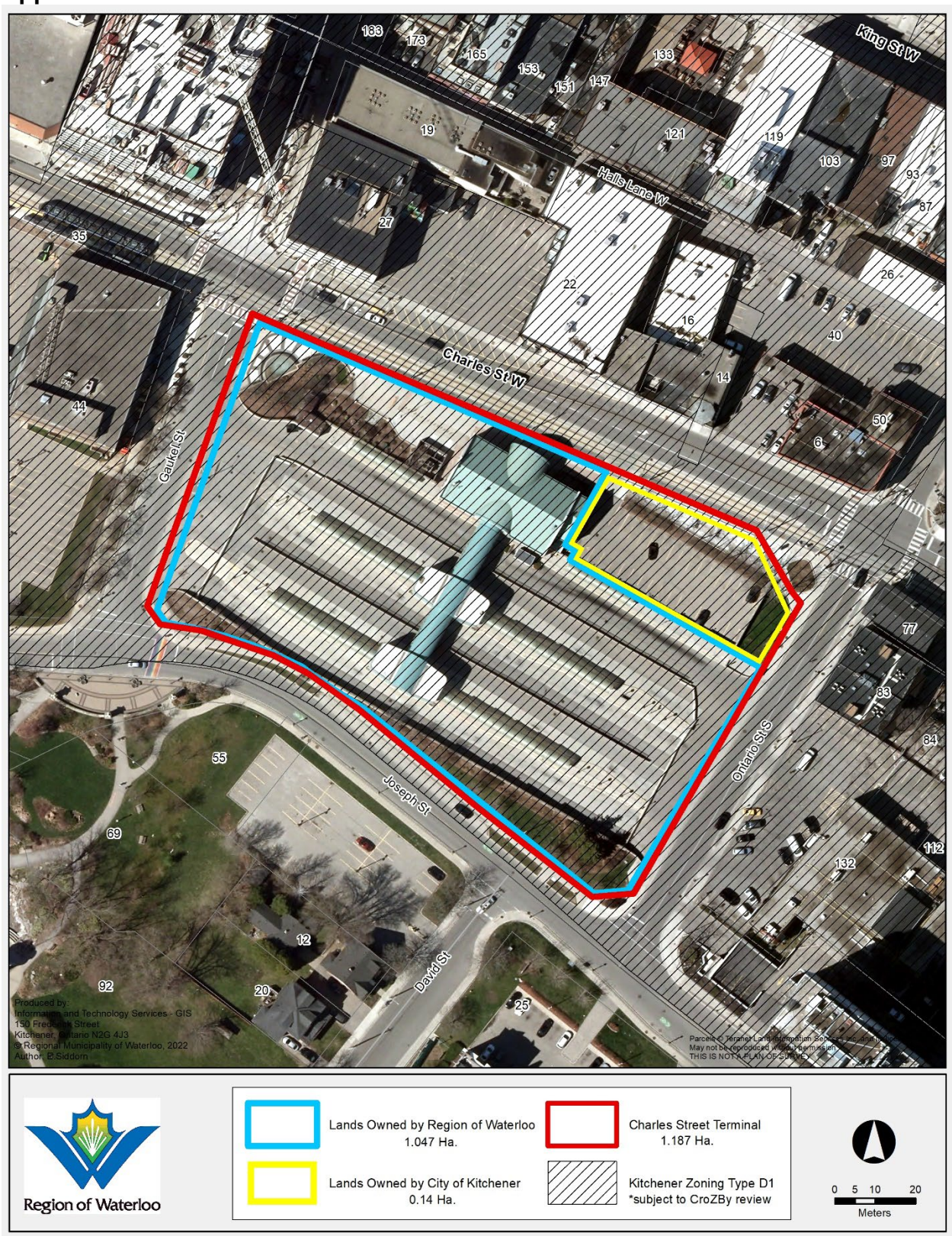
Angela Olano, Manager, Communications and Community Engagement

Laura Philippe, Communications Coordinator, Economic Development

Reviewed By: Matthew Chandy, Director, Innovation and Economic Development

Approved By: Rod Regier, Commissioner, Planning, Development & Legislative Services

Appendix 1: Site Location



Appendix 2: Technical Studies Summary

- Site Topographic Survey: VanHarten Surveying has been engaged to complete a full boundary, features and topographic survey of the site to inform future technical studies and clearly delineate known infrastructure and easements on the property.

- Environmental Site Assessment: A Phase I and Phase II environmental site assessment will be undertaken to evaluate the environmental conditions on the site and prepare materials to support future completion of remediation and/or Risk Assessment and Record of Site Condition (RSC) filing with the Ministry of Environment, Conservation and Parks (MECP) to allow for future residential and other uses at the Site in accordance with Ontario Regulation (O. Reg.) 153/04. The Region have limited this scope of work as part of the RFP process to the completion of the Phase I/II, where the successful RFP proponent will ultimately undertake any necessary remediation and/or Risk Assessment and RSC filing for the property on acquisition of the land, with the support of materials prepared through this scope of work.

- Geotechnical Analysis: A preliminary geotechnical and hydrogeology analysis will be undertaken and include boreholes to analyze soil and groundwater conditions, as well as structural recommendations (load bearings) for the future development, identification of gradients and construction site drainage, and identification of any stability areas or issues found which might influence structural engineering designs. It is anticipated that this work will be awarded along with the environmental site assessment work noted above.

- Site Functional Servicing Study: A civil engineering consultant will be engaged to complete a functional site servicing study in consultation with City and Regional staff, to confirm servicing capacity to the site including water, wastewater and storm water services.

- Designated Substances Survey: The Region will look to complete a designated substances survey of the existing structures on the property assuming demolition of all structures as part of any future development scheme.

- Urban Design analysis and Conceptual massing: A terms of reference is underway for the urban design analysis and conceptual massing work required in advancing the site to an RFP.

- Archeological Assessment: An archeological assessment of the property will examine the land for potential cultural and indigenous artefacts of provincial interest. The archeological fieldwork process has four stages of examination, including identification, evaluation of significance, recommendation of strategy to mitigate impacts, and as necessary, completion of mitigation strategies.

- Cultural Heritage Landscape Study: There are four general types of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes. This purpose of this

study would be to undertake an area scan, identify and evaluate the existing cultural landscape for the property to inform any development parameters outlined in the RFP documentation.

Region of Waterloo

Planning, Development and Legislative Services

Community Planning

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Approval of the Township of Woolwich Proposed New Official Plan

---

1. Recommendation:

a) That the Regional Municipality of Waterloo approve, in part, with modifications, the Official Plan of the Township of Woolwich, and that the Decision contained in Attachment A to Report PDL-CPL-22-17, dated June 7, 2022, be included in the approval document;

b) The repeal of the Township of Woolwich Official Plan, as adopted by the Township of Woolwich By-law 75-2000 and all amendments thereto, is hereby approved in accordance with the provisions of Sections 17 and 21 of the *Planning Act*, R.S.O. 1990, Chap. P.13, as amended, only insofar as it is replaced by the new Official Plan through this approval;

c) That no decision be made at this time with respect to:

   i) Any item deferred by the Council of the Township of Woolwich in Paragraph 1, By-law 55-2021 (Deferral 1);
   ii) In Policy 6.5.3.5, the words “or a small-scale school, place of worship and associated cemetery established in accordance with Policy 6.3.5.2” (Deferral 2);
   iii) the second sentence of Policy 8.4.3 (Deferral 3); and
   iv) In Chapter 20, the definitions for “Category 1 and 2 Specific Retail Store” and “Complementary Commercial Uses” (Deferral 4).

2. Purpose / Issue:

To consider the approval of a new Official Plan for the Township of Woolwich.

3. Strategic Plan:

Thriving Economy, Sustainable Transportation, Environment and Climate Action, Healthy, Safe and Inclusive Communities and Responsive and Engaging Public Service.

4. Key Considerations:

The Woolwich Official Plan (the Official Plan) applies broadly to all lands within the Township of Woolwich, and was prepared in accordance with the Planning Act to bring the Township's Official Plan into conformity with the current 2015 Regional Official Plan.

5. Background:

The Township of Woolwich has completed a statutory review of its official plan as required by the Planning Act. The Region of Waterloo is the approval authority for official plans for area municipalities. Township of Woolwich By-law 55-2021 adopts a new official plan for the Township, and repeals the Township's existing official plan approved by the Region in 2004. Since approval of the existing official plan, there have been a number of changes in Provincial and Regional land use policy which need to be reflected in the Township of Woolwich Official Plan. These include: the Provincial Policy Statement (2020) (PPS), the Growth Plan for the Greater Golden Horseshoe (Office Consolidation, 2020) (the Growth Plan), and a new Regional Official Plan (2015) (ROP). Under Section 26 of the Planning Act, municipalities are required to review, and if necessary update their official plans, at least every five years to ensure conformity with Provincial and Regional land use policy. Given the number of changes, the Township decided to repeal and replace the existing official plan with a new official plan, although many of the former policies and site specific amendments remain in effect.

The Township initiated the review of its official plan in 2019 and released a draft amendment for public review and comment in the Summer of 2020. This process culminated on September 21, 2021 when Township Council adopted By-law No. 55-2021 and subsequently forwarded it to the Region for approval.

The adopted official plan has been reviewed by Regional staff to ensure that the final adopted policies conform to the ROP and the Growth Plan and to ensure consistency with the PPS. Regional staff also reviewed Township staff report DS26-2021 prepared for the September 14, 2021 Committee of the Whole Meeting, and are generally in agreement with the findings and recommendations therein related to conformity with the ROP and the Growth Plan and consistency with the PPS, subject to the modifications set out in this decision. A copy of the Township staff report is available on the Township's website (https://www.woolwich.ca/en/township-services/resources/Ongoing-Planning-

Items/Scoped-Official-Plan-Review/2021-Official-Plan-Report-and-Proposed-New-OP/Report-DS_26_2021_Official_Plan_Review-FINAL-with-Appendices.pdf) .

Regional staff have proposed 32 modifications and 4 deferrals in order to ensure conformity with the in-effect ROP, and consistency and conformity with the PPS and the Growth Plan. The modifications and deferrals have been proposed in consultation with Township of Woolwich staff.

The modifications were required in order to address matters of Regional and Provincial interest, including to ensure conformity with the ROP, and the Growth Plan, and consistency with the PPS. Certain modifications are proposed to achieve internal consistency within the adopted Official Plan. Rationale for each modification and deferral is provided below.

Modification 1 and Modification 2a are required in order to reflect the 2031 planning horizon of the in-effect ROP and Section 5.2.4.3 of the Growth Plan require area municipal official plans to conform with the population and employment forecasts in upper-tier official plans.

Modification 2b clarifies that any decision of Township Council must conform or not conflict with the Growth Plan for the Greater Golden Horseshoe. The modification is required to comply with Section 3(5) of the Planning Act which requires a decision of the council of a municipality to conform to or not conflict with provincial plans.

Modification 3a revises a statement that the Official Plan “complements” the Growth Plan, the ROP and the PPS. The policy now specifies that the Official Plan implements the above-noted policy documents. The modification is required as the Official Plan implements these policy documents. Modification 3b that it is the Township’s objective to satisfy the Region’s criteria of achieving approval authority.

Modification 4 is required to ensure that the Township’s proposed transition policy (Section 1.6 of the proposed Official Plan) is not interpreted as such that a decision could be made which is contrary to the ROP, the Growth Plan or the PPS.

Modification 5 amends the Township’s population forecasts to conform with the population forecasts in Table 1 of the ROP.

Modification 6a italicizes the word “agricultural uses” since this is a defined term in the glossary of the Official Plan and in the PPS.

Modification 6b, 10, 14 and 16 change references to “rural areas” to “rural lands” wherever they are found in the Official Plan. The modifications are required in order to be consistent with the glossary of the Official Plan, and to be consistent with the definitions of “Rural Areas” vs. “Rural Lands” in the PPS.

Modification 7 is required for consistency with Policy 7.1.4 of the Township Official Plan, as well as to conform with ROP Policy 6.G.2 regarding Rural Employment Areas. Rural Employment Areas are the only areas other than settlement areas where commercial uses may be directed.

Modification 8 is required for internal consistency within the Township Official Plan's policies for the Stockyards Urban Area as the policies do not permit this area to be developed for residential purposes.

Modification 9 changes the term "unacceptable impacts" to "adverse effects" as adverse effects is the defined term in Chapter 20 of the Official Plan, the ROP and the PPS.

Modification 11 clarifies that Elmira is a "Township Urban Growth Centre", not an "Urban Growth Centre". The modification is required in order to conform with the land use designation terminology contained in the rest of the official plan, and to conform with the urban structure set out in ROP 2.D.3, since Elmira is not an Urban Growth Centre in the ROP.

Modification 12 amends the heading of Section 5.9 for internal consistency within the Plan since the area brought into the "Urban Area" designation through Regional Official Plan Amendment No. 2 (ROPA 2) - Woolwich Rationalization, is identified as "Future Urban Area" (see Modification 13). See also Modification 13.

Modification 13 adds a new subsection 5.10 entitled "Future Urban Areas" to the Official Plan. The modification implements changes to various maps (see Modifications 24, 25, 26, 27, 29, 30, 31, and 32) which classify lands recently added to the Breslau Settlement Area Boundary in the ROP as "Future Urban Areas". The modifications are required in order to conform with the ROP, as amended by the Ontario Land Tribunal decision on Regional Official Plan Amendment No. 2 (ROPA 2) dated October 2, 2019 (File PL180728), (East Side Lands) and the Region's October 9, 2020 decision to approve and modify Official Plan Amendment No. 34 (OPA 34) to the in-effect Township of Woolwich Official Plan. This decision included a modification to revise the Township's Settlement Area Boundary to conform with the in-effect parts of ROPA 2.

Modification 14, 16b, 19 and 23b are required in order to align with the land use designations in the Plan and the definitions for "Rural Areas" and "Rural Lands" in Chapter 20 of the OP, as well as the same definitions in the ROP and the PPS. The modifications are also required for consistency with Sections 1.1.4, 1.1.5 and 6.0 of the PPS, which distinguishes between "rural lands" and "rural areas". The term "Rural Areas" refers to a system of lands within municipalities that may include Rural Settlement Areas, Rural Lands, Prime Agricultural Areas, natural heritage features and areas and natural resource areas. Rural Lands are a

component of Rural Areas located outside settlement areas and which are outside prime agricultural areas.

Modification 15 replaces reference to “Special Policy Areas” with “Site Specific Policy Area”. The modification is required in order to be consistent with the definition of Special Policy Area in the PPS and the ROP, as well as for internal consistency with Chapter 20 of the OP.

Modification 16a italicizes the words “employment area” since employment areas is a defined term in Chapter 20 of the OP. The modification is also required for conformity with the ROP definition and policies for employment areas.

Modification 17 adds a policy to clarify that any development on or adjacent to a known or potentially contaminated site will be subject to the submission of a Record of Site Condition (RSC) in accordance with “Regional Implementation Guideline for the Review of Development Applications On or Adjacent to Known and Potentially Contaminated Sites”. The modification is required in order to ensure that the OP policies for cleaning up contaminated sites conform with ROP Policy 2.G.18.

Modification 18 deletes the words “impacts” and replaces them with “adverse effects”, since ‘adverse effects’ is a defined term in the ROP and the PPS. The modification ensures that the Official Plan conforms with ROP Policy 2.G.10 regarding the encroachment of employment uses and sensitive uses on one another. The modification also ensures consistency with the land use compatibility policies in Section 1.2.6 of the PPS.

Modification 20 aligns the terminology of Section 8.3.10 with the defined terms in Chapter 20 (Glossary) for agricultural uses, agricultural-related uses and on-farm diversified uses. The modification is also required for consistency with Section 2.3.3.1 of the PPS and conformity with ROP 6.A.4 regarding permitted uses in prime agricultural areas.

Modification 21 revises the servicing policies to remove the ability to service development with private communal services. The modification is required in order to conform with the servicing hierarchy in ROP Policy 5.B.2, which does not permit the use of private communal services. With regard to water and waste water services, the ROP permits development only on the basis of extending an existing municipal water or wastewater system, or through the use of individual water and wastewater treatment (well and septic) systems outside of settlement areas.

Modification 22 adds a public consultation strategy to the list of required information to support a planning application. A public consultation strategy is required for applications for official plan amendments, zoning by-law amendments

and plans of subdivision (and vacant land condominium) in accordance with Ontario Regulations 543/06, 544/06 and 545/06.

Modification 23a adds two new definitions to the Official Plan for “Countryside” and “Delineated Built Boundary”. The definition of “Countryside” complements Modifications 6b, 10, 14, 16 and 23b regarding changes in terminology related to rural lands and rural areas in the Provincial Policy Statement, and to conform with the ROP.

Modification 24 and Modification 27 remove the words “Township Urban Area Expansions” from the legend and removes lands from the “Future Urban Area/Township Urban Area Expansions” category for Map 5.1 (Planned Township Structure) and Map 6.1 (The Countryside). The Future Urban Area will continue to apply to lands brought into the Township Urban Area through the Ontario Land Tribunal decision on ROPA 2 dated October 2, 2019 (File PL180728), (East Side Lands). The modifications is also required in order to align the settlement area boundaries the ROP, as amended by ROPA 2 and OPA 34 as modified by the Region. Modification 27 also changes the terminology on the legend for Map 6.1 from “Rural Areas” to “Rural Lands”, in order to be consistent with Modifications 14, 16b, 19 and 23b.

Modification 25 adds a “Future Urban Area” to Map 5.2. The rationale is the same as for Modification 13.

Modification 26 revises the Settlement Area Boundary and adds lands to the “Urban Designated Greenfields” category on Map 5.3. The modification also changes the legend category from “Urban Designated Greenfields Area” to “Urban Designated Greenfields Area (Future Urban Area)”. The rationale is the same as for Modification 13.

Modifications 28 and 32 make a number of revisions to the location of the Settlement Area Boundary in order to properly depict the appropriate alignment of the Township’s Settlement Area Boundaries. The rationale for Modifications 28 and 32 are the same as the rationale for Modification 13.

Modifications 29 and 30 add lands to the “Future Urban Areas” designation / category on Schedules A and B of the Chapter 7.26 (Settlement Plan – Breslau Urban Area). The rationale for Modifications 29 and 30 is the same as the rationale for Modification 13.

Modification 31 is required in order to conform with the approved Township Urban Area Boundary in the ROP, as amended by ROP Amendment No. 4 (ROPA 4). The rationale for Modification 31 is the same as the rationale for Modification 13.

Deferral 1 acknowledges all of the deferrals in the decision of the Township of Woolwich to adopt the Official Plan (By-law 55-2021).

Deferral 2 relates to language in Policy 6.5.3.5 of the adopted Official Plan which would permit the severance of small-scale schools, places of worship and associated cemeteries in the Prime Agricultural Area. The deferral is required as the PPS and the ROP do not permit severances for these uses in Prime Agricultural Areas. This question of whether the Region is able to provide additional flexibility to permit severances of Old Order Mennonite churches will be explored with the Province through the second ROP Review amendment.

Deferral 3 relates to the second sentence of Section 8.4.3 regarding the Stockyards Urban Area. The deferral is required in order to ensure the accuracy of the statement regarding the Stockyards Urban Area, given that Official Plan Amendment No. 38 (OPA 38) is with the Region for a decision.

Deferrals 4 and 5 relate to the definitions for “Category 1 and 2 Specific Retail Store” and “Complementary Commercial Use”. Similar to Deferral 2, the deferrals are required until such time as a decision is made regarding OPA 38.

Regional staff is satisfied that the Township of Woolwich Official Plan, as modified, conforms to the ROP and the Growth Plan, and is consistent with the PPS.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Any written submissions related the Township Official Plan that were made to the Township of Woolwich prior to the Township’s adoption of the amendment, or any oral submissions related to the amendment made at a public meeting, were considered and/or addressed by the Township of Woolwich. Since the Township’s adoption of the Official Plan, no written submissions were received and considered as part of this decision. No requests for notice of decision were also received.

Since adoption, Regional staff has consulted with Township of Woolwich staff on the drafting of the proposed modifications included in this report. Township staff have no objection to the Region’s proposed modifications.

7. Financial Implications:

Pursuant to Regional By-law 01-028 (Commissioner’s delegation by-law), this approval does not obligate the Regional Municipality of Waterloo to any financial costs over and above those contained in the current budget or the 10-Year Capital Forecast already approved by Regional Council.

8. Conclusion / Next Steps:

Following a decision by Regional Council a Notice of Decision will be issued and

provided there are no appeals received by 4:30 p.m. on the 20th day after a Notice of Decision is issued pursuant to Section 17(35) of the Planning Act, the Official Plan for the Township of Woolwich will come into effect.

9. Attachments / Links:

Appendix A: DECISION - With respect to the Official Plan of the Township of Woolwich Subsection 17(34) of the Planning Act (Docs 4082446)

Prepared By: **David Welwood**, Principal Planner

Amanda Kutler, Manager, Development Planning

Reviewed By: **Danielle De Fields**, Director, Community Planning

Approved By: **Rod Regier**, Commissioner, Planning, Development and Legislative Services

DECISION
With respect to the Official Plan of the Township of Woolwich
Subsection 17(34) of the Planning Act

The Region of Waterloo hereby approves the Township of Woolwich Official Plan, as adopted by By-law No. 55-2021 on September 21, 2021, subject to the following modifications, as shown in Part A of this Decision.

Part A of this draft Decision constitutes additions and deletions to the text of the adopted Official Plan. Additions are shown in **bold**, and deletions are illustrated using a single strikethrough (~~example~~). The corresponding modification number is shown in small superscript following the proposed modification. Part B and D of this Decision identifies modifications to the schedules to the Official Plan. Part C indicates items that were deferred.

PART A: Regional Modifications to the Official Plan

Mod. No.	Section	Details of the Modification
1	Policy 1.2 a)	Policy 1.2 a), is modified as follows: "Provide a formal statement of the Township's intentions relating to managing growth ~~within a 25-year timeframe~~ **until 2031**"
2	Policy 1.3.2	Policy 1.3.2, is modified as follows: "…The Growth Plan provides a long-term framework for where and how municipalities including the Township of Woolwich will grow ~~to 2051~~. It seeks to curb sprawl, protect the natural environment and support economic development by ensuring that land is available to accommodate forecasted population and employment growth when needed, now and in the future. This Growth Plan replaced the former Growth Plan that took effect in July of 2017. The Growth Plan is intended to guide decisions on a wide range of matters, such as transportation, infrastructure planning, land use planning, urban form, housing, natural heritage and resource protection, in the interest of better managing growth while promoting economic prosperity. Any planning decision of Township Council must conform to **or not conflict with** the Growth Plan ~~as implemented through the Regional Official Plan~~.

3	Policy 1.3	Policy 1.3 is modified as follows: "a) In conjunction with and **to implement** ~~as a supplement to~~[3a] the Growth Plan, the Regional Official Plan and the Provincial Policy Statement by the Township of Woolwich, its Boards, Commissions and Committees as the basis for decisions and actions on matters within its jurisdiction; d) To guide Township Council, the Council of the Region of Waterloo, the Committee of Adjustment and other public bodies and officials in the exercise of their powers and responsibilities particularly related to such matters as subdivision control, subdivision plan review, official plan amendments, zoning by-laws and land severance policies and minor variances. It is an objective of this Plan to ~~continue the pursuit in transferring the Region's~~ **to satisfy Regional criteria to achieve** approval authority responsibility for subdivision applications to the Township; and"

4	Policy 1.6	Policy 1.6 is modified as follows: a) Should additional redlined revisions, Zoning By-law amendments, part lot control by-laws, site plans, consents or minor variances be required, additional studies identified in this Plan will not be required, unless such: i) Such studies are already required by existing draft conditions or a site plan agreement; ii) Conditions are revised in accordance with the Planning Act; iii) Such studies are required by Provincial and Federal regulations**, or by Provincial or Regional plans**; iv) Such studies are required as a result of development being proposed on new lands that were not part of the original approved development or v) Major changes are being proposed to a development that significantly alters the original approved development. b) Any matter or proceeding referenced in Section 1.6 c) that was commenced before this Plan can into force shall be continued and finally disposed of under the former Township of Woolwich Official Plan, which was approved on May 8, 2002 by the Region and subsequently amended from time to time (i.e., the "former Township of Woolwich Official Plan") as it read on the day the matter or proceeding commenced, **except where such a decision would conflict with or not conform with the Growth Plan for the Greater Golden Horseshoe or the Regional Official Plan, or would be inconsistent with the Provincial Policy Statement. In all cases, decisions of Council shall conform with or not conflict with the Growth Plan, conform with the Regional Official Plan and be consistent with the Provincial Policy Statement**.

5	Policy 3.2	Policy 3.2 is modified as follows: "3.2 This Plan is based on the population forecasts contained in the Regional Official Plan, which forecasts an increase in the Township's population from: • ~~26,000~~ **20,100** in ~~2016~~ **2006**"
6	Policy 3.3	Policy 3.3 is modified as follows: 3.3 The Plan adopts policies to protect and preserve the Countryside area and primarily permits only *agricultural uses*[6a], *agriculture-related uses*, and *on-farm diversified uses*, except for *Rural* ~~*Areas*~~ ***Lands*** within the Countryside area which may permit a limited range of non-agricultural use.
7	Policy 3.9	Policy 3.9 is modified as follows: 3.9 The Plan includes policies that direct commercial uses that serves the needs of residents to locate in settlement areas and other ~~designated commercial areas~~ **Rural Employment Areas**.
8	Policy	Policy 3.11 a) is modified as follows: 3.11 Future development in the Breslau and Stockyards Urban Areas, and the Elmira and St Jacobs Township Urban Areas will be appropriately staged and prioritized to: a) Accommodate the Township's forecasted population and employment growth in a gradual and controlled manner over the planning horizon of this Plan; b) Integrate land use planning and planning for *infrastructure* and *public service facilities* to ensure that growth does not exceed existing or planned capacity; and c) **For, the Breslau Urban Area, and the Elmira and St. Jacobs Township Urban Areas, to support** ~~Support~~ the achievement of *complete communities* with a broad range and mix of housing options.

9	Policy 3.18	Policy 3.18 is modified by replacing the word “unacceptable impacts” with “*adverse effects*”.
10	Policy 5.1.5	Policy 5.1.5, is modified as follows: 5. The Countryside is illustrated on Map 5.1 and includes all of the *Prime Agricultural Areas* and *Rural ~~Areas~~* ***Lands*** located outside of the Urban Areas, Township Urban Areas, Rural Settlement Areas and Rural Employment Areas. This area also includes a broad band of *environmental features* and productive agricultural lands within specific areas designated as the Protected Countryside. The Protected Countryside is intended to permanently protect these valuable areas from future urban development. Future development and specific policies for the Countryside and the Protected Countryside are outlined in this Chapter 6 of this Plan.
11	Policy 5.6.3 a)	Policy 5.6.3 a), is modified as follows: “a) Identifying *strategic growth areas, including the* Elmira **Township** Urban Growth Centre, to support achievement of the *reurbanization* target and recognize these areas as focal points for development;
12	Policy 5.9	The title of Policy 5.9 is modified as follows: “**5.9 FUTURE EXPANSIONS OF URBAN AREAS AND ~~/~~TOWNSHIP URBAN AREAS ~~EXPANSION~~ “**

13	Policy 5.10	A new subsection 5.10 entitled “Future Urban Area” is added as follows: “**5.10 FUTURE URBAN AREA** **Regional Official Plan Amendment No. 2 added up to 55 hectares of Urban Designated Greenfield Area lands adjacent to the Breslau Settlement Area located to the north of the proposed Ottawa Street extension and west of Fountain Street. In accordance with Policy 2.B.3 (i) (i) of the Regional Official Plan, this area may be designated in this Plan through a corresponding Official Plan Amendment. On October 9, 2020 the Region approved Official Plan Amendment 34, as modified, to rationalize the boundaries of the Breslau Urban Area boundary in accordance with Policy 2.B.4, which also implemented Regional Official Plan Amendment No. 2 to add the new Urban Designated Greenfield Area lands into the Breslau Settlement Area. As these lands are not currently designated in this Plan to permit future urban land uses, Maps 5.1, 5.2 and 5.3 and the associated maps in Section 7.26 refer to these lands as “Future Urban Area” until such time as the development applications for the respective properties are approved and in-effect, including appropriate land use designations contained in Section 7.4 and any other associated policies as deemed required.**”
14	Chapter 6	Chapter 6, and any other applicable reference in the Official Plan, is modified by changing the words “Rural Areas” to “Rural Lands” wherever they appear.
15	Policy 7.27.2.3 g)	Policy 7.27.2.3 g), is modified as follows: “Further, lands within ~~Special Policy Area~~ **Site Specific Policy Area** 2 may include contiguous commercial building(s) of no more than 13,500 square metres of Gross Leasable Floor Area.

16	Policy 8.2.4	Policy 8.2.4 is modified as follows: a) italicizing the words “employment areas”. b) Policy 8.2.4 d) is modified as follows: “d) Will not utilize lands designated in Prime *Agricultural Areas or Rural* ***Lands*** ~~*Areas*~~, except in accordance with Policies 6.3.1.1 (Minor Change/Expansion) and 19.10 (Existing Use);”
17	Policy 8.2.7 e)	Policy 8.2.7 e) is modified by adding a new paragraph f) as follows: “**f) Where a development application is proposed on, or adjacent to, a known or potentially contaminated site, planning approvals will be subject to the submission of a Record of Site Condition in accordance with the provision of the Regional Implementation Guideline for the Review of Development Applications On or Adjacent to Known and Potentially Contaminated Sites.**”
18	Policy 8.2.9	Policy 8.2.9 is modified as follows: “8.2.9 The Township will minimize the ~~impact~~ **potential *adverse effects*** of employment uses ensuring that such uses comply with all applicable Regional and Provincial environmental policies, guidelines and legislation. These potential ~~impacts~~ ***adverse effects*** include, but is not limited to, the emission of noise and vibration; the emission of impermissible concentrations of air contaminants such as dust, smoke, odour, fumes and other particulate; water quality and waste control, and the discharge of contaminants to surface water and ground water.”
19	Policy 8.3.5	Policy 8.3.5 is modified as follows: 8.3.5 The Township will consider through zoning provisions the use of land for *on-farm diversified uses* within the *Prime Agricultural Areas* and *Rural* ***Lands*** ~~*Areas*~~ in accordance with the policies established in Chapter 6 –Countryside Land Use Area ~~-~~- of this Plan.

20	Policy 8.3.10	Policy 8.3.10 is modified as follows: 8.3.10 The Township will work with other public and private partners to encourage, develop and expand *agricultural* ***uses***, ~~*agriculturally*~~ ***agricultural-****related* ***uses*** and *on-farm diversified uses* within the Township.

21	Chapter 16	Chapter 16 is modified by: a) Revising Policy 16.1.1 as follows: 16.1.1 The Township will evaluate water supply servicing options for *development applications*, based on the following order of priority: a) The extension of servicing from a *municipal drinking-water supply* system is the preferred form of servicing within settlement areas~~.~~**; and** ~~b) Where servicing from a *municipal drinking water supply system* is not available, planned or feasible, private communal water services are the preferred form of servicing for multi-unit/lot developments to support the protection of the environment and minimize potential risk to human health and safety; and~~ **b)** ~~c)~~ Where servicing from a *municipal drinking water supply system* ~~or private communal water services are~~ **is** not available, planned or feasible new individual private wells may be used provided that the site conditions are suitable for the long-term provision of such service with no negative impacts, except where such wells are not permitted in accordance with Section 16.1.9 of this Plan. In settlement areas, individual private wells may be used for infilling or minor rounding out of existing development. 1. b) Revising Policy 16.2.1 as follows: "16.2.1 The Township will consider the approval of *development applications* with respect to wastewater servicing in accordance with the Regional Official Plan policies, based on the following order of priority: a) The extension of servicing from a *municipal wastewater system* is the preferred form of servicing within settlement areas; **and** ~~b) Where servicing from a *municipal wastewater system* is not available, planned or feasible, private communal wastewater treatment services are the preferred form of servicing for~~

		~~multi-unit/lot developments to support the protection of the environment and minimize~~ *potential risk to human health and safety; and* **b)** ~~c)~~ Where servicing from a municipal wastewater system ~~or private communal wastewater treatment services are~~ **is** not available, planned or feasible new individual private wastewater treatment systems may be used provided that the site conditions are suitable for the long-term provision of such service with no negative impacts, except where such systems are not permitted in accordance with Section 16.2.4.1. In settlement areas, individual private wastewater treatment systems may be used for infilling or minor rounding out of existing development
22	Policy 19.7.11	Policy 19.7.11 is modified by adding a new bullet which states "**Public consultation strategy**".

23	Policy 20	Policy 20, Glossary, is modified by a) adding the following new definitions and changing their occurrence in the Woolwich Official Plan to italics; and **"Countryside – Where used in this Plan aligns with the definition for Rural Areas in the Provincial Policy Statement, meaning a system of lands, within municipalities that may include Rural Settlement Areas, Rural Lands, Prime Agricultural Areas, natural heritage features and areas and resource areas."** **"Delineated Built Boundary - The limits of the developed urban area as defined by the Minister in consultation with affected municipalities for the purpose of measuring the minimum intensification target in this Plan.**" b) Modifying the definition for "Rural Areas" as follows: **"Rural Areas** – ~~means a system of lands within municipalities that may include Rural Settlement Areas, rural lands, Prime Agricultural Areas, natural heritage features and area and resources areas.~~ **See "Countryside"**

PART B: Regional Modifications to the Maps of the Official Plan

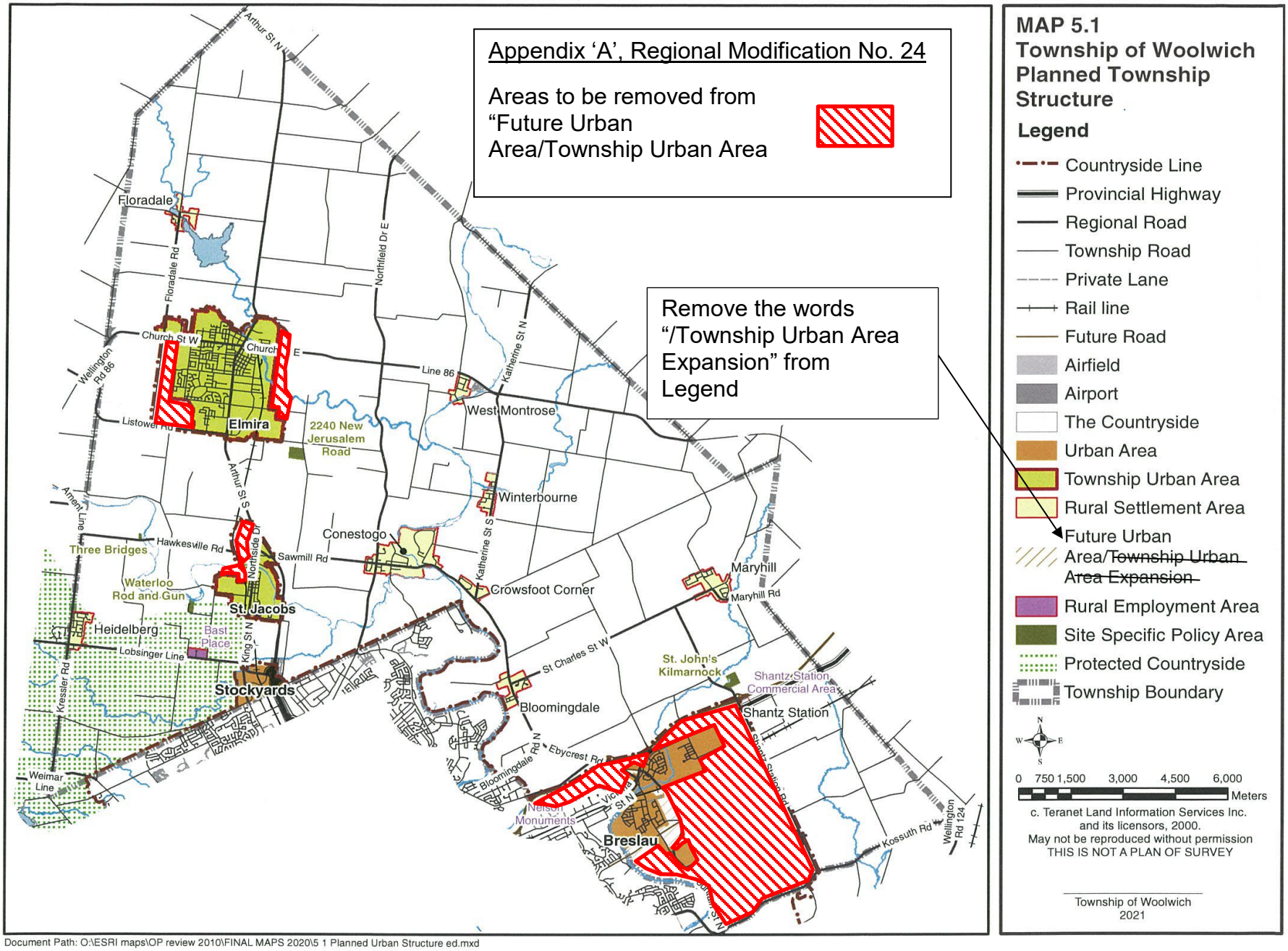
Mod. No.	Figure, Map, or Schedule	Details of the Modification
24	Map 5.1	Map 5.1 is amended by removing lands from the “Future Urban Areas/Township Urban Area Expansion” category, and by removing the the words “/Township Urban Area Expansion” from Legend, as shown on Appendix A hereto.
25	Map 5.2	Map 5.2 is amended by adding lands to a new “Future Urban Areas” category, and adds the category to the legend, as shown on Appendix B hereto.
26	Map 5.3	Map 5.3 is amended by adding lands to the Urban Designated Greenfield Area” category, adding the words “(Future Urban Area”) in the legend after the words “Designated Greenfield Area” and revising the location of the settlement area boundary for Breslau, as shown on Appendix C hereto.
27	Map 6.1	Map 6.1 is amended by removing lands from the “Future Urban Areas/Township Urban Areas” category, revising the location of the Settlement Area Boundary, removing the words “/Township Urban Area Expansion” from the legend, and changing “Rural Areas” to “Rural Lands” in the legend, as shown on Appendix D hereto.
28	Section 7.14, Schedule A (Heidelberg), Section 7.15, Schedule A (West Montrose) and Section 7.20, Schedule A (Conestogo)	Section 7.14, Schedule A (Hedelberg), Section 7.15, Schedule A (West Montrose) and Section 7.20, Schedule A (Conestogo) are modified by adding the missing Settlement Area Boundary as shown on Appendix E.
29	Section 7.26, Schedule A (Breslau Urban Structure)	Section 7.26, Schedule A (Breslau Urban Structure) is modified by adding lands to the “Future Urban Areas” category as shown on Appendix F.

30	Section 7.26, Schedule B (Land Use Plan)	Section 7.26, Schedule B (Land Use Plan) is modified by adding lands to the “Future Urban Areas” designation and revising the location of the Settlement Area Boundary as shown on Appendix G.
31	Section 7.26, Schedule C (Transportation Network)	Section 7.26, Schedule C (Transportation Network) is modified by revising the location of the Settlement Area Boundary as shown on Appendix H.
32	Section 7.29, Schedule A (Elmira Urban Structure), Section 7.29, Schedule A1 (Elmira Southwood), Section 7.29, Schedule B (Elmira Transportation), Map 18.2, Map 18.3	Section 7.29, Schedule A (Elmira Urban Structure), Section 7.29, Schedule A1 (Elmira Southwood), Section 7.29, Schedule B (Elmira Transportation), Map 18.2, and Map 18.3, are modified by revising the Settlement Area Boundary as shown on Appendix I.

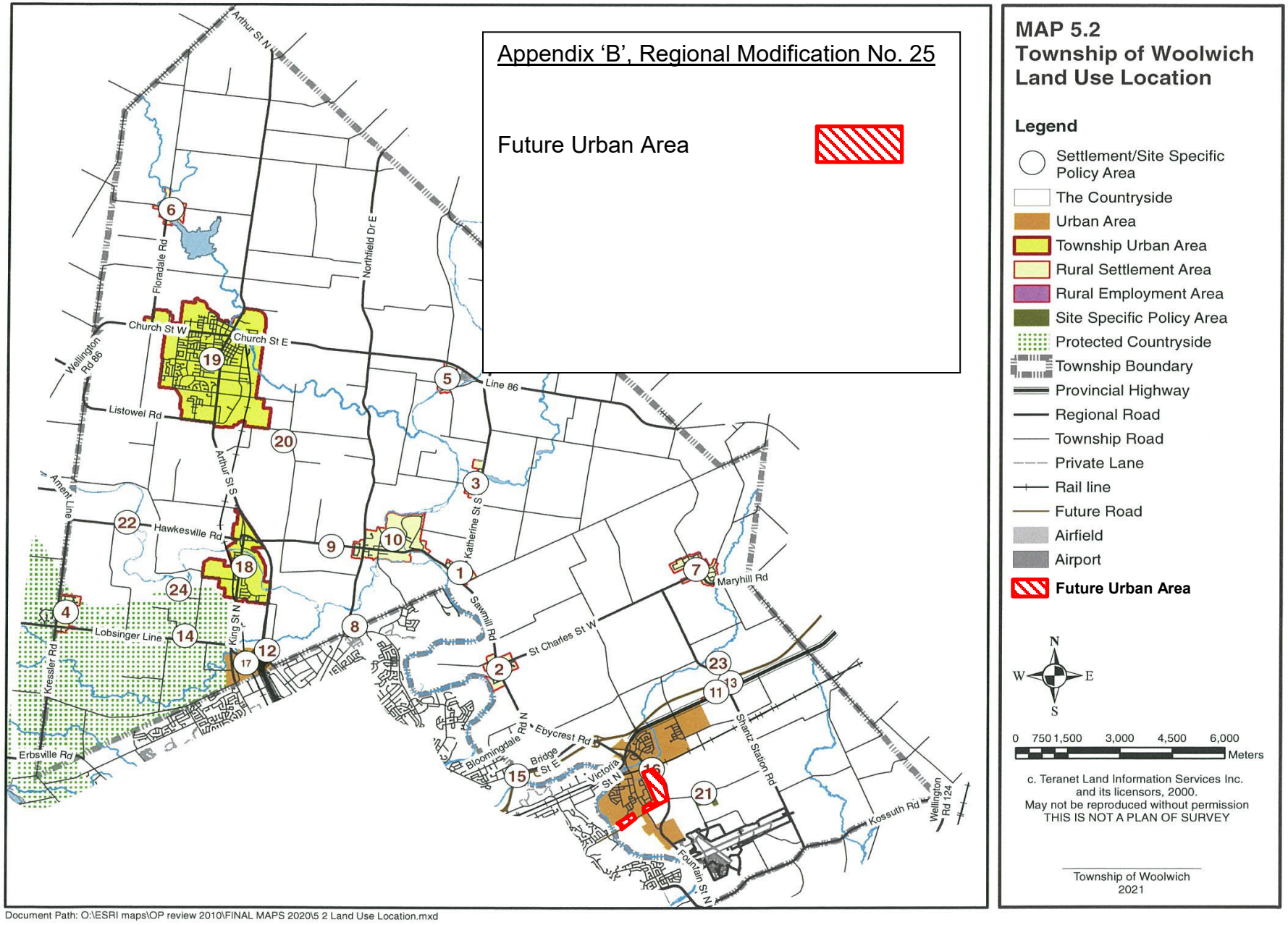
PART C: Items Deferred

Def. No.	Details of the Deferral
1	Any item deferred by the Council of the Township of Woolwich in Paragraph 1, By-law 55-2021 is further deferred by the Region.
2	In Policy 6.3.5.3, the words “or a small-scale school, place of worship and associated cemetery established in accordance with Policy 6.3.5.2” are deferred.
3	The second sentence of Section 8.4.3 is deferred.
4	Definition for “Category 1 and 2 Specific Retail Store” is deferred.
5	Definition for “Complementary Commercial Uses” is deferred.

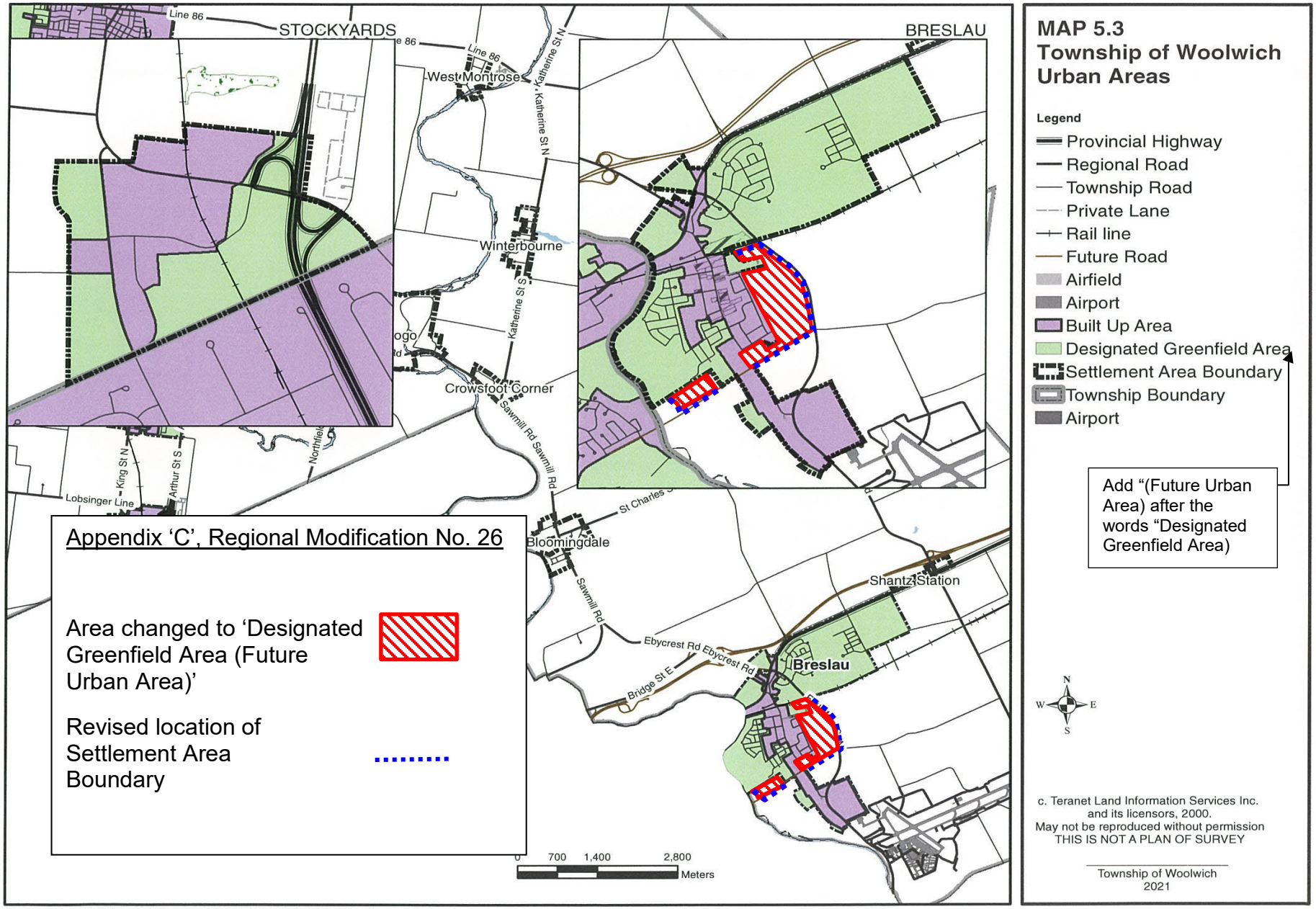
PART D: Modifications to Official Plan Schedules and Maps



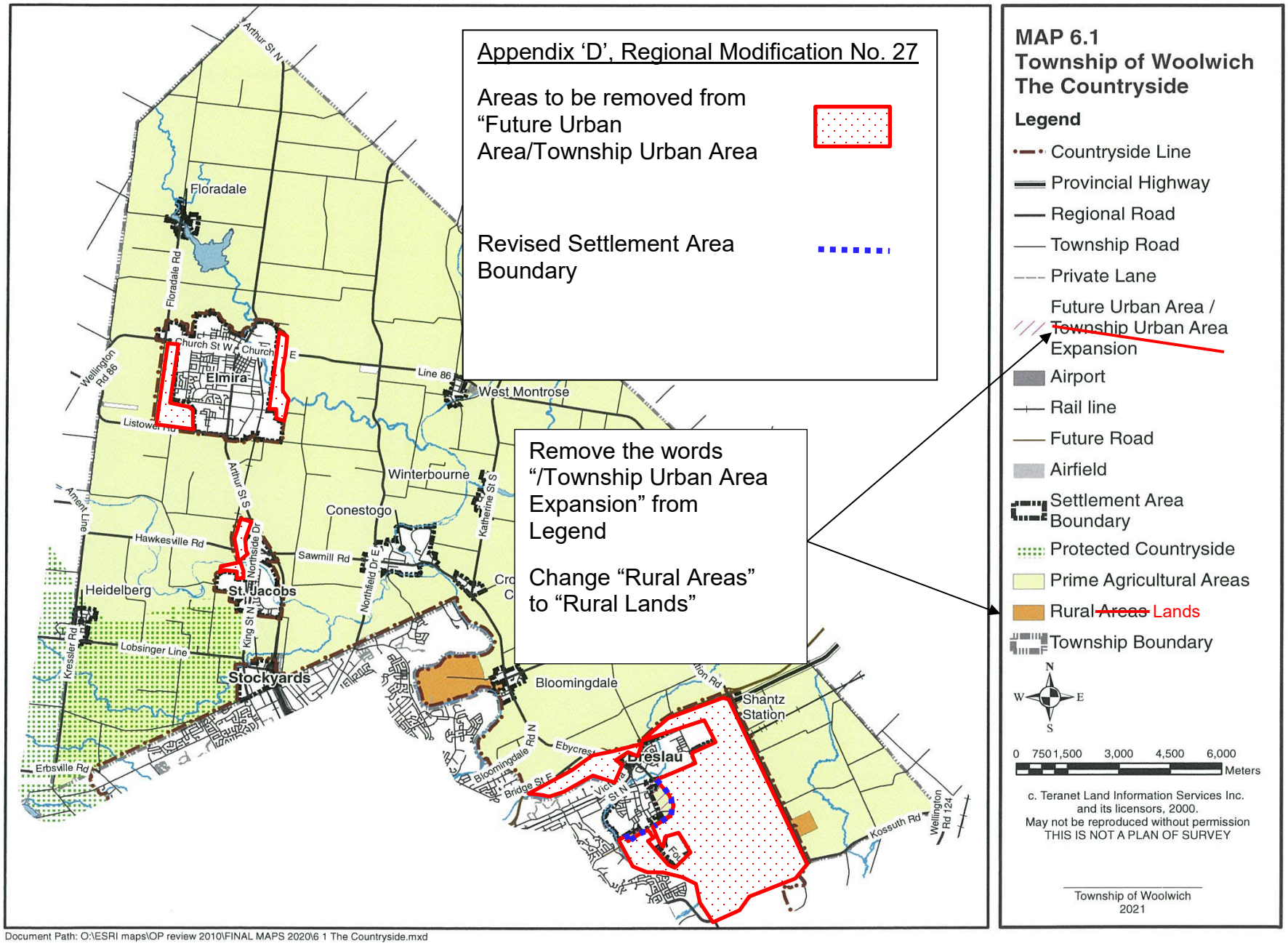
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\5 1 Planned Urban Structure ed.mxd



Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\5 2 Land Use Location.mxd

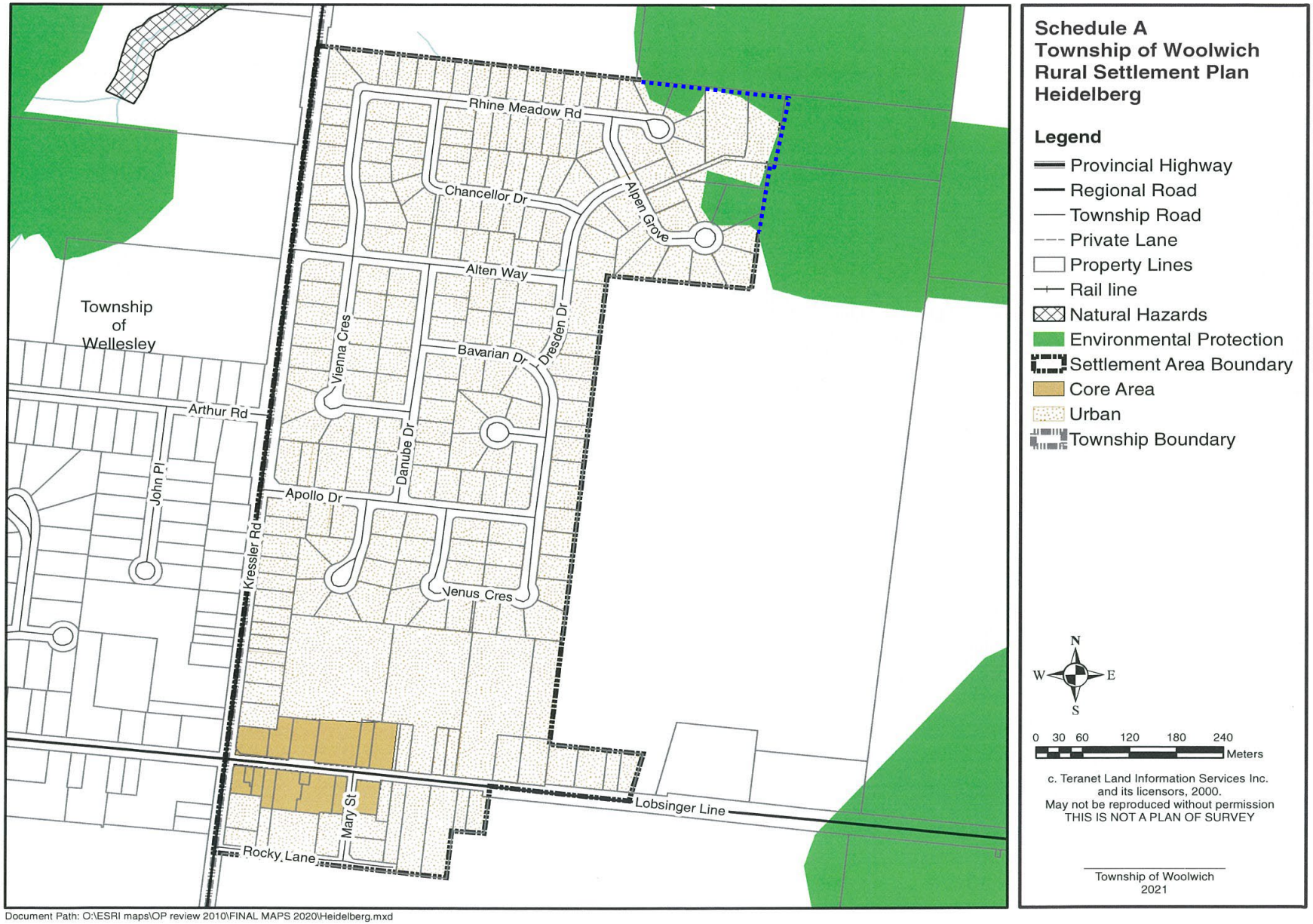


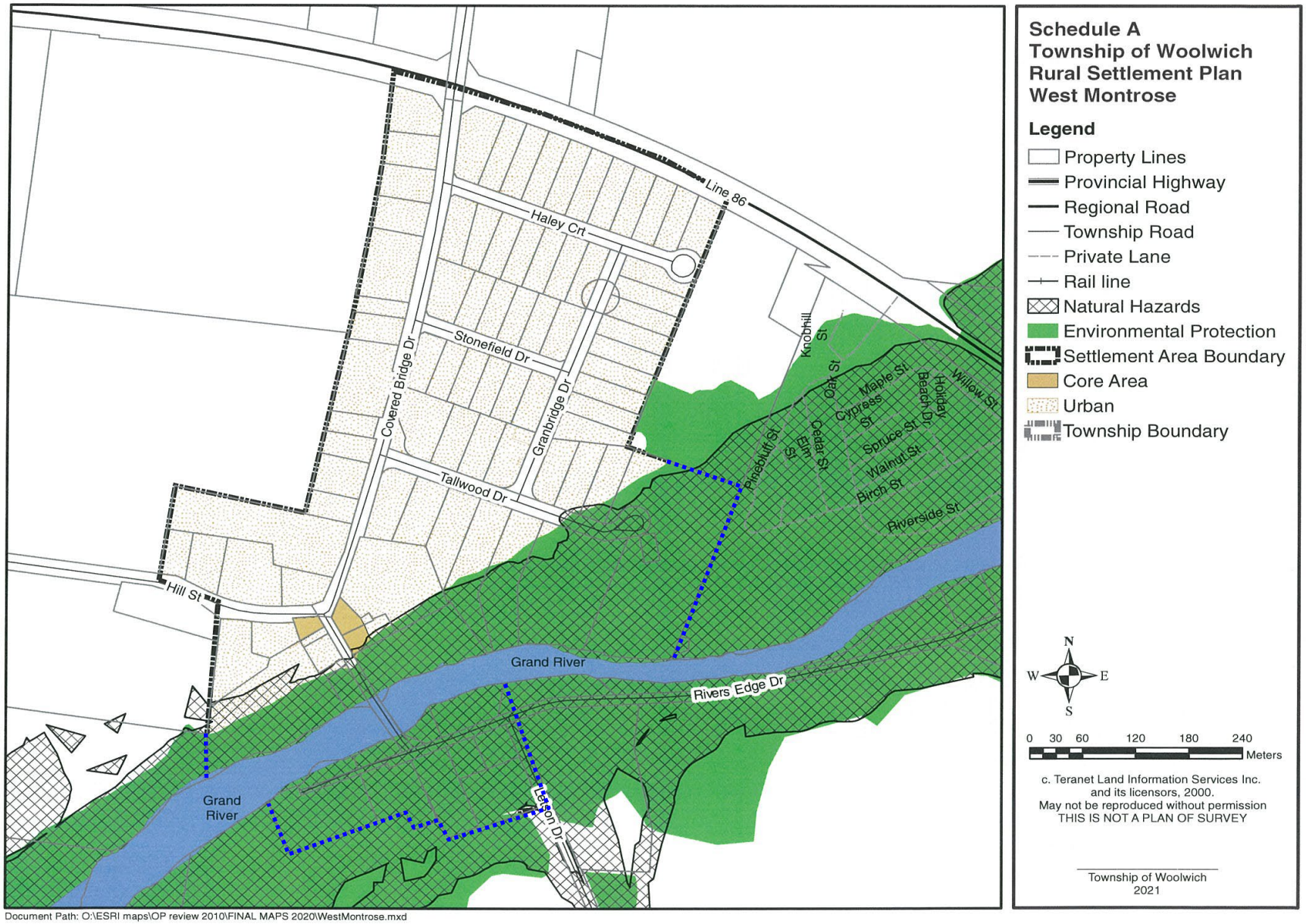
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\5 3 Urban Areas.mxd


Appendix 'D', Regional Modification No. 27
Areas to be removed from "Future Urban Area/Township Urban Area
Revised Settlement Area Boundary
Remove the words "/Township Urban Area Expansion" from Legend
Change "Rural Areas" to "Rural Lands"
MAP 6.1
Township of Woolwich
The Countryside
Legend
Countryside Line
Provincial Highway
Regional Road
Township Road
Private Lane
Future Urban Area / ~~Township Urban Area~~ Expansion
Airport
Rail line
Future Road
Airfield
Settlement Area Boundary
Protected Countryside
Prime Agricultural Areas
Rural ~~Areas~~ Lands
Township Boundary
N
W
E
S
0 750 1,500 3,000 4,500 6,000
Meters
c. Teranet Land Information Services Inc. and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2021
Floradale
Elmira
West Montrose
Winterbourne
Conestogo
Heidelberg
St. Jacobs
Stockyards
Bloomingdale
Breslau
Shantz Station
Arthur St N
Floradale Rd
Church St W
Church St E
Line 86
Wellington Rd 86
Listowel Rd
Arthur St S
Amen Line
Hawkesville Rd
Sawmill Rd
Northside Dr
Northfield Dr E
Katherine St S
King St N
Lobsinger Line
Kressler Rd
Erbsville Rd
Bloomingdale Rd N
Bridge St E
Victoria St N
Fountain St N
Kossuth Rd
Wellington Rd 124
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\6 1 The Countryside.mxd

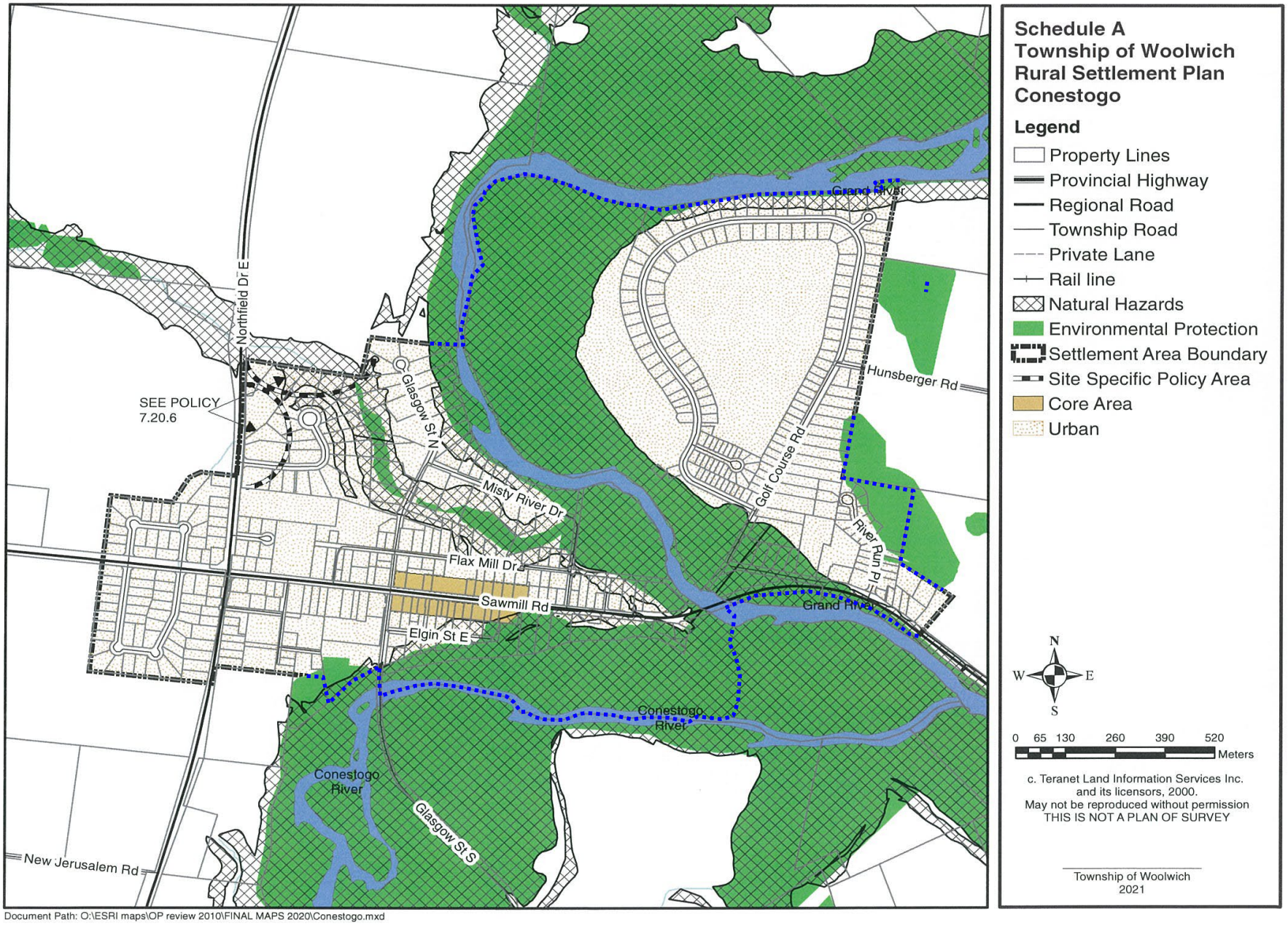
Appendix ‘E’, Regional Modification No. 28

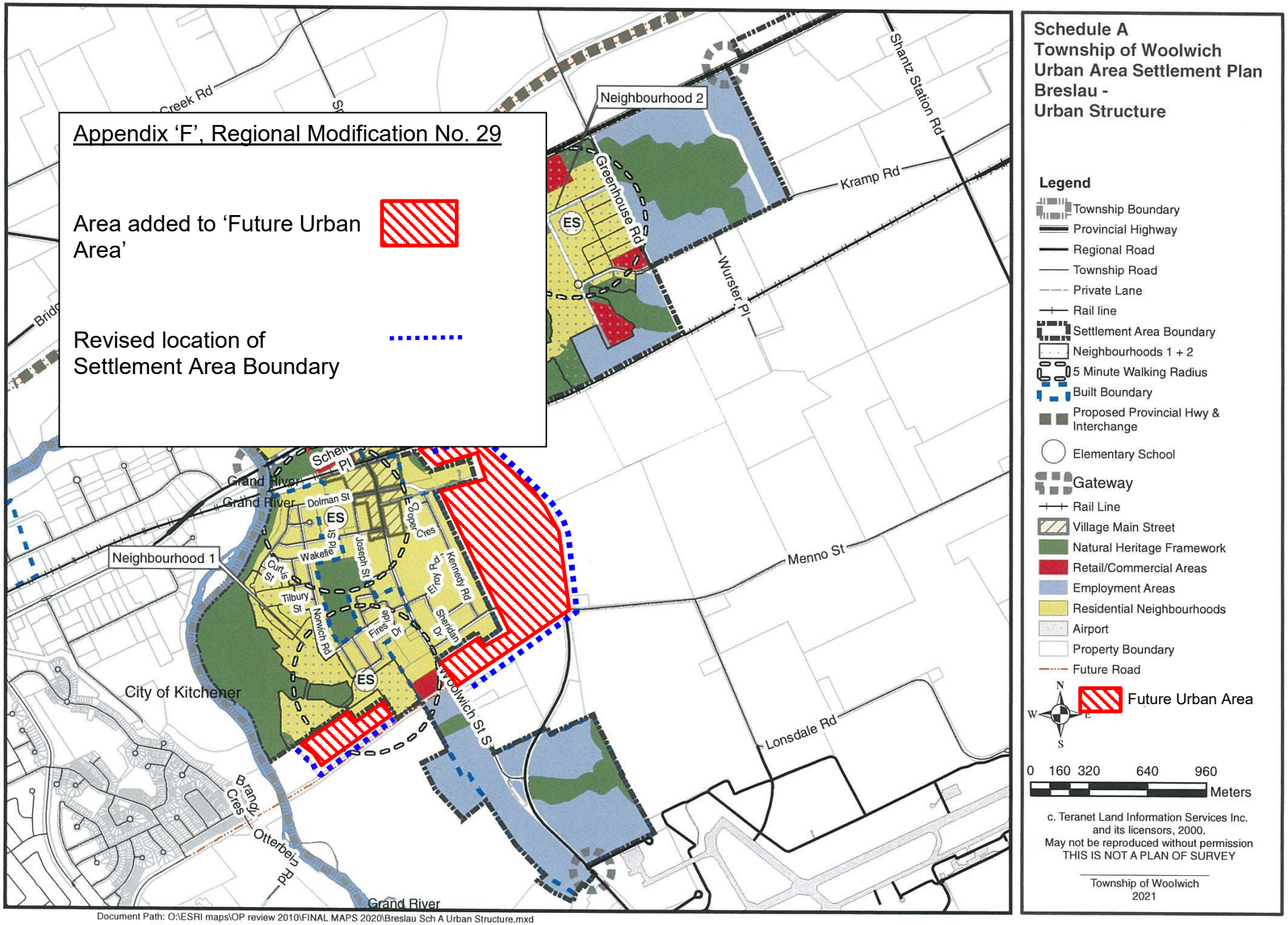
Added location of “Settlement Area Boundary”

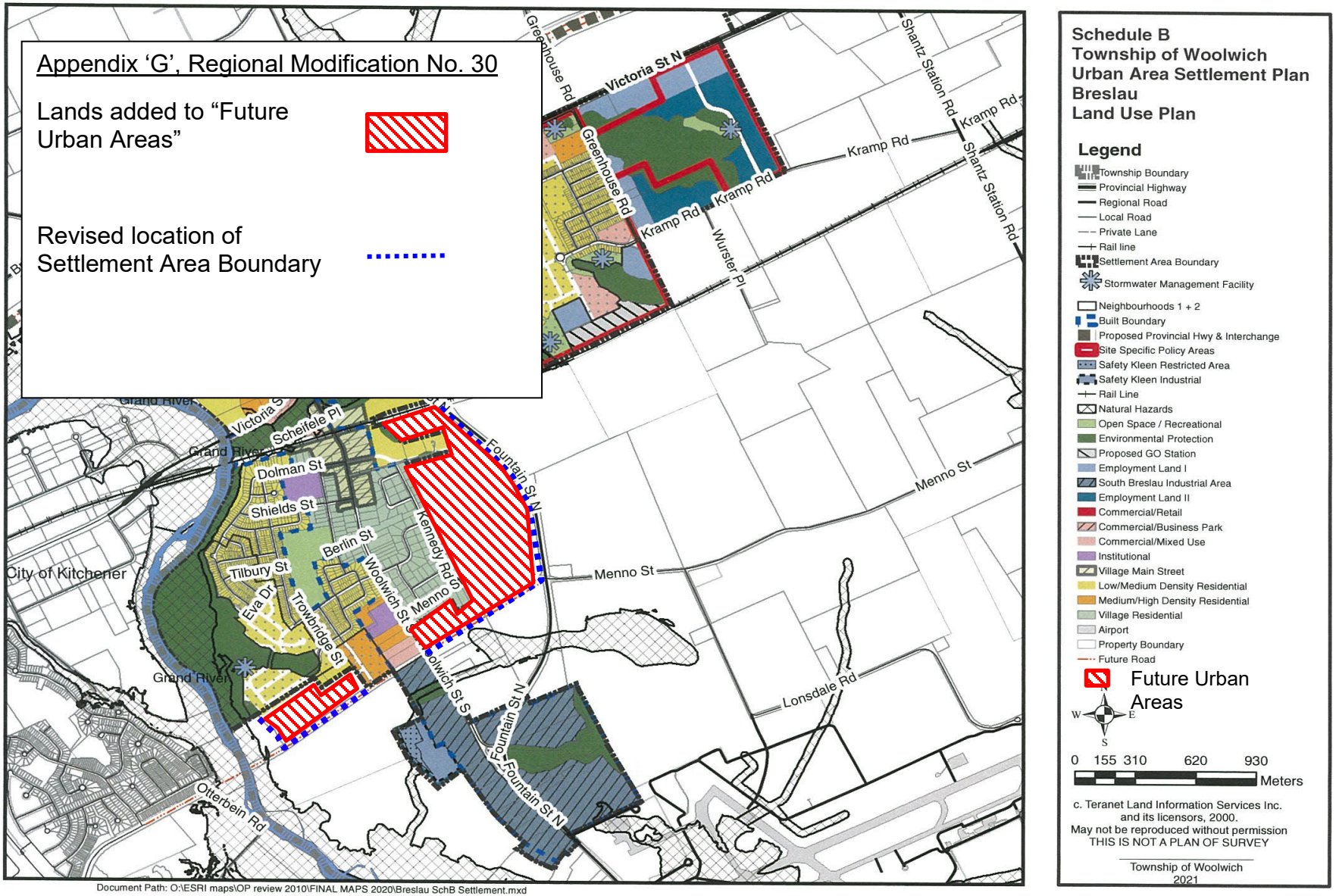

Schedule A
Township of Woolwich
Rural Settlement Plan
Heidelberg
Legend
Provincial Highway
Regional Road
Township Road
Private Lane
Property Lines
Rail line
Natural Hazards
Environmental Protection
Settlement Area Boundary
Core Area
Urban
Township Boundary
Township of Wellesley
Rhine Meadow Rd
Chancellor Dr
Alpen Grove
Alten Way
Vienna Cres
Bavarian Dr
Dresden Dr
Arthur Rd
John Pl
Danube Dr
Apollo Dr
Kressler Rd
Venus Cres
Lobsinger Line
Mary St
Rocky Lane
N
W
E
S
0 30 60 120 180 240
Meters
c. Teranet Land Information Services Inc.
and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2021
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Heidelberg.mxd

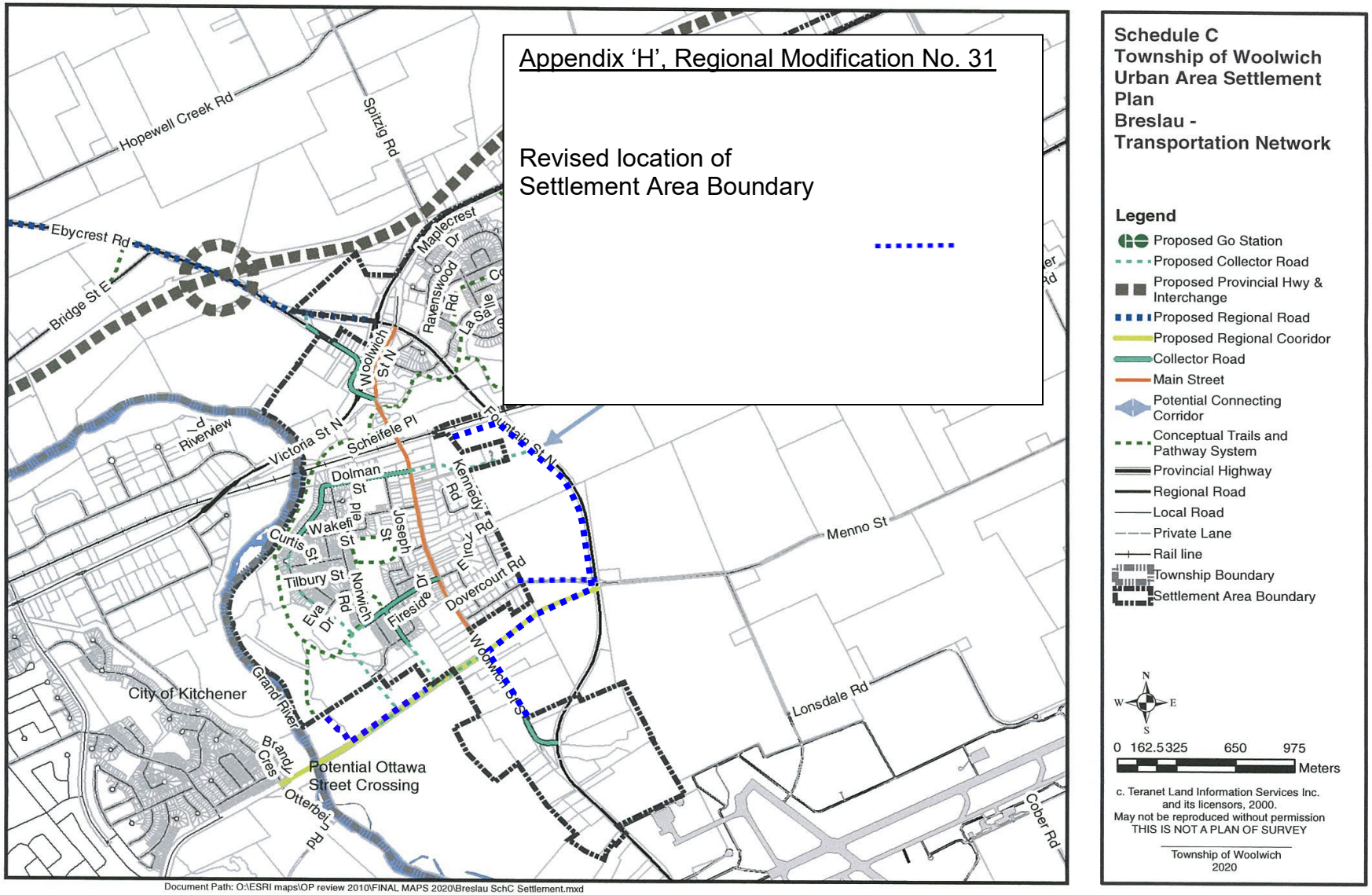


Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\WestMontrose.mxd


Schedule A
Township of Woolwich
Rural Settlement Plan
Conestogo
Legend
Property Lines
Provincial Highway
Regional Road
Township Road
Private Lane
Rail line
Natural Hazards
Environmental Protection
Settlement Area Boundary
Site Specific Policy Area
Core Area
Urban
Northfield Dr E
SEE POLICY
7.20.6
Glasgow St N
Misty River Dr
Flax Mill Dr
Sawmill Rd
Elgin St E
Grand River
Hunsberger Rd
Golf Course Rd
River Run Pl
Conestogo
River
Glasgow St S
New Jerusalem Rd
N
W
E
S
0 65 130 260 390 520
Meters
c. Teranet Land Information Services Inc.
and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2021
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Conestogo.mxd

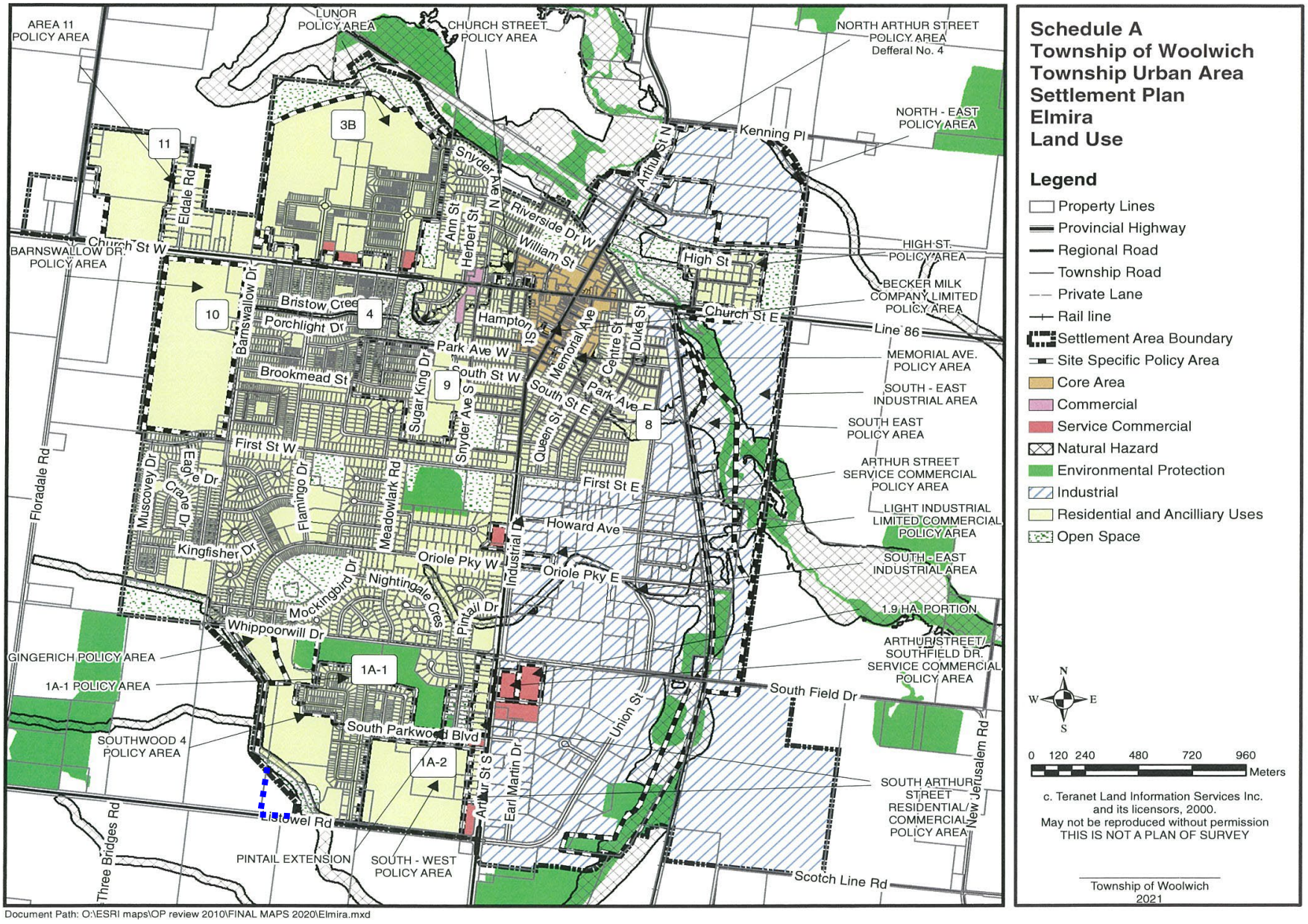

Appendix 'F', Regional Modification No. 29
Area added to 'Future Urban Area'
Revised location of Settlement Area Boundary
Neighbourhood 1
Neighbourhood 2
City of Kitchener
Grand River
Menno St
Lonsdale Rd
Kramp Rd
Shantz Station Rd
Wurster Pl
Greenhouse Rd
Woolwich St S
Dolman St
Wakefield St
Joseph St
Tilbury St
Norwich Rd
Kennedy Rd
Sheridan Dr
Otterbein Rd
Brandt Cres
ES
Schedule A
Township of Woolwich
Urban Area Settlement Plan
Breslau -
Urban Structure
Legend
Township Boundary
Provincial Highway
Regional Road
Township Road
Private Lane
Rail line
Settlement Area Boundary
Neighbourhoods 1 + 2
5 Minute Walking Radius
Built Boundary
Proposed Provincial Hwy & Interchange
Elementary School
Gateway
Rail Line
Village Main Street
Natural Heritage Framework
Retail/Commercial Areas
Employment Areas
Residential Neighbourhoods
Airport
Property Boundary
Future Road
Future Urban Area
N
W
E
S
0 160 320 640 960
Meters
c. Teranet Land Information Services Inc. and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2021
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Breslau Sch A Urban Structure.mxd

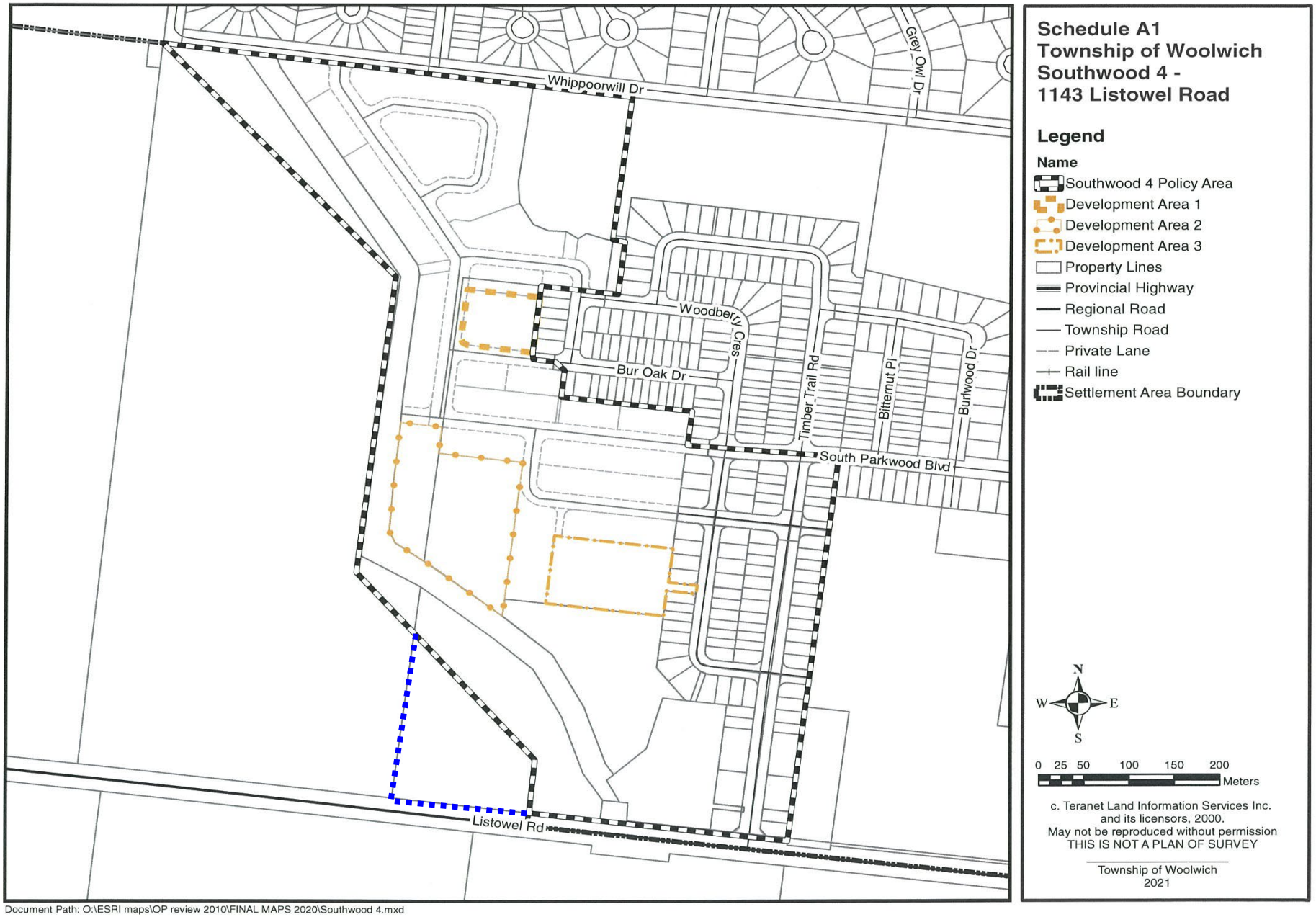

Appendix 'G', Regional Modification No. 30
Lands added to "Future Urban Areas"
Revised location of Settlement Area Boundary
Schedule B
Township of Woolwich
Urban Area Settlement Plan
Breslau
Land Use Plan
Legend
Township Boundary
Provincial Highway
Regional Road
Local Road
Private Lane
Rail line
Settlement Area Boundary
Stormwater Management Facility
Neighbourhoods 1 + 2
Built Boundary
Proposed Provincial Hwy & Interchange
Site Specific Policy Areas
Safety Kleen Restricted Area
Safety Kleen Industrial
Rail Line
Natural Hazards
Open Space / Recreational
Environmental Protection
Proposed GO Station
Employment Land I
South Breslau Industrial Area
Employment Land II
Commercial/Retail
Commercial/Business Park
Commercial/Mixed Use
Institutional
Village Main Street
Low/Medium Density Residential
Medium/High Density Residential
Village Residential
Airport
Property Boundary
Future Road
Future Urban Areas
0 155 310 620 930
Meters
c. Teranet Land Information Services Inc. and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2021
Victoria St N
Greenhouse Rd
Kramp Rd
Shantz Station Rd
Wurster Pl
Scheifele Pl
Dolman St
Shields St
Berlin St
Tilbury St
Eva Dr
Trowbridge St
Woolwich St S
Kennedy Rd
Fountain St N
Menno St
Lonsdale Rd
Otterbein Rd
Grand River
City of Kitchener
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Breslau SchB Settlement.mxd

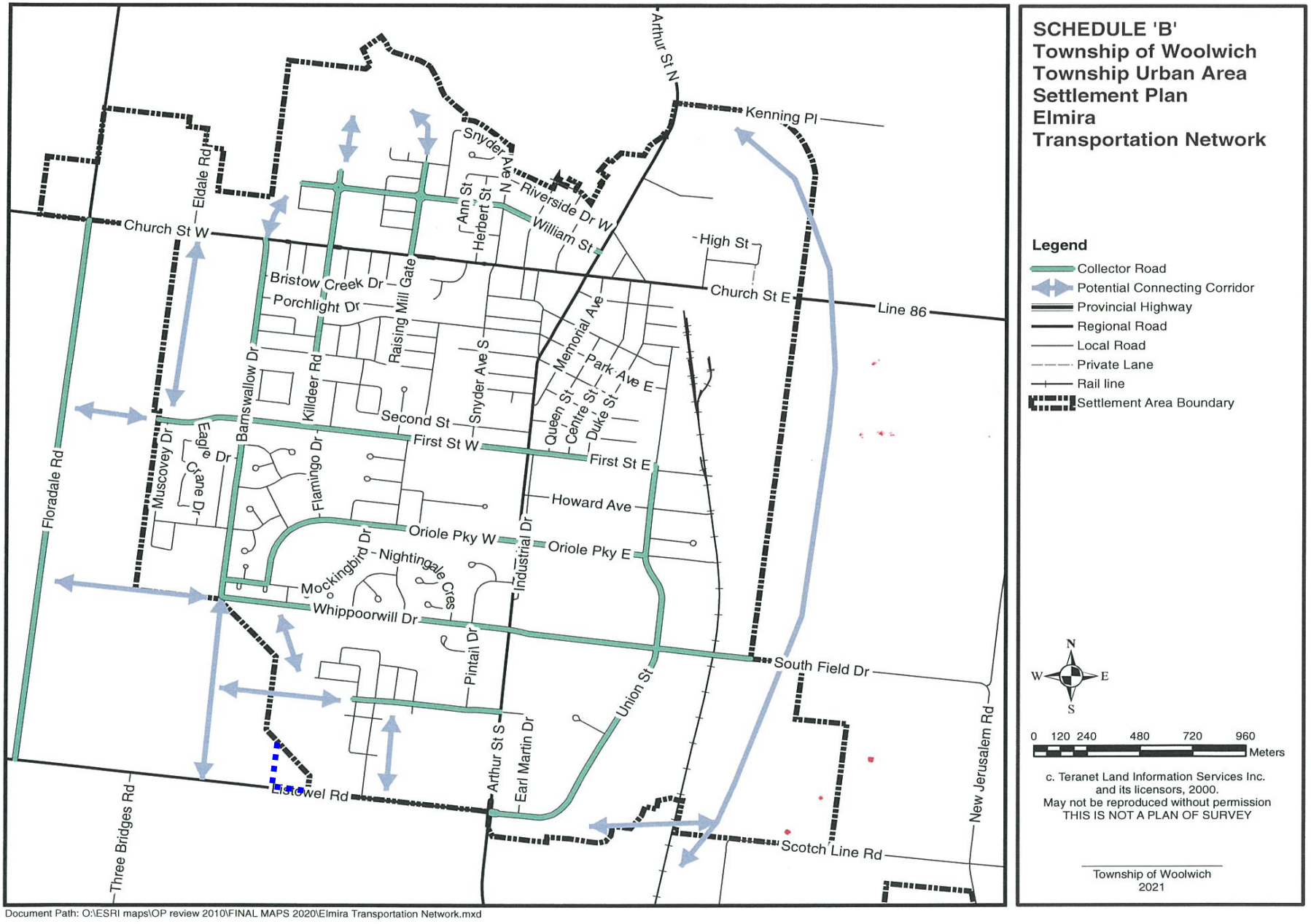

Appendix 'H', Regional Modification No. 31
Revised location of
Settlement Area Boundary
Schedule C
Township of Woolwich
Urban Area Settlement
Plan
Breslau -
Transportation Network
Legend
Proposed Go Station
Proposed Collector Road
Proposed Provincial Hwy & Interchange
Proposed Regional Road
Proposed Regional Cooridor
Collector Road
Main Street
Potential Connecting Corridor
Conceptual Trails and Pathway System
Provincial Highway
Regional Road
Local Road
Private Lane
Rail line
Township Boundary
Settlement Area Boundary
Hopewell Creek Rd
Spitzig Rd
Ebycrest Rd
Bridge St E
Maplecrest Dr
Ravenswood Rd
Woolwich St N
Riverview
Victoria St N
Schiefele Pl
Fountain St N
Dolman St
Wakefield St
Joseph St
Kennedy Rd
Curtis St
Tilbury St
Norwich Rd
Eva Dr
Fireside Dr
Dovercourt Rd
Menno St
Lonsdale Rd
Woolwich St S
City of Kitchener
Grand River
Brandy Cres
Potential Ottawa Street Crossing
Otterbein Rd
Cober Rd
N
W
E
S
0 162.5325 650 975
Meters
c. Teranet Land Information Services Inc. and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2020
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Breslau SchC Settlement.mxd

Appendix 'I', Regional Modification No. 32

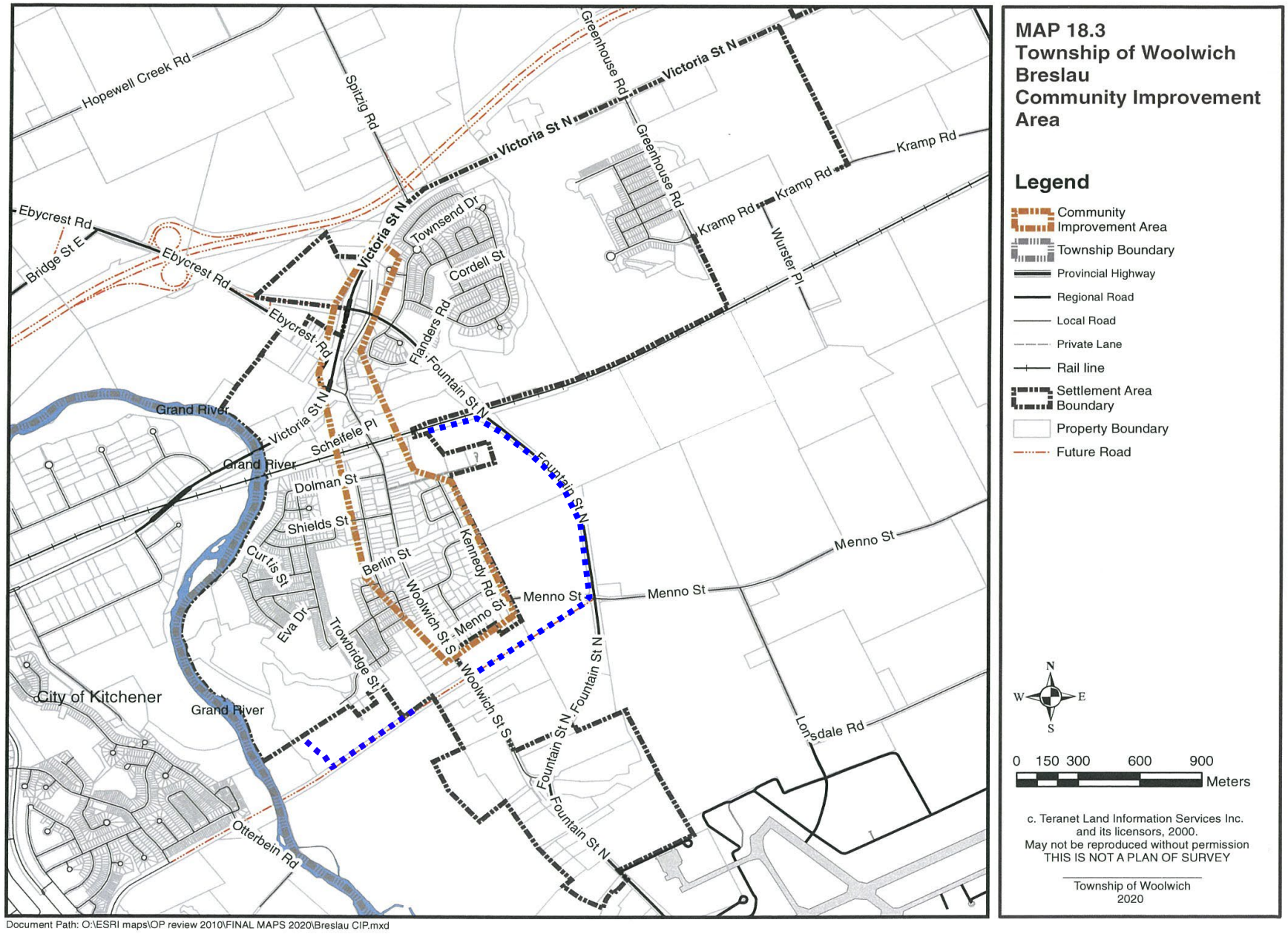
Revised location of "Settlement Area Boundary"


Schedule A
Township of Woolwich
Township Urban Area
Settlement Plan
Elmira
Land Use
Legend
Property Lines
Provincial Highway
Regional Road
Township Road
Private Lane
Rail line
Settlement Area Boundary
Site Specific Policy Area
Core Area
Commercial
Service Commercial
Natural Hazard
Environmental Protection
Industrial
Residential and Ancilliary Uses
Open Space
AREA 11 POLICY AREA
LUNOR POLICY AREA
CHURCH STREET POLICY AREA
NORTH ARTHUR STREET POLICY AREA Defferal No. 4
NORTH - EAST POLICY AREA
BARNSWALLOW DR. POLICY AREA
HIGH ST. POLICY AREA
BECKER MILK COMPANY LIMITED POLICY AREA
MEMORIAL AVE. POLICY AREA
SOUTH - EAST INDUSTRIAL AREA
SOUTH EAST POLICY AREA
ARTHUR STREET SERVICE COMMERCIAL POLICY AREA
LIGHT INDUSTRIAL LIMITED COMMERCIAL POLICY AREA
SOUTH - EAST INDUSTRIAL AREA
1.9 HA. PORTION
ARTHUR STREET/ SOUTHFIELD DR. SERVICE COMMERCIAL POLICY AREA
GINGERICH POLICY AREA
1A-1 POLICY AREA
SOUTHWOOD 4 POLICY AREA
SOUTH ARTHUR STREET RESIDENTIAL/ COMMERCIAL POLICY AREA
PINTAIL EXTENSION
SOUTH - WEST POLICY AREA
Kenning Pl
Arthur St N
Snyder Ave N
Riverside Dr W
William St
Ann St
Herbert St
Eldale Rd
Church St W
High St
Church St E
Line 86
Bristow Cres
Porchlight Dr
Barnswallow Dr
Hampton St
Park Ave W
South St W
Brookmead St
Sugar King Dr
Memorial Ave
Centre St
Duke St
South St E
Park Ave E
Queen St
Snyder Ave S
First St W
First St E
Eagle Dr
Crane Dr
Muscovey Dr
Flamingo Dr
Meadowlark Rd
Floradale Rd
Howard Ave
Industrial Dr
Kingfisher Dr
Oriole Pky W
Oriole Pky E
Mockingbird Dr
Nightingale Cres
Pintail Dr
Whippoorwill Dr
South Field Dr
Union St
South Parkwood Blvd
Arthur St S
Earl Martin Dr
New Jerusalem Rd
Listowel Rd
Three Bridges Rd
Scotch Line Rd
3B
11
10
4
9
8
1A-1
1A-2
N
W
E
S
0 120 240 480 720 960
Meters
c. Teranet Land Information Services Inc. and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2021
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Elmira.mxd


Whippoorwill Dr
Grey Owl Dr
Woodberry Cres
Bur Oak Dr
Timber Trail Rd
Bitternut Pl
Burlwood Dr
South Parkwood Blvd
Listowel Rd
Schedule A1
Township of Woolwich
Southwood 4 -
1143 Listowel Road
Legend
Name
Southwood 4 Policy Area
Development Area 1
Development Area 2
Development Area 3
Property Lines
Provincial Highway
Regional Road
Township Road
Private Lane
Rail line
Settlement Area Boundary
N
W
E
S
0 25 50 100 150 200
Meters
c. Teranet Land Information Services Inc.
and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2021
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Southwood 4.mxd



Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Elmira Transportation Network.mxd


MAP 18.3
Township of Woolwich
Breslau
Community Improvement Area
Legend
Community Improvement Area
Township Boundary
Provincial Highway
Regional Road
Local Road
Private Lane
Rail line
Settlement Area Boundary
Property Boundary
Future Road
Hopewell Creek Rd
Spitzig Rd
Victoria St N
Greenhouse Rd
Kramp Rd
Wurster Pl
Ebycrest Rd
Bridge St E
Townsend Dr
Cordell St
Flanders Rd
Fountain St N
Grand River
Scheifele Pl
Dolman St
Shields St
Curtis St
Berlin St
Kennedy Rd S
Woolwich St S
Menno St
Eva Dr
Trowbridge St
City of Kitchener
Otterbein Rd
Lonsdale Rd
N
W
E
S
0 150 300 600 900
Meters
c. Teranet Land Information Services Inc. and its licensors, 2000.
May not be reproduced without permission
THIS IS NOT A PLAN OF SURVEY
Township of Woolwich
2020
Document Path: O:\ESRI maps\OP review 2010\FINAL MAPS 2020\Breslau CIP.mxd

Region of Waterloo

Transportation and Environmental Services

Transit Services

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	September 2022 Transit Service Plan

---

1. Recommendation:

That the Regional Municipality of Waterloo approve the following as described in report TES-TRS-22-09 dated June 7, 2022:

a) Restore university and college oriented transit services beginning on Monday September 5, 2022;

b) Restore iXpress Routes 201 and 202 frequency to every 10 minutes in the peak period beginning by Monday January 2, 2023; contingency plans will consider adding key service in the fall of 2022 as resources become available; and

c) Defer the implementation of the Cambridge network redesign to Monday, April 23, 2023, subject to 2023 budget approval.

2. Purpose / Issue:

Transit ridership has been increasing throughout 2022 and is expected to increase further as more post-secondary students return in Fall 2022 and as a result of overall increased economic activity. The proposed expansion of the Cambridge transit network is also scheduled for Fall 2022. This network expansion supports ridership growth and future Stage 2 ION implementation.

COVID has increased staff turnover and has restricted GRT's ability to hire and train new bus operators. The shortage of trained operators will require the return of pre-pandemic service and the planned transit expansions in Cambridge to be phased.

3. Strategic Plan:

The restoration and expansion of transit service levels supports Sustainable Transportation Objective 2.1: Enhance the transit system to increase ridership and ensure it is accessible and appealing to the public.

4. Key Considerations:

a) To meet the anticipated demands, and support current and future U-Pass programs, it is proposed that service reinstatements be considered on a number of university and college oriented routes (various trips added back in at key times), as well as, restoring the service frequency on iXpress routes 201 and 202 to every 10 minutes in the peak periods from the current 15 minutes.

b) Currently the biggest constraint to adding service is hiring and training enough transit operators to drive the buses. As a result, it is proposed that the implementation of the needed service be phased-in. There are already capacity issues (overloaded buses) on buses serving the Universities and College. With increasing numbers of students expected to attend classes in fall 2022 it is recommended that as much university/college service be restored in September as can be accommodated by the anticipated operator complement. Additional service, up to pre-pandemic levels or as required to avoid over-crowding, would be implemented during the fall as more new operators are hired and complete their training.

c) To ensure a proper implementation of the service expansion in Cambridge, it is recommended that the changes be deferred to Spring 2023. Due to the way the service changes are intrinsically linked together and the need to properly promote the service changes to the public, this service cannot be phased in. It is not recommended to implement the Cambridge expansion before the restoring of pre-pandemic service to the Universities/College. As noted above there is already overcrowding with more anticipated in Fall 2022 on the University/College routes. Implementing the Cambridge expansion in Fall 2022 would not leave enough capacity to address the expected University/College overloads. It is also very typical that the new service in Cambridge would initially have lower ridership which would ramp up as people became familiar with the new service.

5. Background:

In September 2021, the restoration of transit service began in anticipation of the return of post-secondary students to more in-class and on-campus activities and of increased activity as the pandemic evolved. This was based on a June 2021 report on September 2021 Service Levels (TES-TRS-21-09) which recommended restoring service to 94% of pre-pandemic levels.

While ridership improvements stalled in the winter of 2021-22 due to the pandemic wave caused by the Omicron variant, growth has resumed and is expected to continue for the rest of the year. The more recent pandemic waves appear to be having decreasing impacts on transit usage trends.

The following shows the state of ridership and revenue to date in 2022:

	2019		2021		2022				2022 cp. To Pre-pandemic	
	Ridership	Revenue ($)	Ridership	Revenue ($)	Projected Ridership	Projected Revenue ($)	Actual Ridership	Actual Revenue ($)	% Riders	% Rev
Jan	1,922,055	3,584,373	562,550	1,175,586	1,196,498	2,740,716	805,155	2,510,759	42%	70%
Feb	1,732,642	3,402,171	571,140	1,229,218	980,239	2,656,090	975,093	2,774,318	56%	82%
Mar	1,971,396	3,532,577	800,267	1,516,871	1,335,197	2,747,567	1,434,000	3,546,629	73%	100%
Apr	1,721,439	3,231,962	623,849	1,261,583	1,217,762	2,359,449	1,100,179	3,058,562	64%	95%
Year to Date	7,347,532	13,751,082	2,557,806	5,183,258	4,729,695	10,503,823	4,314,427	11,890,268	59%	86%
Year End	21,964,989	39,801,405	9,741,109	22,876,879	15,948,913	31,685,181				

As can be seen in the table, recovery is continuing to occur and transit staff want to ensure we will be prepared to meet the needs of residents of the Region.

In addition to increased activities at post-secondary institutions, more employers are getting employees back to the workplace such as with the hybrid model. This will also lead to increased ridership on GRT services and ridership is already significantly higher than last year. While it has not reached pre-pandemic numbers overall, key routes or time periods are approaching those numbers and transit services needs to accommodate those demands.

Post-secondary schools and high schools are now back at campus to a larger degree than Fall 2021. U-Pass programs have been restored. While there is, and likely will continue to be, some on-line learning, it is likely Fall 2022 will see significant increase campus activity as more classes will be on campus and be much closer to a pre-pandemic state.

Enrollment is either meeting or exceeding what was occurring prior to the pandemic. The University of Waterloo had 38,653 full-time and part-time students in January 2019, which increased 40,486 students in January 2022. Laurier had 17,192 full-time and part-time students at Waterloo Region sites in January 2019 and 17,300 in January 2022. Both schools anticipate a fulsome return to campus for September 2022 and that numbers will be similar to the Winter 2022 Term. Ridership impact for September will be greater because student on-campus and community activities are anticipated to be much closer to pre-pandemic levels.

Conestoga College had 19,841 students this past January, which is about 4,500 higher than pre-pandemic. The impact on transit was lower due to 30% of the classes being remote learning. Again, as more on-campus activity occurs and enrollment continues to increase, the potential overloads on transit will be more noticeable.

There have already been a number of complaints from riders about overloads on some routes

servicing the schools. With the enrollment and on-campus trends currently seen, the strains on the service will likely increase and be more noticeable on key routes.

Currently, most of this service is accounted for within the GRT budget. Any additional service could be provided by utilizing revenue that has projected for 2022 in excess of the current budget totals. This is outlined in more detail in the Finance section below. Even with these changes, there are a number of services that will not have been restored to their pre-pandemic levels. These include a large number of late night services, additional frequency on Route 7 (short-turn service) and two-way service on Route 55.

The biggest constraint is hiring enough transit operators to drive the buses. Currently there is a lack of applicants and delays in recruiting. In addition, there are limits on the size of Transit Professional Operator Training (TPOT) classes due to COVID protocols. All operators must go through this training prior to beginning to drive. Currently eight staff can be trained in each 5-week course. When combined with natural attrition of staff (retirements, moving to other employment), there will be a limited number of new staff available by September.

This is not unique to GRT but in the post-pandemic world is being experienced by most transit agencies across the country. Staff have continually discussed the issue with others in the industry in order to look at options to improve the situation. Similar to other areas of the economy, it is anticipated that this situation will continue for a number of years until the situation “normalizes” and filling staff needs will no longer be a constraining factor in providing the services needed by our community.

Training classes will eventually increase in size up to 15-18 employees as Public Health measures are reviewed by Regional Health & Safety staff and they can be confident that the larger size can be safely accommodated.

The service being restored to serve the universities and college include primarily Routes 13 and 19 with numerous single trips added at key times on several other routes including 8, 12, 29, 31, 110 and 201.

Routes 201 and 202 iXpress have had overloads reported at various times and points along the routes. This is expected to grow in the fall which is why the service needs improved frequency. It is proposed to implement this at the start of the winter 2023 service period. Contingency plans will be looked at in order to supplement service in the fall where possible as the staff complement increases.

To ensure a proper implementation of the service expansion in Cambridge, it is recommended that the changes be deferred to Spring 2023. Due to the way the service changes are intrinsically linked together and the need to properly promote the service changes to the public, this service cannot be phased in. It is anticipated that not enough new operators would be in place by September to implement the service and the anticipated overloads on other routes could not be properly responded to if staff are not available.

As part of the Cambridge improvements, additional spring service on the Route 61 and the 203 will be implemented. These changes will address service issues and overloads that are currently being experienced by customers on those routes due to service reductions that occur in the spring and summer period.

The Cambridge redesign is intended to create more direct service, support current travel patterns and to increase long-term ridership in advance of Stage 2 ION LRT. Below are key considerations of the redesigned network:

- Redesigned routes would better connect neighbourhoods to major destinations such as shopping centres, schools and employment areas.
- More routes would connect directly to Ainslie Terminal and Cambridge Centre Station, where connections to frequent routes such as 302 ION Bus are available.
- Improved hours of operation and increased frequency of service during weekday evenings and weekends.
- Expanded service to new growth areas in southeast Galt.

Public Information Centres (PIC's) were held in mid-May to inform the public of the proposed service changes and to convey changes that were made in response to feedback received from the public. While the revisions that were made addressed the majority of concerns raised in the feedback, staff has had minimal time to address any additional concerns raised during the PIC's. By deferring the final implementation, staff can provide a more fulsome review of any new feedback.

The anticipated additional bus operator needs for all the services outlined above would be as follows:

Service	2022 Service Hours	Annual Service Hours	Operators Required
University/College Service	3,100	8,940	5
Route 201/202 Reinstatement	5,606	14,976	10
Cambridge Redesign	8,100	25,500	14

6. Area Municipality Communication and Public/Stakeholder Engagement:

Staff have on-going discussions with university and college administration to review the projected enrollment numbers for each term in order to assist in determining service demand and potential locations and time of overload concerns.

7. Financial Implications:

The Region's approved 2022 Grand River Transit operating budget includes a provision of

$641,000 to provide for the launch of an additional 8,000 service hours in 2022 in support of the GRT Business Plan. This cost was to be annualized to $2,004,000 in 2023 for a total 25,000 service hours.

As set out in the table below, the proposed 2023 and 2024 budgets would be adjusted to reflect restoration of service in the university and college areas and on route 201 and 202, as well as the implementation of the Cambridge area network redesign.

	2022 Budget	Proposed 2022 Service Level Changes	2022 Variance	2023 Budget	2024 Budget
Expenditure					
University/ College Service	$0	$285,000	$285,000	$823,000	$823,000
iXpress Route 201/202 Reinstatement	$0	$0	$0	$1,378,000	$1,378,000
Cambridge Redesign	$641,000	$0	($641,000)	$1,623,000	$2,434,000
Total Service Restoration	**$641,000**	**$285,000**	**($356,000)**	**$3,824,000**	**$4,635,000**
Incremental Expenditure				**$3,824,000**	**$811,000**

Through the 2023 Budget process, staff will provide revised estimates for 2023 and 2024 revenues, which may help to offset the increased costs of service restoration in 2023 and 2024.

The proposed service hours are as set out below:

	2022 Budget	Proposed 2022 Service Level Changes	2022 Variance	2023 Budget	2024 Budget
Service Hours					
University/ College Service	0	3,100	3,100	8,940	8,940
iXpress Route 201/202 Reinstatement	0	0	0	14,976	14,976
Cambridge Redesign	8,000	0	(8,000)	17,633	26,450
Subtotal Service Hours	**8,000**	**3,100**	**(4,900)**	**41,549**	**50,366**
Incremental Service Hours				**33,549**	**8,817**

8. Conclusion / Next Steps:

Pending Council approval of the service level restoration and expansion plan staff will: begin scheduling the additional service and developing bus operator work assignments; hire and train bus operators; and develop a communication plan for the public and stakeholders detailing the Fall service schedule improvements.

Staff will continue to monitor changing ridership levels and travel patterns as the economic recovery progresses and will make recommendations to adjust services accordingly.

Attachments / Links:

NIL.

Prepared By: **Blair Allen**, Acting Manager, Transit Development

Reviewed By: **Neil Malcolm**, Acting Director, Transit Services

Approved By: **Thomas Schmidt**, Commissioner, Transportation & Environmental Services

Region of Waterloo

Transportation and Environmental Services

Transportation

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Downtown Cambridge Truck Diversion Study

---

1. Recommendation:

For information.

2. Purpose / Issue:

To share the interim results of the Downtown Cambridge Truck Diversion Study in the City of Cambridge and to inform Council of staff's next planned steps leading to a recommendation for this project.

3. Strategic Plan:

This update supports Strategic Focus Area 2 (Sustainable Transportation), specifically 2.3 Increase participation in active forms of transportation (cycling and walking) and 2.4 Improve road safety for all users - drivers, cyclists, pedestrians, horse and buggies along with Area 5 (Responsive and Engaging Public Service), specifically 5.2 to provide excellent citizen centered services that enhance service satisfaction.

4. Key Considerations:

a) Truck Studies

As requested by the City of Cambridge and part of an overall exercise to review the truck travel patterns within Downtown Cambridge staff conducted a truck origin-destination survey in the spring of 2021 and collected new traffic data in March/April 2022. The collected data was analysed to identify the truck travel patterns and to understand the impact of potentially restricting trucks that did not need to be in Downtown Cambridge. Initial results from these analyses indicate that from the approximately 1,600 trucks per day on Water Street near McQueen Shaver Boulevard, over 62% (1000-1150) could be diverted to other routes such as McQueen Shaver Boulevard, Franklin Boulevard, Dundas Street, and Concession/Main Street. Please refer to Appendix A of this report for a map displaying the alternative routes.

b) Assessment of Impacts of Truck Diversion along McQueen Shaver Boulevard

A truck restriction in Downtown Cambridge would result in additional trucks along the alternative routes noted above. Based on new noise assessments, staff has determined that the additional trucks that would be diverted as a result of a truck restriction in Downtown Cambridge would be sufficient to trigger the warrant for a noise wall for some of the homes along McQueen Shaver Boulevard according to the Regional Noise Policy. As such, a staff recommendation to restrict trucks in Downtown Cambridge would also include a recommendation to install noise walls along portions of McQueen Shaver Boulevard. The noise walls along McQueen Shaver Boulevard would be up to 1500 metres in length with the actual extent determined through detailed design. The approximate cost of the additional noise walls along McQueen Shaver Boulevard is estimated to be up to $4 million.

c) Next Steps for Truck Diversion Study

As per usual practice, prior to recommending any truck restrictions in Downtown Cambridge, staff are planning to undertake public consultation to hear concerns from all those who may be affected by the re-routing of trucks around the downtown. This public consultation is planned for late 2022, followed by a final recommendation to Regional Council in early 2023.

Staff wish to be as proactive as possible, so that in the event that Council approves the truck restrictions in early 2023, the noise walls along McQueen Shaver Boulevard can be constructed as soon as possible. With that objective in mind, staff will be undertaking some design in 2022 of the noise walls along McQueen Shaver Boulevard, so that if the truck restrictions are approved in early 2023 then the construction of these walls can be tendered as early as possible. The target timeline for this tender would be 2023, and the work would be in the same tender as the Franklin Boulevard noise walls.

5. Background:

In the fall of 2020, Cambridge City Council asked the Region to investigate the possibility of restricting the through trucks movement in the core of Downton Cambridge on Water Street and Ainslie Street.

The plan to build Regional Roads around Cambridge has been in place for many years (1965 - South Boundary and East Boundary roads). Along with this plan, it was assumed traffic (autos and trucks) would divert from the downtown area and has been documented for over 25 years in various policies and studies. The additional east-west roadway capacity via South Boundary (now called McQueen Shaver Boulevard) and the East Boundary corridors to connect to 401 has been in the Region’s and City’s long-term plans for over 50 years.

The 2010 Environmental Assessment for the McQueen Shaver Boulevard refers to the

diversion of truck traffic from the Hespeler Road/Water Street (Highway 24) corridor to Franklin Boulevard and Dundas Street (Highway 8).

The City of Cambridge Transportation Master Plan of 2020 developed a goods movement strategy that focuses on connectivity for truck routes and the impacts on sensitive areas. The plan's highlight included "Reducing truck traffic in sensitive areas such as core areas".

The diversion of trucks from the narrow streets in the heart of downtown Cambridge would contribute to the revitalisation of downtown by allowing the development of a more people-friendly street environment. A vibrant downtown is an essential component of a successful city.

6. The Area Municipality Communication and Public/Stakeholder Engagement:

In late 2022 staff will undertake public engagement through the Engage WR platform that will host relevant project information to obtain input from all that would be affected by the diversion of trucks around the downtown.

City of Cambridge staff have been apprised of the findings of the study to date and are supportive of the Downtown Cambridge truck restriction.

7. Financial Implications:

There are sufficient funds in the Region's 2022-2031 Capital Program to retain a consultant to design the noise walls for Franklin Boulevard and McQueen Shaver Boulevard. The project budget for the construction of the noise walls on Franklin Boulevard as well as the noise walls along McQueen Shaver Boulevard, funded from the Roads Regional Development Charge Reserve Fund, will be updated as part of the 2023 capital budget process.

8. Conclusion / Next Steps:

NIL.

9. Attachments / Links:

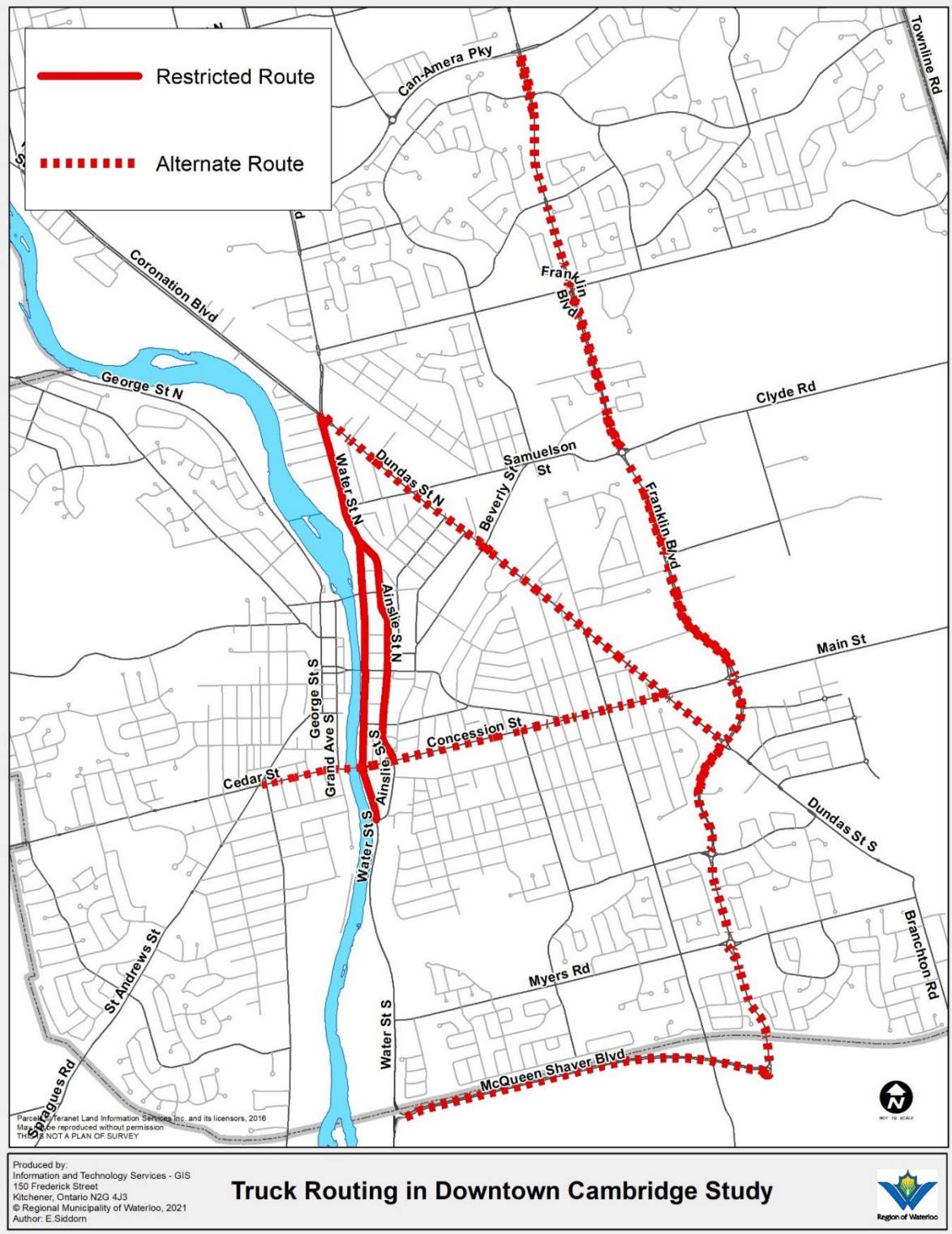
Appendix A: Map Displaying Potential Truck Restrictions on Water and Ainslie Streets and Potential Alternate Routes

Prepared By: Paula Sawicki, Manager, Transportation Planning

Reviewed By: Steve van De Keere, Director, Transportation

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services

Appendix A: Identification of Potential Truck Restrictions on Water and Ainslie Streets and Potential Alternate Routes



Region of Waterloo

Transportation and Environmental Services

Transportation

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Posted Speed Limits in School Zones

---

1. Recommendation:

That the Regional Municipality of Waterloo approve the lowering of posted speed limits in school zones on Regional roads by time, day and month as a Pilot Project as per the following additions to Schedule 17, Speed Limits, by amending the Region's Traffic and Parking By-law 16-023, as amended:

- Add to Schedule 17, Rates of Speed, Regional Road 52 (Bridge Street) from 95m South of Woolwich Street to 33m South of Bridle Trail, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 53 (Courtland Avenue) from 32m North of Madison Avenue to 83m North of Peter Street, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 9 (Bridgeport Road) from 100m West of Margaret Avenue to 225m East of Regional Road 8 (Weber Street), Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 1 (Waterloo Street) from 20m North of Laschinger Boulevard to 70m South of Victoria Street/Forrest Avenue, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 50 (Westmount Road) from Gilmour Crescent to 10m South of Greenbrook Drive, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 23 (Katherine Street South) from 40m South of Meadowbrook Place to Allan Street, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 24 (Water Street) from 68m south of Malcolm Street to 15m North of Dayton Street, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 50 (Westmount Road) from 35m North of Dunsmere Drive to 43m North of Regional Road 4 (Ottawa Street), Maximum

Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;

- Add to Schedule 17, Rates of Speed, Regional Road 12 (Bridge Street) from 50m East of Meadowbrook Court to 30m East of Front Street, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 8 (Weber Street) from 93m South of Borden Avenue to 50m South of Stirling Avenue, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 15 (Lobsinger Line) from 140m West of Charles Street to Regional Road 10 (Herrgott Road), Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 58 (Fischer-Hallman Road) from 28m North of McGarry Drive to Queen's Boulevard, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 55 (Victoria Street) from 131m West of Westforest Trail to 130m East of Westforest Trail/Eastforest Trail, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 8 (Weber Street) from 127m South of Montgomery Road to 11m South of Edmund Road, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 6 (Frederick Street) from Spetz Street to 38m East of Lancaster Street (Ellen Street) , Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 21 (Arthur Street) from First Street to 20m South of Ernst Street, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 8 (Weber Street) from 52m South of Broadview Avenue to 50m North of Wilfred Avenue, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 86 (Line 86) from 415m from East of Regional Road 10 (Herrgott Rd) to 810m East of Regional Road 10 (Herrgott Rd)/Sideroad 18, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 57 (University Avenue) from 130m West of Westvale Gate/Resurrection Drive to 103m West of Regional Road 58 (Fischer-Hallman Road) , Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 1 (Snyder's Road) from 197m East of Regional Road 5 (Nafziger Road) to 115m West of Brenneman Drive, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 9 (Erb Street West) from 18m East of Westhaven Street to 192m East of Erbsville Court, Maximum Speed

40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;

- Add to Schedule 17, Rates of Speed, Regional Road 8 (Weber Street) from 20m South of Regional Road 15 (King Street) to 23m South of Milford Avenue, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 70 (Erbsville Road) from 128m South of Laurelwood Drive to 65m South of Wideman Road, Maximum Speed 40km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 38 (Maple Grove Road) from Saltsman Drive to 25m West of Regional Road 17 (Fountain Street), Maximum Speed 50km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 10 (Herrgott Road) from 25m South of Broadway Street to 40m South of Geddes Street, Maximum Speed 60km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June;
- Add to Schedule 17, Rates of Speed, Regional Road 30 (Shantz Station Road) from 400m North of Highway 7 (Victoria Street) to 274m South of Hopewell Creek Road, Maximum Speed 60km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June; and
- Add to Schedule 17, Rates of Speed, Regional Road 16 (Kressler Road) from 227m South of Rocky Lane to 570m South of Rocky Lane, Maximum Speed 60km/h, 7:00 a.m. to 5:00 p.m., Monday to Friday, September to June.

as outlined in Report TES-TRP-22-06 dated June 7, 2022.

2. Purpose / Issue:

This report serves to respond to a motion of Regional Council on January 26, 2022 directing staff to conduct a review and consider options for setting appropriate speed limits in all 35 school zones on Regional roads that do not currently have speed limits of 40km/h.

3. Strategic Plan:

The report supports Strategic Objective: 2.3, Increase participation in active forms of transportation (cycling and walking), Strategic Objective 2.4 Improve road safety for all users/drivers, cyclists, pedestrians, horse and buggies and Strategic Objective 4.1 Improve child and youth wellbeing in Waterloo Region.

4. Key Considerations:

a) Conditions at Existing School Zones

In 2015, Regional Council requested that staff review options to reduce travel speeds, based on speed surveys and other reviews, on Regional roads in all 35 school zones. To address this request of Regional Council, staff undertook a comprehensive study, summarized in Report TES-TRP-15-03.2 (included in Appendix A). In summary, staff concluded that speeding in existing school zones was not a significant systemic issue

and was not contributing to pedestrian or cyclist collisions near schools.

b) School Zone Speed Limit Strategies

To address the recent request by Regional Council, staff developed and assessed the following school zone speed limit strategies:

- Maintain existing speed limits;
- Reduce speed limits;
- Reduce Speed Limit by time/day when Flashing;
- Reduce speed limit when ASE is implemented; and
- Reduce speed limit by time/day and month.

c) Recommended Strategy

Based on an assessment of the alternative strategies, staff are recommending that posted speed limits in 31 of the 35 school zones on Regional roads be reduced by time/day and month. School zones with Maximum Speed by Time of Day and/or Days and Months can regulate lower speed limits during regular school times. During non-school times, the existing posted speed limit would then be in effect. This strategy adheres to current Regional practices for determining appropriate speed limits. This option would meet both driver and school safety expectations. The motoring public would likely respect variable speed limits by time-of-day more than full time speed limit reductions because lower speed limits during school hours is both meaningful and logical. Additionally, previous speed studies in school zones (as discussed in Report TES-TRP-15-03.2) indicate that drivers are slowing down during school hours. Staff also recommend that those four remaining school zones with existing 24/7 40km/h posted speed limits continue to retain the existing 24/7 40km/h speed limit.

5. Background:

School Zones Fronting Regional Roads

Currently, within the Region of Waterloo, there are 35 school zones fronting Regional roads. Of the 35 school zones, four school zones currently have a 24/7 40km/h posted speed limit. The remaining 31 school zones have a posted speed limit greater than 40 km/h. Each school has frontage or direct access to/from a Regional road. The Highway Traffic Act defines a school zone as a portion of highway that adjoins the entrance to or exit from a school and within 150 metres along a highway, in either direction, beyond the limits of the land used for the purposes of a school. There is a total of 16 Automated Speed Enforcement (ASE) locations in school zones within the Region. Of those 16, there are six school zones fronting a Regional road leaving 29 of the 35 school zones without ASE. Please refer to Appendix B for a summary of school zones on Regional Roads.

ASE in School Zones

The Region’s ASE program (Phase 1A) was launched in September 2021, which

included eight sites approved during Phase 1A. All eight sites were commissioned before the end of 2021.

In late 2021, the ASE program was expanded to include eight additional locations (Phase 1B) for a total of 16 sites. All 16 sites are planned to be operational by the summer of 2022. Please refer to Appendix C for a summary of all 16 sites approved as part of Phase 1A and Phase 1B.

Current Regional Practice for Setting Speed Limits

Current Regional practice is to set speed limits at or about the average travel speed of traffic because this is most likely to produce a uniformly moving traffic stream. Traffic flowing at a uniform speed generally results in fewer collisions. With uniform speed, drivers are less impatient, pass less often, and are less likely to tailgate, which reduces both head-on and rear-end collisions. The posting of an appropriate speed limit also simplifies the work of enforcement officers because most of the traffic is moving at or near the posted speed. With an appropriate speed limit, blatant speeders are easily spotted, safe drivers are not penalized, and police officers are not asked to enforce and defend unrealistic and arbitrary speed limits.

Existing Operating Speeds in School Zones

In 2015, Regional Council requested that staff review options to reduce travel speeds, if required, based on speed surveys and other reviews, on Regional roads near school zones. A copy of report TES-TRP-15-03.2 is included in Appendix A. In summary, staff concluded that speeding in existing school zones was not a significant systemic issue and was not contributing to pedestrian or cyclist collisions near schools. At that time, staff did not recommend reducing speed limits in school zones but recommended physical measures to encourage drivers to lower their speed and to implement proven safety countermeasures to enhance school zone safety where applicable and feasible, as part of all transportation capital projects.

Collision History Within School Zones

Staff assessed the Region’s most recent 5-year collision history (2014 to 2018) involving pedestrians, cyclists and motorists within all school zones and Regional roads abutting schools. Staff concluded again that there were no unusual collision patterns involving pedestrians and or cyclists within school zones or abutting Regional roads. Table 1 below summarizes the 5-year collision history involving pedestrians and cyclists within school zones and abutting Regional roads.

Table 1 – Pedestrian and Cycling Collision History (2014 to 2018)

	Pedestrian Collision Location				Cycling Collision Location		
	Traffic Signal	Midblock	Stop Control		Traffic Signal	Midblock	Stop Control
Elementary Aged	0	1	0	Elementary Aged	0	0	0
Secondary Aged	0	2	0	Secondary Aged	0	0	0
Adult	0	0	0	Adult	0	1	0
Total	**0**	**3**	**0**	**Total**	**0**	**1**	**0**

School Zone Speed Limit Strategies Considered

Regional staff developed and assessed the following school zone speed limit strategies:

- Maintain existing speed limits;
- Reduce speed limits;
- Reduce Speed Limit by time/day when Flashing;
- Reduce speed limit when ASE is implemented; and
- Reduce speed limit by time/day and month.

The following is an assessment of the above options.

Maintain Existing Speed Limits

As summarized in Report TES-TRP-15-03.2, motorists are largely adhering to the posted speed limits fronting schools; drivers in general are slowing down during regular school hours. The following table is an excerpt from report TES-TRP-15-03.2 that summarized the average speed of motorists observed in school zones and abutting Regional roads by existing posted speed limit.

Table 2 – Average Observed Operating Speeds

Posted Speed Limit	School Frontages	Average Speed Observed	Average Speed Observed During School Periods
40 km/h	3	48 km/h	45 km/h
40 km/h when flashing	2	50 km/h	45 km/h
50 km/h	31	52 km/h	50 km/h
60km/h	8	58 km/h	56 km/h
70 km/h	2	71 km/h	70 km/h
80 km/h	2	71 km/h	68 km/h

The observed average speed of motorists on Regional roads indicated that drivers were generally respecting speed limits set at 50 km/h or above. It was also noted that drivers were not necessarily respecting speed limits set lower than 50 km/h. Overall, Regional staff determined that drivers however were reducing their speeds in school zones during school hours.

Reduce Speed Limits

Existing speed limits are appropriate as outlined in Report TES-TRP-15-03.2. Research and local experience indicates that posting an artificially low speed limit, without additional measures, has little to no effect on driver behaviour and may cause an increase in collisions due to increased variability of driver speed causing tailgating and unsafe passing.

School zones where the Region has reduced the speed limit from 50km/h to 40km/h, with the use of signs only, shows that the average travel speed within these zones is 48km/h. This indicates that simply changing the posted speed limit by way of speed limit signs alone has little to no affect on reducing overall average travel speeds.

Reduce Speed Limit by Time/Day When Flashing

The Region has two (2) school zones on Myers Road that currently utilize School Zone Maximum Speed When Flashing signs. These signs include the use of two alternating flashing beacons, and when operated, regulate a lower speed limit during school hours. Regional staff studies regarding the effectiveness of these signs have shown little to no impact on driver speeds. Recently Regional Council approved lowering the speed limit on Myers Road to 40 km/h that will necessitate the removal of these signs.

The implementation of these School Zone Maximum Speed When Flashing signs in remaining school zones on Regional roads would negate the ability to utilize Automated Speed Enforcement (ASE) technology given potential legal challenges associated with the operation of the flashing beacons. The cost to install 66 School Zone Maximum Speed signs When Flashing in school zones on Regional roads would be approximately $765,000. The funds required to install these signs would likely be considered “throw-away costs” as Region staff anticipate the future expansion of the ASE program to school zones currently without ASE. Regional staff therefore does not recommend this option.

Reduce Speed Limit When ASE is Implemented

This recommendation would see the speed limit within a school zone reduced when ASE is implemented. School zones on Regional roads having speed limits of 50 km/h would be reduced by 10km/h and school zones on Regional roads with speed limits greater than 50 km/h would be reduced by 20km/h. School zones having speed limits of 40 km/h would remain at 40 km/h. Supporting ASE would be a key element in helping to ensure that the speed limit in these school zones are respected.

By the end of June 2022, the Region will have 16 ASE locations ready for active enforcement. 29 designated school zones along Regional Roads would remain without ASE until processing constraints can be removed from the ASE administrative framework as noted in Report TES-TRP-22-04 and further funding is provided to support the expansion of the ASE program. The existing ASE locations could also have a full-time reduction to the posted speed limit by 10km/h or 20km/h depending on the location.

Reduce Speed Limit by Time, Day and Month

Maximum posted speed limit signs having time, day and month limits is a new regulation passed by the Province to address ASE legal concerns associated with School Zone Maximum Speed When Flashing signs. This regulation permits a reduction to the posted speed limit in designated school zones by time of day, day of week and month of year using regulatory signs only. Regional staff lobbied and met with Provincial staff to develop new school zone regulatory signing without the use of flashing beacons. The new regulation, with the use of signs only, is the result of Regional staff's contributions on the ASE Committee.

School zones with Maximum Speed by Time of Day and/or Days and Months can regulate lower speed limits during regular school times. During non-school times, the existing posted speed limit would then take affect. This option adheres to current Regional practices for determining appropriate speed limits. This option would meet both driver and school safety expectations. The motoring public would likely respect variable speed limits by time-of-day more than full time speed limit reductions because lower speed limits during school hours is both meaningful and logical. Additionally, Regional staff speed studies in school zones already indicate that drivers are slowing down during school hours.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Nil.

7. Financial Implications:

It is estimated that the cost to reduce posted speed limits by implementing a maximum time of day posted speed reduction fronting 31 of the 35 schools along Regional roads with the use of signs only would be approximately $25,000. The Region's approved 2022-2031 Transportation Capital Program includes a budget of $135,000 in 2022 for Pedestrian and Cycling Countermeasures (Project #09646) to be funded from the Transportation Capital Reserve.

8. Conclusion / Next Steps:

After reviewing the options noted within this report, it is recommended that Regional Council approve the option to implement a Maximum Speed by Time, Day and Month within school zones that have a posted speed limit greater than 40km/h and that front a

Regional Road as a Pilot Project.

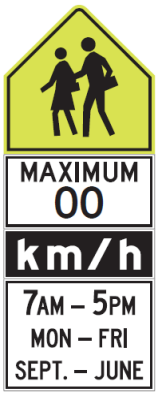
This practice could be implemented within all school zones now while not jeopardizing future ASE planned expansion. Regional road locations that have existing ASE would also receive a Maximum Speed by Time, Day and Month reduction to the posted speed limit. School zones would have the posted speed limit lowered by 10km/h to 20km/h depending on the location. Existing school zones having posted speed limits of 40 km/h would remain at 40 km/h. Table 3 summarizes the recommend speed limits by time, day and month. School zones currently without ASE would continue to be prioritized for ASE as planned.

Table 3 – Proposed Speed Limit Reductions by Time, Day and Month

Current School Zone Speed Limit	Proposed School Zone Time of Day Speed Limit	Proposed Hours	Proposed Days	Proposed Months
40	N/A	N/A	N/A	N/A
50	40	7am – 5pm	Mon – Fri	Sept – Jun
60	40	7am – 5pm	Mon – Fri	Sept – Jun
70	50	7am – 5pm	Mon – Fri	Sept - Jun
80	60	7am – 5pm	Mon – Fri	Sept – Jun

Figure 1 below illustrates an example of the required signage.

Figure 1 - School Zone with Maximum Speed by Time of Day/Days and Month



Staff anticipate that all new posted speed signs could be in place by the start of the 2022/2023 school year (September 2022). Staff will monitor operating speeds at all school zones and report back to Regional Council on the results. Staff will also continue to work with Area Municipal staff on the expansion of the ASE program.

9. Attachments / Links:

Appendix A: TES-TRP-15-03.2 (Docs 1971479)

Appendix B: School Zones fronting Regional Roads (DOCS 4057546)

Appendix C: Summary of ASE Locations (DOCS 4057546)

Prepared By: **Mike Jones**, Supervisor Traffic

Bob Henderson, Manager of Transportation Engineering

Reviewed By: **Steve van De Keere**, Director, Transportation

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Report: TES-TRP-15-03.2

Region of Waterloo

Transportation and Environmental Services

Transportation

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: October 27, 2015 **File Code:** T01-20/GEN/TWP

Subject: Review of Posted Speed Limits Near Schools

Recommendation:

That the Regional Municipality of Waterloo approve the implementation of proven physical measures and safety countermeasures where applicable and feasible to reduce operating speeds and enhance safety on Regional roads adjacent to schools as outlined in Report TES-TRP-15-03.2, dated October 27, 2015.

Summary:

At the Regional Council meeting held on April 22, 2015, Regional Council requested that staff review options to reduce travel speeds, if required, based on the speed surveys and other reviews, on Regional roads near school zones and report back on the findings in October 2015.

Staff reviewed motorist speed and collisions at 47 locations along all Regional roads that had an abutting school property within the Region of Waterloo.

Staff has concluded that speeding is not a systemic issue and is not contributing to pedestrian or cyclist collisions near schools. Staff has reconfirmed that the majority of pedestrian collisions continue to occur at traffic signals. In light of this review, staff is not recommending reducing speed limits in school zones at this time but is recommending physical measures to encourage drivers to lower their speed and to implement proven safety countermeasures to enhance school zone safety where applicable and feasible as part of all transportation capital projects.

Report:

1.0 Background

On May 12, 2014, the Township of Wilmot passed a resolution requesting the Region of Waterloo consider lowering the posted speed limit to 40 km/h along Regional roads fronting all schools and libraries in the Township of Wilmot. Regional staff undertook speed surveys and collision reviews at 8 locations in the Township of Wilmot, developed options and provided a recommendation to address those locations in Wilmot Township.

Based on the speed and collision reviews, and the Region's past experience with the lowering of posted speed limits below average operating speeds, staff recommended (as detailed in Report TES-TRP-15-03) that the Region maintain existing speed limits in school zones on Regional roads. Staff's recommendation was based on the following observations and conclusions as detailed in Report TES-TRP-15-03:

- The average speed of motorists is at or near the posted speed;
- Based on Region practice, the existing posted speed limits are appropriate at these locations;
- Drivers are already lowering their speed near schools to 8 km/h below the posted speed limits during times when children are arriving or leaving school;
- There are no pedestrian or motor vehicle collision problems at these locations; and
- In the absence of physical changes to the road itself, arbitrarily lowering posted speeds will have no appreciable effect on actual driver speeds.

At the April 14, 2015 Planning and Works Committee, Committee members heard concerns from a resident of New Dundee who requested the lowering of posted speed limits on Regional roads fronting schools. Following a discussion on various options to address this issue, Regional Planning and Works Committee did not approve Report TES-TRP-15-03 and directed staff to bring back a recommendation to Regional Council on April 22, 2015 that included a more comprehensive review of operating speeds near all schools on Regional roads, and possible options that could lower operating speeds including such measures as physical changes to the roads as well as new types of signs and education for drivers and students.

At the Regional Council meeting held on April 22, 2015, Regional Council requested that staff review options to reduce travel speeds, if required, based on the speed surveys and other reviews, on Regional roads near school zones and report back on findings in October 2015.

Staff have since reviewed the average speed and the 5-year collision history (2010 to 2014) involving pedestrians and cyclists along all Regional roads that have an abutting school property.

2.0 Function of Regional Roads

As per the Region's Official Plan, Regional roads are to provide safe, direct, accessible and multi-modal transportation links for moving people and goods. Regional roads are also intended to accommodate large commercial trucks in order to move goods.

3.0 Current Regional Practice for Setting Speed Limits

Current Regional practice is to set speed limits at or about the average travel speed of traffic because this is most likely to produce a uniformly moving traffic stream. Traffic flowing at a uniform speed generally results in fewer collisions. With uniform speed, drivers are less impatient, pass less often, and are less likely to tailgate, which reduces both head-on and rear-end collisions. The posting of an appropriate speed limit also simplifies the work of enforcement officers because most of the traffic is moving at or near the posted speed. With an appropriate speed limit, blatant speeders are easily spotted, safe drivers are not penalized, and police officers are not asked to enforce and defend unrealistic and arbitrary speed limits.

4.0 Existing Operating Speeds in School Zones

Regional staff conducted traffic speed surveys along all Regional roads where a school property (elementary, secondary and private schools) abuts a Regional road. It was identified that there are 47 schools with property that abuts a Regional road within the Region of Waterloo (13 public elementary schools, 27 public secondary schools and 7 private elementary schools).

The speed surveys were conducted to measure average traffic speeds over a 24-hour period. Speed data was collected in May, 2015 and where required follow up speed surveys were conducted in September, 2015. Appendix A summarizes the locations assessed and average measured speeds.

Staff assessed the average operating speed of motorists based on the posted speed limit. The following Table summarizes the average operating speeds observed for various posted speed limits.

Table 1 – Average Observed Operating Speeds

Posted Speed Limit	Number of School Zones	Average Speed Observed	Average Speed Observed During School Periods
40 km/h	3	48 km/h	45 km/h
40 km/h when flashing	2	50 km/h	45 km/h
50 km/h	31	52 km/h	50 km/h
60km/h	8	58 km/h	56 km/h
70 km/h	2	71 km/h	70 km/h
80 km/h	2	71 km/h	68 km/h

Based on the above analysis, motorists are largely adhering to the posted speed limit except when the posted speed limit is set at 40 km/h.

5.0 Collision History in School Zones

Staff conducted a review of the 5-year collision history (2010-2014) involving both pedestrians and cyclists along Regional roads in the vicinity of all schools within the Region that abut a Regional road. Please refer to Appendix C for a summary of pedestrian and cyclist collisions for the five-year period between 2010 and 2014.

5.1 Pedestrian Collisions

Staff's review shows that there were a total of 29 pedestrian collisions between 2010 and 2014 within the 47 sections of Regional roads that abut school property.

The review of pedestrian collisions in school zones has determined that the majority of collisions (59% or 17 of 29) involve adult pedestrians rather than school-aged children. The review also suggests the majority of collisions (20 out of 29) involving pedestrians occur at traffic signals. This assessment reaffirms that traffic control signals should not be considered a safety device for pedestrians. These collisions primarily occur because of the driver workload associated with turning manoeuvres. Elementary school children represent 10% (3 of 29) of all collisions while secondary school children were involved in 31% (9 of 29) of all collisions. Of the 12 collisions involving school-aged children 3 occurred outside of typical school hours. Table 2 below summarizes pedestrian

collisions.

Table 2 – Tabulation of Pedestrian Collisions by Location

	Pedestrian Collision Location		
	Traffic Signal	**Midblock**	**Stop-Control**
Elementary-Age	2	1	0
Secondary Age	7	2	0
Adult	11	4	2
Total	20	7	2

Staff's review shows that the majority (75% or 9 of 12) of collisions involving school-aged children occur at signalized intersections. Of note, four of the seven collisions involving high school students at a traffic signal occurred at the Franklin Boulevard/Saginaw Parkway intersection.

Of the 29 total collisions involving students and adults, Waterloo Regional Police Services indicated that no collisions were attributed to high speed.

5.2 Cycling Collisions

The 5-year collision history (2010 to 2014) at the 47 locations shows that there were 19 collisions involving cyclists. Table 3 provides a summary of cycling collisions by location.

Table 3 – Tabulation of Cycling Collisions by Location

	Cycling Collision Location		
	Traffic Signal	**Midblock**	**Stop-Control**
Elementary-Age	1	0	1
Secondary Age	0	1	0
Adult	10	2	4
Total	11	3	5

Adult cyclists (aged 18 and up) represent 84% (16 of 19) of the total cycling collisions. Elementary aged cyclists represent 11% (2 of 19) of collisions and secondary aged cyclists represent 5% (1 of 19) of the total. Similar to pedestrian collisions, the majority

of cycling collisions (58%) occurred at a signalized intersection where only 16% (3) occurred within a midblock section where there is school property abutting a Regional road. Waterloo Regional Police Services did not attribute high speed as a contributing factor in any of the collisions. Of the three school-aged cyclist collisions, two collisions occurred within normal school hours of operation.

Similar to pedestrians, the majority of collisions occur at traffic signals when motorists are turning.

6.0 Posted Speed and Pedestrian Collisions

As provided in Report TES-TRP-15-03.2, an assessment of pedestrian collisions in various speed limit zones (40 km/h to 80 km/h) over 287 km of Regional roads during the last 5-years does not conclude that roadways with lower posted speed limits have fewer pedestrian collisions. It does however suggest that median islands have a positive benefit to minimize collisions involving pedestrians. Please refer to Appendix D for a graph that illustrates this data.

7.0 Potential Measures to Reduce Average Operating Speed

Without the presence of active speed enforcement, current research clearly shows that reducing the average operating speed of motorists can only be accomplished through physical changes to the roadway to influence motorist behaviour. In general, physical changes to the road environment that reduce driver comfort generally causes drivers to slow down. The following table (Table 4) provides a summary of the physical measures to reduce average operating speeds, their effectiveness and potential impacts/risks.

Table 4 – Effectiveness of Physical Features to Reduce Operating Speeds

Effectiveness of Physical Measures to Reduce Average Operating Speed				
Measure	Effectiveness			Comments
	Positive	Negative	Neutral	
Narrower lanes	●			May impact cycling safety if no cycling facilities are present
Narrower shoulders	●			May impact pedestrians or cycling safety if no other facilities present
Adding sidewalks	●			Increased pedestrian activity which may have a positive affect on driver speeds
Urbanizing the corridor (adding curbs)	●			
Adding landscaping adjacent to the roadway (boulevard trees)	●			
Installing obstructions such as raised median islands	●			
Adding roundabouts	●			
Installing pedestrian refuge islands	●			
Buildings close to the roadway	●			
Existence of Driveways	●			May negatively impact pedestrians and cyclist safety due to increased conflict points
On-street parking	●			May negatively impact pedestrian and cycling safety
Speed bumps	●			Not an appropriate device for function of a Regional road
Chicanes	●			Not an appropriate device for function of a Regional road
Raised intersections	●			Not an appropriate device for function of a Regional road

Each year staff receives numerous concerns regarding the operating speed of motorists. The following non-physical measures, shown in Table 5, are frequently requested to reduce the average operating speed of motorists not only near schools but throughout the Region.

Table 5 – Effectiveness of Frequently Requested Measures to Reduce Operating Speeds

Effectiveness of Frequently Requested Measures to Reduce Average Operating Speed				
Measure	Effectiveness			Comments
	Positive	Negative	Neutral	
Enforcement	●			Only effective while present.
Lower speed limits			●	
Flashing 40km/h			●	
Stop control		●		Studies show that unwarranted stop controll increase average speed within midblock sections.
Traffic signals		●		Studies have shown increases in operating speed approaching traffic signals. Collisions typically increase following traffic signal installation.
Variable messaging radar devices		●		Studies show no positive effect to operating speeds. Collisions have shown to increase following installation.

Staff collaborates with Waterloo Regional Police Services on an ongoing basis to identify problematic sections of Regional road where speeding is considered problematic and or where speed may be contributing to collisions. Waterloo Regional Police Services do not have the staff time or resources to enforce these locations on a full-time basis.

8.0 Potential Measures to Improve Pedestrian and Cycling Safety

Staff continue to review measures to reduce both pedestrian and cycling collisions. These measures are shown in Table 6 and Table 7 below along with their effectiveness.

Table 6 – Effectiveness of Measures to Improve Pedestrian Safety

Effectiveness of Measures to Improve Pedestrian Safety				
Measure	Effectiveness			Comments
	Positive	Negative	Neutral	
Ladder crosswalks	●			
Pedestrian countdown signals	●			Device displays available time left to complete crossing
Leading pedestrian intervals	●			Allows pedestrians to start crossing for a period of time before motorists are allowed to proceed
Raised intersections				Not an appropriate device to maintain function of a Regional road
Medians	●			
Pedestrian refuge island	●			
Crossing guards	●			
Offset crosswalks	●			
Pedestrian Traffic Control Signals (IPS)			●	A controlled crossing for pedestrians however likely increase in motor vehicle collisions
Roundabout Installation	●			
Education			●	
Illumination	●			
Signs warning of pedestrians and cyclists			●	

Table 7 – Effectiveness of Measures to Improve Cycling Safety

Effectiveness of Measures to Improve Cycling Safety				
Measure	Effectiveness			Comments
	Positive	Negative	Neutral	
Reserved Cycling Lanes	●			
Bike boxes	●			
Protected Cycling phases	●			Protected movement at signalized intersections for cyclists

9.0 Proposed Legislation

9.1 Automated Speed Enforcement

Proposed Bill 99, Safer Roads and Safer Communities Act, was introduced in May 2015 as a private members bill. Bill 99 attempts to provide the Provincial Minister and municipal councils the ability to legislate the use of safety cameras in construction zones and community safety zones. It also includes legislation that a highway or a part of a highway may be designated as a community safety zone if the highway is adjacent to land on which a school, schoolyard, daycare, seniors' residence, community centre or playground is located.

Safety cameras would operate similar to red light cameras that are already in use but would monitor operating speeds rather than red light running. Should Bill 99 pass, it would allow Regional Council the ability to legislate school zones as community safety zones in which a safety camera could be installed within the zone.

A study in Sweden, where more than 1100 cameras have been installed, has documented that speed limit compliance improved from 50% to 80% in general and 95% at camera sites. Studies in Charlotte, North Carolina have shown a 16% reduction in total collisions and as much as 63% reduction in single-motor-vehicle collisions.

9.2 Default 40 km/h Posted Speed Limits

Earlier this year, the Ontario Transportation Minister announced a comprehensive review on the merits of reducing the default 50 km/h posted speed limit within urban communities to 40 km/h across Ontario. It is staff's understanding that 80% of the public do not support the default-speed reduction and that the majority of road authorities support speed reduction in general, but do not support simply reducing posted speed limits. Some municipalities such as Toronto have adopted practices of lowering posted speed limits, however Toronto at this time has limited this practice to low volume, low speed roadways only and not included higher volume / arterial type roadways.

10.0 Staff Recommendations

Upon review of the speed surveys and collision data analysed on Regional roads where school property abuts a Regional road staff has concluded that there is not a significant safety problem related to motorist speed. Staff has also researched and studied the impacts of arbitrary speed reduction initiatives such as lowering posted speed limits and has concluded that these initiatives have little to no impact on reducing driver speeds. This research was also recently confirmed again by the City of Kitchener through its pilot study lowering speed limits in 10 school zones as previously discussed in Report TES-TRP-15-03. Therefore staff is recommending that the existing posted speed limits be maintained on Regional roads that abut school property at this time. The research

and the Region's past experience clearly shows that arbitrarily lowering speed limits in the absence of any physical changes to the driving environment will have little to no effect on actual driver behaviour. While artificially lowering posted speed limits may create a perception of improved safety, the lack of change in driver behaviour will not result in any actual improvement in safety.

Staff is also recommending that the Region's Transportation Capital Program be enhanced such that for every Regional road project that includes a school zone, staff will endeavour to reduce operating speeds with the use of physical measures, that have a positive effect listed earlier, where applicable and feasible. Overall, the data suggests that safety countermeasure treatments for intersections are more likely to succeed in reducing pedestrian and cyclist collisions in school zones rather than speed reduction initiatives. Staff will therefore also endeavour to introduce as many proven pedestrian and cyclist countermeasures listed earlier as practically possible. For example, the use of medians and pedestrian refuge islands continue to prove to be one of the most effective countermeasures to reduce pedestrian collisions.

And further, staff strongly supports Bill 99, Safer Roads and Safer Communities Act, and its ability to allow municipal councils to legislate the use of safety cameras along roadways adjacent to land on which a school, schoolyard, daycare, seniors' residence, community centre or playground is located. More importantly, evidence suggests that the use of automated speed enforcement cameras are very effective in getting drivers to comply with posted speed limits. It is staff's opinion, based on research in Sweden, that these devices would be a very effective strategy to reduce motorist speed in school zones and as such will request the province to pursue the approval of the proposed legislation. If legislation passes, staff would support a pilot study of automated speed enforcement in select school zones and depending on the success of a pilot study would expand the automated speed enforcement program accordingly.

Corporate Strategic Plan:

This report addresses the Region's goal to optimize existing road capacity to safely manage traffic throughout Waterloo Region (Strategic Objective 3.3).

Financial Implications:

The additional cost to incorporate physical measures and to install pedestrian and cyclist safety countermeasures will be included as part of the budget of individual projects in the Transportation Capital Program.

Other Department Consultations/Concurrence:

Nil

Attachments

Appendix A – Summary of Speed Surveys by Location

Appendix B – Average Travel Speeds of Motorists During Typical School Arrival and Departure Times

Appendix C – Five-year Summary of Pedestrian and Cyclist Collisions by Location

Appendix D – Pedestrian Collisions vs. Posted Speed Limit

Prepared By: **Mike Jones**, Supervisor Traffic Engineering

Approved By: **Thomas Schmidt**, Commissioner, Transportation and Environmental Services

Summary of Speed Surveys by Location

Speed Survey Results							
School Details					Speed Summary		
School Name	Municipality	Type	Abutting Property	Abutting Regional Road	Total Vehicles Observed	Posted Speed (km/h)	Average Speed (km/h)
A.R. Kaufman Public School	Kitchener	Elementary	Side	Westmount Rd	23339	50	50
Bridgeport Public School	Kitchener	Elementary	Front	Bridge St	13751	50	46
Cambridge Christian School	Cambridge	Elementary	Front	Myers Rd	11383	40 when flashing	50
Conestogo Public School	Woolwich	Elementary	Front	Sawmill Rd	9104	40	43
Country side Christian School	Wellesley	Elementary	Front	Hergott Rd	2980	80	76
Courtland Avenue Public School	Kitchener	Elementary	Front	Courtland Ave	13784	50	48
Eastwood Collegiate Institute	Kitchener	Secondary	Side	Weber St	17244	50	48
Ecole Elementaire Catholique Mere Elisabeth Bruyere	Waterloo	Elementary	Side	University Ave	20978	50	56
Ecole Elementaire L'Harmonie	Waterloo	Elementary	Front	Bridgeport Rd	13831	50	56
Ecole Secondaire Catholique Pere-Rene-De-Galinee	Cambridge	Secondary	Front	Maple Grove Rd	20971	70	67
Elmira District S.S.	Woolwich	Secondary	Side	Arthur St	13209	50	46
Forest Glen P.S.	Wilmot	Elementary	Front	Waterloo St	7192	50	53
Forest Heights Collegiate	Kitchener	Secondary	Side	Fischer Hallman Rd	27834	50	57
Forest Hill Public School	Kitchener	Elementary	Front	Westmount Rd	21959	50	53
Foundation Christian School	Woolwich	Elementary	Front	Katherine St	3457	50	55
Galt Collegiate Institute	Cambridge	Secondary	Front	Water St	29597	50	50
Grandview P.S. (New Hamburg)	Wilmot	Elementary	Front	Huron St	3171	50	49
Holy Family	Wilmot	Elementary	Front	Huron St	6706	50	44
Holy Spirit Catholic School	Cambridge	Elementary	Side	Myers Rd	4591	50	60
Howard Robertson Public School*	Kitchener	Elementary	Side	Fairway Rd	21171	50	52
Laurentian Hills Christian School	Kitchener	Elementary	Side	Westmount Rd	16743	50	54
Laurentian Public School	Kitchener	Elementary	Front	Westmount Rd	16743	50	54
Manchester Public School	Cambridge	Elementary	Side	Dundas St	18614	40	51
Moffat Creek Public School	Cambridge	Elementary	Front	Myers Rd	3382	50	53

Speed Survey Results (Cont'd)							
School Details					**Speed Summary**		
School Name	**Municipality**	**Type**	**Abutting Property**	**Abutting Regional Road**	**Total Vehicles**	**Posted Speed**	**Average Speed**
Monsignor Doyle Catholic Secondary School	Cambridge	Secondary	Front	Myers Rd	11417	40 when flashing	50
New Dundee Public School	Wilmot	Elementary	Front	Bridge St	3121	50	53
Pathfinder Christian School	Woolwich	Elementary	Front	Shantz Station Rd	9350	60	70
Queensmount Public School	Kitchener	Elementary	Side	Westmount Rd	24620	50	50
Resurrection Catholic Secondary School	Kitchener	Secondary	Front	University Ave	16256	60	50
Sandhills Public School	Kitchener	Elementary	Front	Victoria St	10418	50	54
Sheppard Public School	Kitchener	Elementary	Front	Weber St	16781	50	48
Sir Adam Beck Public School	Wilmot	Elementary	Front	Snyder's Rd	5855	60	62
Sir John A MacDonald Secondary School	Waterloo	Secondary	Side	Erbsville Rd	8117	60	56
Southwood Secondary School	Cambridge	Secondary	Side	Cedar St	11159	50	54
St. Agatha	Wilmot	Elementary	Front	Notre Dame Dr	4014	50	56
St. Benedict Catholic Secondary School	Cambridge	Secondary	Side	Can Amera Pkwy	15589	70	75
St. Benedict Catholic Secondary School	Cambridge	Secondary	Side	Franklin Blvd	45482	60	49
St. Brigid Catholic School	North Dumfries	Elementary	Side	Northumberland St	9499	50	54
St. Clement	Wellesley	Elementary	Front	Lobsinger Line	5301	50	51
St. David Catholic Secondary School	Waterloo	Secondary	Side	Weber St	14508	60	53
St. Dominic Savio Catholic School	Kitchener	Elementary	Side	Victoria St	10447	50	57
St. Gregory Catholic School	Cambridge	Elementary	Side	St. Andrews St	10803	40	49
St. John's - Kilmarnock School	Woolwich	Elementary	Front	Shantz Station Rd	3391	80	66
Suddaby Public School	Kitchener	Elementary	Side	Frederick St	10280	50	43
Sunnyside Public School	Kitchener	Elementary	Side	Weber St	14753	50	58
The Kitchener-Waterloo Bilingual School	Waterloo	Elementary	Front	Erb St	13726	60	58
Waterloo-Oxford D.S.S.	Wilmot	Secondary	Front	Snyder's Rd	5817	60	65
Westmount Public School	Kitchener	Elementary	Side	Westmount Rd	20229	50	50

Average Travel Speeds of Motorits During Typical School Arrival and Departure Times

Average Speed Results - Student Arrival and Departure 8:00 a.m. to 9:30 a.m. and 2:00 p.m. to 4:00 p.m.						
School Details					**Speed Summary**	
Location	**Municipality**	**Type**	**Abutting Property**	**Abutting Regional Road**	**Posted Speed (km/h)**	**Average Speed (Arrival / Departure)**
A.R. Kaufman Public School	Kitchener	Elementary	Side	Westmount Rd	50	49
Bridgeport Public School	Kitchener	Elementary	Front	Bridge St	50	44
Cambridge Christian School	Cambridge	Elementary	Front	Myers Rd	40 when flashing	46
Conestogo Public School	Woolwich	Elementary	Front	Sawmill Rd	40	41
Country side Christian School	Wellesley	Elementary	Front	Hergott Rd	80	72
Courtland Avenue Public School	Kitchener	Elementary	Front	Courtland Ave	50	46
Eastwood Collegiate Institute	Kitchener	Secondary	Side	Weber St	50	47
Ecole Elementaire Catholique Mere Elisabeth Bruyere	Waterloo	Elementary	Side	University Ave	50	56
Ecole Elementaire L'Harmonie	Waterloo	Elementary	Front	Bridgeport Rd	50	56
Ecole Secondaire Catholique Pere-Rene-De-Galinee	Cambridge	Secondary	Front	Maple Grove Rd	70	66
Elmira District S.S.	Woolwich	Secondary	Side	Arthur St	50	46
Forest Glen P.S.	Wilmot	Elementary	Front	Waterloo St	50	52
Forest Heights Collegiate	Kitchener	Secondary	Side	Fischer Hallman Rd	50	54
Forest Hill Public School	Kitchener	Elementary	Front	Westmount Rd	50	50
Foundation Christian School	Woolwich	Elementary	Front	Katherine St	50	53
Galt Collegiate Institute	Cambridge	Secondary	Front	Water St	50	44
Grandview P.S. (New Hamburg)	Wilmot	Elementary	Front	Huron St	50	47
Holy Family	Wilmot	Elementary	Front	Huron St	50	42
Holy Spirit Catholic School	Cambridge	Elementary	Side	Myers Rd	50	58
Howard Robertson Public School*	Kitchener	Elementary	Side	Fairway Rd	50	50
Laurentian Hills Christian School	Kitchener	Elementary	Side	Westmount Rd	50	52
Laurentian Public School	Kitchener	Elementary	Front	Westmount Rd	50	52
Manchester Public School	Cambridge	Elementary	Side	Dundas St	40	48
Moffat Creek Public School	Cambridge	Elementary	Front	Myers Rd	50	47

Average Speed Results - Student Arrival and Departure 8:00 a.m. to 9:30 a.m. and 2:00 p.m. to 4:00 p.m. (Cont'd)						
School Details					**Speed Summary**	
Location	**Municipality**	**Type**	**Abutting Property**	**Abutting Regional Road**	**Posted Speed (km/h)**	**Average Speed (Arrival / Departure)**
Monsignor Doyle Catholic Secondary School	Cambridge	Secondary	Front	Myers Rd	40 when flashing	44
New Dundee Public School	Wilmot	Elementary	Front	Bridge St	50	55
Pathfinder Christian School	Woolwich	Elementary	Front	Shantz Station Rd	60	68
Queensmount Public School	Kitchener	Elementary	Side	Westmount Rd	50	50
Resurrection Catholic Secondary School	Kitchener	Secondary	Front	University Ave	60	50
Sandhills Public School	Kitchener	Elementary	Front	Victoria St	50	50
Sheppard Public School	Kitchener	Elementary	Front	Weber St	50	47
Sir Adam Beck Public School	Wilmot	Elementary	Front	Snyder's Rd	60	60
Sir John A MacDonald Secondary School	Waterloo	Secondary	Side	Erbsville Rd	60	55
Southwood Secondary School	Cambridge	Secondary	Side	Cedar St	50	53
St. Agatha	Wilmot	Elementary	Front	Notre Dame Dr	50	55
St. Benedict Catholic Secondary School	Cambridge	Secondary	Side	Can Amera Pkwy	70	74
St. Benedict Catholic Secondary School	Cambridge	Secondary	Side	Franklin Blvd	60	47
St. Brigid Catholic School	North Dumfries	Elementary	Side	Northumberland St	50	53
St. Clement	Wellesley	Elementary	Front	Lobsinger Line	50	48
St. David Catholic Secondary School	Waterloo	Secondary	Side	Weber St	60	51
St. Dominic Savio Catholic School	Kitchener	Elementary	Side	Victoria St	50	50
St. Gregory Catholic School	Cambridge	Elementary	Side	St. Andrews St	40	47
St. John's - Kilmarnock School	Woolwich	Elementary	Front	Shantz Station Rd	80	64
Suddaby Public School	Kitchener	Elementary	Side	Frederick St	50	42
Sunnyside Public School	Kitchener	Elementary	Side	Weber St	50	55
The Kitchener-Waterloo Bilingual School	Waterloo	Elementary	Front	Erb St	60	56
Waterloo-Oxford D.S.S.	Wilmot	Secondary	Front	Snyder's Rd	60	64
Westmount Public School	Kitchener	Elementary	Side	Westmount Rd	50	49

Five-year Summary of Pedestrian Collisions by Location

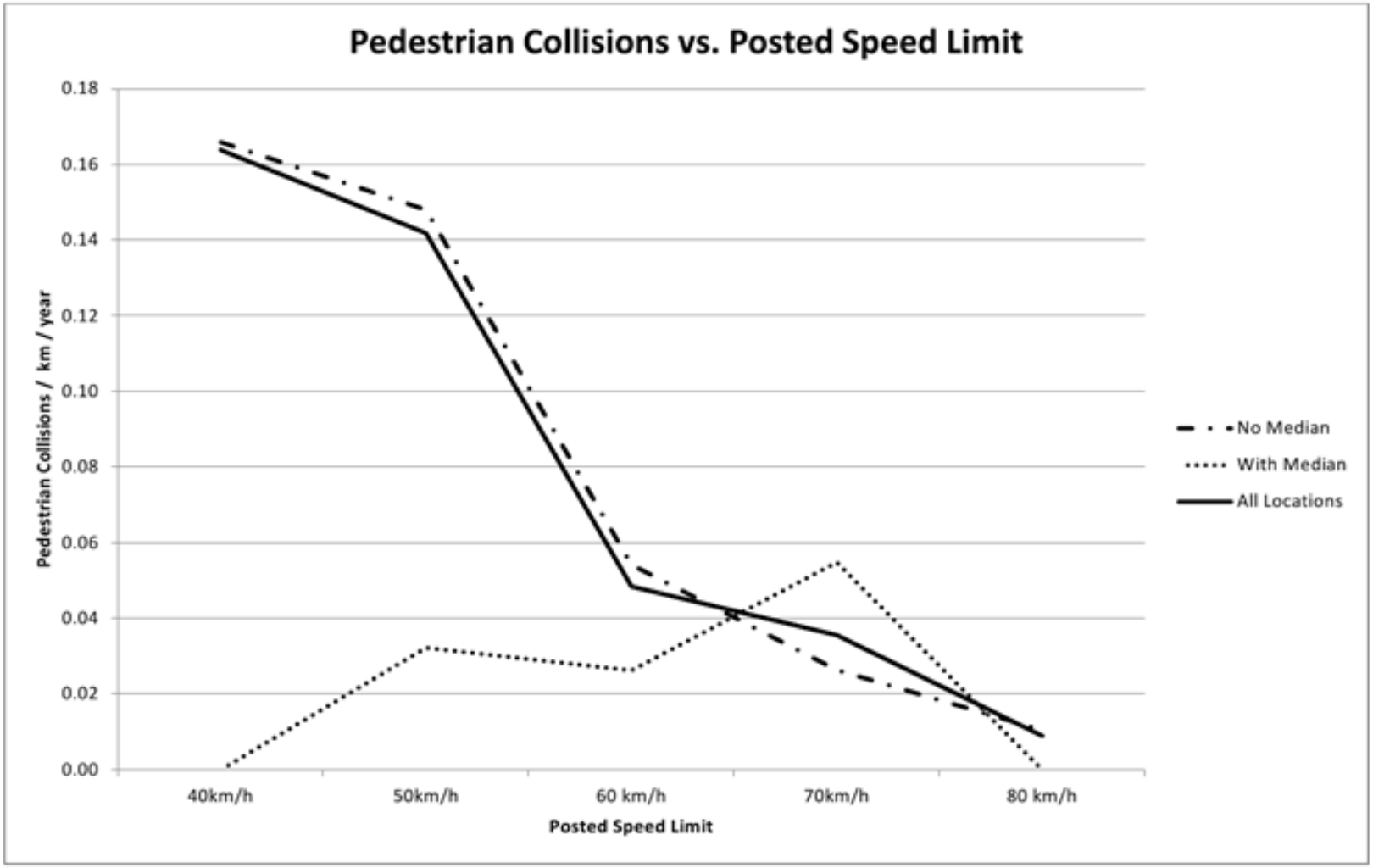
2010 to 2014 Five-year Pedestrian and Cycling Collision History								
School Details					**2010 to 2014 Pedestrian and Cycling Collisions**			
School Name	**Municipality**	**Type**	**Abutting Property**	**Abutting Regional Road**	**Pedestrian Collisions**	**Pedestrian Age**	**Cycling Collisions**	**Cyclist Age**
A.R. Kaufman Public School	Kitchener	Elementary	Side	Westmount Rd	4	20, 22, 18, 9	0	-
Bridgeport Public School	Kitchener	Elementary	Front	Bridge St	0	-	0	-
Cambridge Christian School	Cambridge	Elementary	Front	Myers Rd	0	-	0	-
Conestogo Public School	Woolwich	Elementary	Front	Sawmill Rd	0	-	0	-
Countryside Christian School	Wellesley	Elementary	Front	Hergott Rd	0	-	0	-
Courtland Avenue Public School	Kitchener	Elementary	Front	Courtland Ave	0	-	1	48
Eastwood Collegiate Institute	Kitchener	Secondary	Side	Weber St	0	-	2	33, 49
Ecole Elementaire Catholique Mere Elisabeth Bruyere	Waterloo	Elementary	Side	University Ave	0	-	0	-
Ecole Elementaire L'Harmonie	Waterloo	Elementary	Side	Bridgeport Rd	0	-	0	-
Ecole Secondaire Catholique Pere-Rene-De-Galinee	Cambridge	Secondary	Front	Maple Grove Rd	0	-	0	-
Elmira District S.S.	Woolwich	Secondary	Side	Arthur St	0	-	1	12
Forest Glen P.S.	Wilmot	Elementary	Front	Waterloo St	1	36, 3, 1	0	-

2010 to 2014 Five-year Pedestrian and Cycling Collision History (Cont'd)								
School Details					**2010 to 2014 Pedestrian and Cycling Collisions**			
School Name	**Municipality**	**Type**	**Abutting Property**	**Abutting Regional Road**	**Pedestrian Collisions**	**Pedestrian Age**	**Cycling Collisions**	**Cyclist Age**
Forest Heights Collegiate	Kitchener	Secondary	Front	Fischer Hallman Rd	1	54	1	32
Forest Hill Public School	Kitchener	Elementary	Front	Westmount Rd	1	20	0	-
Foundation Christian School	Woolwich	Elementary	Front	Katherine St	0	-	0	-
Galt Collegiate Institute	Cambridge	Secondary	Front	Water St	3	18, 17, 14	0	-
Grandview P.S. (New Hamburg)	Wilmot	Elementary	Front	Huron St	1	51	0	-
Holy Family	Wilmot	Elementary	Front	Huron St	0	-	0	-
Holy Spirit Catholic School	Cambridge	Elementary	Side	Myers Rd	1	17	0	-
Howard Robertson Public School	Kitchener	Elementary	Side	Fairway Rd	3	17, 22, 65	0	-
Laurentian Hills Christian School	Kitchener	Elementary	Side	Westmount Rd	1	13	1	21
Laurentian Public School	Kitchener	Elementary	Front	Westmount Rd	0	-	0	-
Manchester Public School	Cambridge	Elementary	Side	Dundas St	0	-	0	-
Moffat Creek Public School	Cambridge	Elementary	Front	Myers Rd	0	-	0	-

2010 to 2014 Five-year Pedestrian and Cycling Collision History (Cont'd)								
School Details					**2010 to 2014 Pedestrian and Cycling Collisions**			
School Name	**Municipality**	**Type**	**Abutting Property**	**Abutting Regional Road**	**Pedestrian Collisions**	**Pedestrian Age**	**Cycling Collisions**	**Cyclist Age**
Monsignor Doyle Catholic Secondary School	Cambridge	Secondary	Front	Myers Rd	0	-	0	-
New Dundee Public School	Wilmot	Elementary	Front	Bridge St	0	-	0	-
Pathfinder Christian School	Woolwich	Elementary	Front	Shantz Station Rd	0	-	0	-
Queensmount Public School	Kitchener	Elementary	Side	Westmount Rd	2	19, 30	0	-
Resurrection Catholic Secondary School	Kitchener	Secondary	Front	University Ave	1	18	1	unknown
Sandhills Public School	Kitchener	Elementary	Front	Victoria St	0	-	0	-
Sheppard Public School	Kitchener	Elementary	Front	Weber St	0	-	0	-
Sir Adam Beck Public School	Wilmot	Elementary	Front	Snyder's Rd	0	-	0	-
Sir John A MacDonald Secondary School	Waterloo	Secondary	Side	Erbsville Rd	0	-	1	12
Southwood Secondary School	Cambridge	Secondary	Side	Cedar St	0	-	0	-
St. Agatha	Wilmot	Elementary	Front	Notre Dame Dr	0	-	0	-
St. Benedict Catholic Secondary School	Cambridge	Secondary	Side	Can Amera Pkwy	0	-	1	30

2010 to 2014 Five-year Pedestrian and Cycling Collision History (Cont'd)								
School Details					**2010 to 2014 Pedestrian and Cycling Collisions**			
School Name	**Municipality**	**Type**	**Abutting Property**	**Abutting Regional Road**	**Pedestrian Collisions**	**Pedestrian Age**	**Cycling Collisions**	**Cyclist Age**
St. Benedict Catholic Secondary School	Cambridge	Secondary	Side	Franklin Blvd	7	17, 15, 15, 41, 20, 14, 14	2	19, 47
St. Brigid Catholic School	North Dumfries	Elementary	Side	Northumberland St	0	-	0	-
St. Clement	Wellesley	Elementary	Front	Lobsinger Line	0	-	0	-
St. David Catholic Secondary School	Waterloo	Secondary	Side	Weber St	0	-	0	-
St. Dominic Savio Catholic School	Kitchener	Elementary	Side	Victoria St	0	-	0	-
St. Gregory Catholic School	Cambridge	Elementary	Side	St. Andrews St	0	-	1	17
St. John's - Kilmarnock School	Woolwich	Elementary	Front	Shantz Station Rd	0	-	0	-
Suddaby Public School	Kitchener	Elementary	Side	Frederick St	1	68	2	44, 48
Sunnyside Public School	Kitchener	Elementary	Side	Weber St	2	13, 74	0	-
The Kitchener-Waterloo Bilingual School	Waterloo	Elementary	Front	Erb St	0	-	2	20, 28
Waterloo-Oxford D.S.S.	Wilmot	Secondary	Front	Snyder's Rd	1	16	0	-
Westmount Public School	Kitchener	Elementary	Side	Westmount Rd	0	-	0	-

Pedestrian Collisions vs. Posted Speed Limit



Appendix B

School Zones Fronting a Regional Road

Schools with Frontage (access) to a Regional Road				
School Details				Posted Speed (km/h)
Location	Municipality	Type	Abutting Regional Road	
Bridgeport Public School	Kitchener	Elementary	Bridge St	50
Cambridge Christian School	Cambridge	Elementary	Myers Rd	40 when flashing
Conestogo Public School	Woolwich	Elementary	Sawmill Rd	40
Cameron Heights C.I.	Kitchener	Secondary	Charles St E	50
Country side Christian School	Wellesley	Elementary	Hergott Rd	80
Courtland Avenue Public School	Kitchener	Elementary	Courtland Ave	50
Ecole Elementaire L'Harmonie	Waterloo	Elementary	Bridgeport Rd	50
Ecole Secondaire Catholique Pere-Rene-De-Galinee	Cambridge	Secondary	Maple Grove Rd	70
Forest Glen P.S.	Wilmot	Elementary	Waterloo St	50
Forest Hill Public School	Kitchener	Elementary	Westmount Rd	50
Foundation Christian School	Woolwich	Elementary	Katherine St	50
Galt Collegiate Institute	Cambridge	Secondary	Water St	50
Laurentian Public School	Kitchener	Elementary	Westmount Rd	50
Moffat Creek Public School	Cambridge	Elementary	Myers Rd	50
Monsignor Doyle Catholic Secondary School	Cambridge	Secondary	Myers Rd	40 when flashing
New Dundee Public School	Wilmot	Elementary	Bridge St	50
Pathfinder Christian School	Wellesley	Elementary	Line 86	60
Resurrection Catholic Secondary School	Kitchener	Secondary	University Ave	60
Sandhills Public School	Kitchener	Elementary	Victoria St	50
Sheppard Public School	Kitchener	Elementary	Weber St	50
Sir Adam Beck Public School	Wilmot	Elementary	Snyder's Rd	60
St. Clement	Wellesley	Elementary	Lobsinger Line	50
St. John's - Kilmarnock School	Woolwich	Elementary	Shantz Station Rd	80
The Kitchener-Waterloo Bilingual School	Waterloo	Elementary	Erb St	60
Waterloo-Oxford D.S.S.	Wilmot	Secondary	Snyder's Rd	60
Forest Heights Collegiate Institute	Kitchener	Secondary	Fischer-Hallman	50
Manchester Public	Cambridge	Elementary	Dundas	40
St. Dominic Savio Catholic School	Kitchener	Elementary	Victoria St	50
Eastwood Collegiate Institute	Kitchener	Secondary	Weber	50
St. David Catholic Secondary School	Waterloo	Secondary	Weber St	60
Suddaby Public School	Kitchener	Elementary	Frederick	50
Elmira District Secondary School	Woolwich	Secondary	Arthur St	50
Sir John A Macdonald Secondary Sch	Waterloo	Secondary	Erbsville	60
Sunnyside Public School	Kitchener	Elementary	Weber	50
South Heidelberg Parochial School	Wellesley	Elementary	Kressler	50
ASE Locations on Regional Roads				

Appendix C

Summary ASE Locations

Phase 1A	School	Roadway	Municipality
	Laurentian Public School	Westmount Road	Region of Waterloo
	New Dundee Public School	Bridge Street	Township of Wilmot
	Foundation Christian School	Katherine Street	Township of Woolwich
	St. Clements Public School	Lobsinger Line	Township of Wellesley
	Cedar Creek Public School	Hilltop Drive	Township of North Dumfries
	St. Gabriel Catholic Elementary	Guelph Avenue	City of Cambridge
	Keatsway Public School	Keats Way	City of Waterloo
	Franklin Avenue Public School	Franklin Avenue	City of Kitchener
Phase 1B	Sandhills Public School	Victoria Street	Region of Waterloo
	Sir Adam Beck Public School	Snyder's Road West	Township of Wilmot
	Wellesley Public School	Queen's Bush Road	Township of Wellesley
	Clearview Mennonite School	Three Bridges Road	Township of Woolwich
	St. Brigid Catholic School	Broom Street	Township of North Dumfries
	Elgin Street Public School	Elgin Street North	City of Cambridge
	Westheights Public School	Westheights Drive	City of Kitchener
	St. Nicholas Catholic School	Laurelwood Drive	City of Waterloo

Region of Waterloo

Planning Development and Legislative Services

Legal Services

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Approval to Expropriate Lands (2nd Report) for a Roundabout at the Intersection of Line 86 (Regional Road No. 86) and Floradale Road (Regional Road No. 19), in the Township of Woolwich

---

1. Recommendation:

That the Regional Municipality of Waterloo approve the expropriation of lands for improvements at the intersection of Line 86 (Regional Road No. 86) and Floradale Road (Regional Road No. 19), in the Township of Woolwich, in the Regional Municipality of Waterloo, as detailed in report PDL-LEG-22-32, dated June 7th, 2022, described as follows:

Fee Simple Partial Taking:

I. Part of Lot 104, German Company Tract, being Part 1 on 58R-21350, (Part of PIN 22211-0422 (LT)), Township of Woolwich, Regional Municipality of Waterloo (1525 Floradale Road / 300 Line 86, Woolwich);

II. Part Lot 105, German Company Tract, being Parts 3, 4 & 6 on 58R-21350, (Part of PIN 22233-0839 (LT)), Township of Woolwich, Regional Municipality of Waterloo (275 Church Street West, Woolwich);

III. Part of Lot 112, German Company Tract, being Part 7 on 58R-21350, (Part of PIN 22159-0006 (LT)), Township of Woolwich, Regional Municipality of Waterloo (southwest quadrant of the intersection of Line 86 and Floradale Road, Woolwich);

IV. Part of Lot 113, German Company Tract, being Part 8 on 58R-21350, (Part of PIN 22211-0411 (LT)), Township of Woolwich, Regional Municipality of Waterloo (6805 Line 86, Woolwich);

Permanent Easement - Drainage:

The right and easement, being an easement in gross, for itself, its successors and assigns and anyone authorized by it, in perpetuity to, at any time enter upon the

following properties for purposes of constructing, installing, maintaining, inspecting, altering, moving, replacing, reconstructing, enlarging and repairing, as applicable, pipes, catch basins, swales, ditches and other works and appurtenances thereto for the purpose of the transfer or transmission and management of storm water, both above and below the ground and for every such purpose and for all purposes necessary or incidental to the exercise of the rights hereby created, through, over, upon, along and across the lands, and for all such purposes together with the free, unimpeded and unobstructed access for itself, its successors and assigns, servants, agents, contractors, workers and anyone authorized by it, and vehicles, supplies and equipment at all times and for all purposes and things necessary for or incidental to the exercise and enjoyment of the right and easement:

V. Part Lot 105, German Company Tract, being Parts 2 & 5 on 58R-21350, (Part of PIN 22233-0839 (LT)), Township of Woolwich, Regional Municipality of Waterloo (275 Church Street West, Woolwich);

And that staff be instructed to register a Plan of Expropriation for the property within three months of the granting of the approval to expropriate the property, as required by the *Expropriations Act;*

And that the registered owners be served with a Notice of Expropriation and a Notice of Possession for the property after the registration of the Plan of Expropriation and the Regional Solicitor is authorized to take any and all actions required to enforce such Notices including but not limited to any application pursuant to Section 40 of the *Expropriations Act;*

And that the Regional Solicitor is authorized to enter into an agreement with the registered owners, or to make an application under Section 39 of the *Expropriations Act,* to adjust the date for possession specified in the Notice of Possession as may be required;

And that all above-referenced fee simple partial takings situated adjacent to an existing Regional public highway be acquired for road widening purposes and therefore be deemed to form part of the adjacent public highway in accordance with subsection 31(6) of the *Municipal Act, 2001*;

And that if no agreement as to compensation is made with an owner, the statutory Offer of Compensation and payment be served upon the registered owners of the property in the amount of the market value of the interests in the land as estimated by the Region's appraiser in accordance with the *Expropriations Act*;

And that the Regional Solicitor be authorized to execute any Indemnity agreement or other document related to payment of the statutory Offer of Compensation;

And further that the Regional Solicitor be authorized to discontinue expropriation proceedings or any part thereof, in respect of the above described lands, or any part thereof, upon the registration on title of the required documentation to complete the transaction or if determined by the Commissioner of Transportation and Environmental

Services that such lands, or any part or interest thereof, are not required for the subject Project.

2. Purpose / Issue:

Council approval of the expropriations is being sought at this time to: (i) permit registration of the Plans of Expropriation in the Summer of 2022; and (ii) provide possession of the required lands and interests by the Fall of 2022, to facilitate utility relocations at these locations.

3. Strategic Plan

This Project supports the 2019-2023 Corporate Strategic Plan under Strategic Focus Area 2 (Sustainable Transportation) and, more specifically, Strategic Objective 2.4 "Improve road safety for all users – drivers, cyclists, pedestrians, horses and buggies."

4. Key Considerations:

a) Project Overview

The proposed improvements at the intersection of Line 86 (Regional Road No. 86) and Floradale Road (Regional Road No. 19), Woolwich Township, will improve road safety and reduce delays to motorists.

The scope of work to be completed includes the following:

- Construction of a single lane roundabout, including designated pedestrian crossings therein; and
- Reconfiguration of existing drainage for the road.

The recommended roundabout would replace temporary traffic signals that were installed as an interim measure. The main issues raised by the public and adjacent property owners, and addressed within the proposed improvements, are: passage of large agricultural equipment; volume of commercial truck traffic; and, volume of horse and buggy traffic. The roundabout would be designed geometrically to accommodate all identified users. The Region has constructed other roundabouts in rural settings (recently at Hergott Road and Ament Line) where agricultural equipment, commercial trucks, and horse and buggies frequently use the roundabout with no concerns. Lastly, the proposed roundabout provides a gateway feature for traffic entering Elmira from the west and will enhance traffic calming as traffic enters Elmira.

b) Project Timing

Utility relocations are anticipated for Fall of 2022, and commencement of construction for the road improvements is scheduled to commence in Spring of 2023.

c) Properties Impacted

The implementation of the recommended improvements directly impacts four (4) properties. A map of the impacted properties is attached hereto as Appendix “A”. Land acquisitions are required from all four (4) of the properties to accommodate the said improvements, including fee simple partial takings from all four (4) of the properties and a permanent easement from one (1) property for drainage purposes.

It should be noted the expropriation of the lands is on an “as is” basis and, upon acquisition, the Region assumes all responsibility for the lands.

5. Background:

Council approved the commencement of expropriation of the subject properties on March 8th, 2022 as detailed in report PDL-LEG-22-15. The appropriate forms under the Expropriations Act (the “Act”) were served on or about April 29, 2022 in order to initiate formal proceedings under the Act for these properties.

No Hearings of Necessity have been requested within the statutory time frame by the impacted property owners in connection with this expropriation process.

6. Area Municipality Communication and Public/Stakeholder Engagement:

All of the affected property owners were previously contacted by Legal Services staff and informed of the project as well as the Region’s intention to commence the expropriation process and the Region’s Expropriation Information Sheet was provided to each of them. All of the affected property owners have also been provided with offers to purchase. Legal Services staff contacted all property owners and informed them of the Region’s intention to continue with the expropriation process in order to ensure that the construction timeline is maintained, including this Report being presented to Council, as detailed in the Region’s Expropriation Information Sheet.

Legal Services staff has been negotiating property acquisitions over the past several months and intends to continue negotiations with property owners in an effort to achieve settlements of their claims under the Act.

7. Financial Implications:

There are sufficient funds in the Transportation Capital Program to acquire the lands as set out in this report. The Region’s approved 2022-2031 Transportation Capital Program includes a budget of $90,000 in 2022 and $1,160,000 in 2023-2024 for Line 86 / Floradale Road Roundabout (Project #07558) to be funded from the Regional Roads Development Charges Reserve Fund.

8. Conclusion / Next Steps:

Council approval of the expropriations is required to advance this project within the noted timelines.

Upon Council approval of the expropriation of the properties, such approval will be endorsed upon a certificate of approval on the Plan of Expropriation for those properties not acquired under agreement. The Plan will then be registered within three months of the approval. Ownership of the property vests with the Region upon the registration of the Plan. Notices of Expropriation and Notices of Possession are then served upon all registered owners, including tenants as shown on the assessment roll. The Region will take possession of the required lands at least 3 months after service of the Notice of Possession.

After the registration of the Plans of Expropriation and prior to the taking of possession of the property, the expropriating authority is required to serve the registered owners with an offer in full compensation for their interests in the land. The offer must be accompanied by the immediate payment of one hundred (100%) of the appraised market value of the land to the registered owners as estimated by the Region's appraiser. The registered owners are also to be served with a report appraising the market value of the property, which report formed the basis for the offer of compensation.

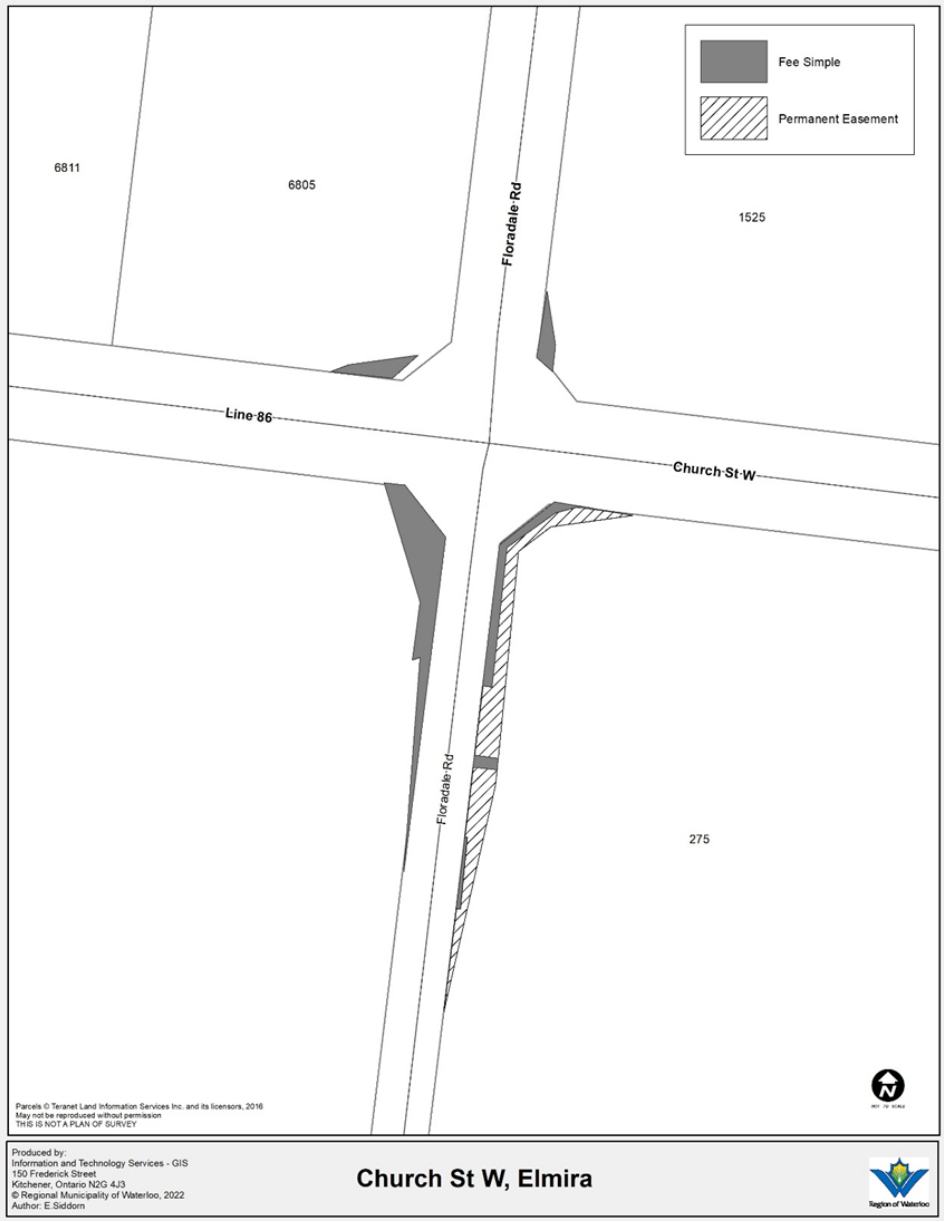
Attachments / Links:

A list of the corporate owners of the fee simple interest in the subject lands is attached hereto as Appendix "B". Regional staff have conducted corporate profile searches of affected corporate property owners and the directors and officers are listed for each. This list does not include tenants, easement holders or holders of security interests in the subject lands.

Appendix "A" – Map of subject lands
Appendix "B" – Corporate Profiles of Corporate Owners

Prepared By: **Andy Gazzola**, Solicitor, Property
Approved By: **Jeff Schelling**, Regional Solicitor and Director of Legal Services

Appendix “A” – Map of Subject Lands



Appendix “B” – Corporate Profiles of Corporate Owners

1. Property: 275 Church Street West, Woolwich
   Owner: EFS Property Ltd.
   Address: 30 Coral Gables Crescent, Elmira, ON, N3B 3P4
   Directors/Officers: Allan Dueck, James Allan Elgie, Ian Timothy Verbeek
   Annual Return: June 21, 2020

2. Property: 6805 Line 86, Woolwich
   Owner: 1066779 Ontario Limited
   Address: 8499 Highway 23 North, RR 1, Listowel, ON, N4W 3H2
   Directors/Officers: Marlin Darrell Stoltz, Carson Douglas Brown
   Annual Return: March 29, 2022

3. Properties: (i) 1525 Floradale Road / 300 Line 86, Woolwich;
   (ii) Southwest quadrant of the intersection of Line 86 and Floradale Road, Woolwich
   Owner: Witco Holdings Inc.
   Address: RR1, P.O. Box 443, Waterloo, ON, N2J 4G8
   Directors/Officers: Michael Moser, Larry Edmund Witzel
   Annual Return: May 17, 2020

Region of Waterloo

Planning Development and Legislative Services

Legal Services

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Approval to Expropriate Lands (2nd Report) for Improvements on Dundas Street from Hespeler Road to Franklin Boulevard and on Main Street from Chalmers Street to Franklin Boulevard, in the City of Cambridge

---

1. Recommendation:

That the Regional Municipality of Waterloo approve the expropriation of lands for the purpose of the reconstruction of Dundas Street from Hespeler Road to Franklin Boulevard and on Main Street from Chalmers Street to Franklin Boulevard, in the City of Cambridge, in the Regional Municipality of Waterloo, as detailed in Report PDL-LEG-22-33 dated June 7, 2022, described as follows:

Fee Simple Full Taking:

i. Lot 2, Registered Plan 1263, being Part 1 on 58R-21005 (PIN 03842-0029 (LT)) (355 Main Street, Cambridge);

Fee Simple Partial Taking:

ii. Part of Lot 1, Registrar's Compiled Plan 1135, being Part 1 on 58R-21008 (Part of PIN 03824-0008 (LT)) (11 Dundas Street North, Cambridge);
iii. Part of Lots 1 and 2, Registrar's Compiled Plan 1135, being Part 2 on 58R-21008 (Part of PIN 03824-0008 (LT)) (11 Dundas Street North, Cambridge);
iv. Part of Lot 2, Registrar's Compiled Plan 1135, being Part 3 on 58R-21008 (Part of PIN 03824-0097 (LT)) (75 Dundas Street North, Cambridge);
v. Part of Lots 2 and 3, Registrar's Compiled Plan 1135, being Part 4 on 58R-21008 (Part of PIN 03824-0097 (LT)) (75 Dundas Street North, Cambridge);
vi. Part of Lot 3, Registrar's Compiled Plan 1135, being Parts 5, 6, 7 and 8 on 58R-21008 (Part of PIN 03824-0097 (LT)) (75 Dundas Street North, Cambridge);
vii. Part of Lot 5, Concession 11, being Part 9 on 58R-21008 (Part of PIN 03824-0014 (LT)) (75 Dundas Street North, Cambridge);
viii. Part of Lot 6, Concession 10, being Part 1 on 58R-21007 (Part of PIN 03824-

0017 (LT)) (31 Dundas Street South, Cambridge);

ix. Part of Lot 6, Concession 10, being Part 2 on 58R-21007 (Part of PIN 03824-0029 (LT)) (31 Dundas Street South, Cambridge);

x. Part of Lot 5, Concession 10, being Part 3 on 58R-21007 (Part of PIN 03824-0022 (LT)) (489 Main Street East, Cambridge);

xi. Part of Lots 100 and 101, Registered Plan 215, being Part 1 on 58R-21006 (Part of PIN 03823-0119 (LT)) (1 Briercrest Avenue, Cambridge);

xii. Part of Lots 101 and 102, Registered Plan 215, being Part 2 on 58R-21006 (Part of PIN 03823-0120 (LT)) (350 Main Street, Cambridge);

Temporary Easement – Grading:

The right and easement, being a temporary easement in gross, for the free and unobstructed, right, interest and easement terminating on the 31st day of December, 2024, for itself, its successors and assigns, and anyone authorized by it, on, over, under and through the following properties for the purposes of excavation, construction, installation, replacement, alteration, grading, and landscaping as required in connection with the improvements on Dundas Street from Hespeler Road to Franklin Boulevard and on Main Street from Chalmers Street to Franklin Boulevard, and all related improvements, and works ancillary thereto and for such purposes, the free, unimpeded and unobstructed access to the lands at all times by employees, agents, contractors, workers and anyone authorized by it, and vehicles, supplies and equipment at all times and for all purposes and things necessary for or incidental to the exercise and enjoyment of the right and easement:

xiii. Part of Lot 1, Registrar's Compiled Plan 1135, being Part 18 on 58R-21008 (Part of PIN 03824-0008 (LT)) (11 Dundas Street North, Cambridge);

xiv. Part of Lots 1 and 2, Registrar's Compiled Plan 1135, being Part 17 on 58R-21008 (Part of PIN 03824-0008 (LT)) (11 Dundas Street North, Cambridge);

xv. Part of Lot 3, Registrar's Compiled Plan 1135, being Parts 11, 12, 13 and 14 on 58R-21008 (Part of PIN 03824-0097 (LT)) (75 Dundas Street North, Cambridge);

xvi. Part of Lots 2 and 3, Registrar's Compiled Plan 1135, being Part 15 on 58R-21008 (Part of PIN 03824-0097 (LT)) (75 Dundas Street North, Cambridge);

xvii. Part of Lot 2, Registrar's Compiled Plan 1135, being Part 16 on 58R-21008 (Part of PIN 03824-0097 (LT)) (75 Dundas Street North, Cambridge);

xviii. Part of Lot 5, Concession 11, being Part 10 on 58R-21008 (Part of PIN 03824-0014 (LT)) (75 Dundas Street North, Cambridge);

xix. Part of Lot 6, Concession 10, being Part 4 on 58R-21007 (Part of PIN 03824-0017 (LT)) (31 Dundas Street South, Cambridge);

xx. Part of Lot 6, Concession 10, being Part 5 on 58R-21007 (Part of PIN 03824-0029 (LT)) (31 Dundas Street South, Cambridge);

xxi. Part of Lot 5, Concession 10, being Part 6 on 58R-21007 (Part of PIN 03824-

0022 (LT)) (489 Main Street East, Cambridge);

xxii. Part of Lots 100 and 101, Registered Plan 215, being Part 4 on 58R-21006 (Part of PIN 03823-0119 (LT)) (1 Briercrest Avenue, Cambridge);

xxiii. Part of Lots 101 and 102, Registered Plan 215, being Part 3 on 58R-21006 (Part of PIN 03823-0120 (LT)) (350 Main Street, Cambridge);

And that staff be instructed to register a Plan of Expropriation for the property within three months of the granting of the approval to expropriate the property, as required by the *Expropriations Act;*

And that the registered owners be served with a Notice of Expropriation and a Notice of Possession for the property after the registration of the Plan of Expropriation and the Regional Solicitor is authorized to take any and all actions required to enforce such Notices including but not limited to any application pursuant to Section 40 of the *Expropriations Act;*

And that the Regional Solicitor is authorized to enter into an agreement with the registered owners, or to make an application under Section 39 of the *Expropriations Act,* to adjust the date for possession specified in the Notice of Possession as may be required;

And that all above-referenced fee simple partial takings situated adjacent to an existing Regional public highway be acquired for road widening purposes and therefore be deemed to form part of the adjacent public highway in accordance with subsection 31(6) of the *Municipal Act, 2001*;

And that if no agreement as to compensation is made with an owner, the statutory Offer of Compensation and payment be served upon the registered owners of the property in the amount of the market value of the interests in the land as estimated by the Region's appraiser in accordance with the *Expropriations Act*;

And that the Regional Solicitor be authorized to execute any Indemnity agreement or other document related to payment of the statutory Offer of Compensation;

And further that the Regional Solicitor be authorized to discontinue expropriation proceedings or any part thereof, in respect of the above described lands, or any part thereof, upon the registration on title of the required documentation to complete the transaction or if determined by the Commissioner of Transportation and Environmental Services that such lands, or any part or interest thereof, are not required for the subject Project.

2. Purpose / Issue:

Council approval of the expropriations is sought to: (i) permit registration of the Plans of

Expropriation in the Summer of 2022, and (ii) provide possession of the required lands and interests in the Fall/Winter of 2022, to facilitate the commencement of preliminary works in the Spring of 2023 and construction at these locations in 2024.

3. Strategic Plan:

This project supports Strategic Focus Area 2 (Sustainable Transportation) and specifically Strategic Objective 2.3 to increase participation in active forms of transportation (cycling and walking). This project also supports Strategic Objective 2.4 to improve road safety for all users: drivers, cyclists, pedestrians, horse and buggies.

4. Key Considerations:

a) Project Overview

The overall project includes road improvements to both Dundas Street (between Hespeler Road and Franklin Boulevard) and Main Street (between Chalmers Street and Franklin Boulevard), in the City of Cambridge, including:

- Reconstruct Dundas Street from Hespeler Road to Franklin Boulevard;
- Reconstruct Main Street from Chalmers Street to Franklin Boulevard;
- Construct on-road cycling facilities on Dundas Street from Roxboro Road to Franklin Boulevard;
- Construct on-road cycling facilities on Main Street from Chalmers Street to Franklin Boulevard;
- Replace the existing traffic control signal at the intersection of Dundas Street and Main Street with a roundabout; and
- Replace existing concrete sidewalks within the project limits and widen where feasible.

b) Project Timing

Construction of this overall project is currently underway and is occurring in stages from 2020 to 2025. In view of the high concentration of road construction planned over the next few years in this area of Cambridge, construction will be phased to minimize traffic disruption. Preliminary works are scheduled to commence in the Spring of 2023, with construction of the road improvements commencing in the Spring of 2024.

c) Properties Impacted

The implementation of the improvements directly impacts ten (10) properties. At this time, to facilitate utility relocations in the Spring of 2023 and construction in the Spring of 2024, the land acquisitions outlined in the Recommendation of this Report are required from nine (9) properties, as shown in Appendix “A” attached hereto. These acquisitions include a fee simple full taking from one (1) of the properties, fee simple partial takings from eight (8) of the properties, and temporary easements from eight (8)

of the properties for grading purposes.

To date, the Region has completed an agreement with one (1) of the property owners for this Project. As such, expropriation proceedings have been discontinued for this property.

The expropriation of the lands is on an “as is” basis and upon closing, the Region assumes all responsibility for the lands.

5. Background:

Council approved the commencement of expropriation of the subject properties on May 11th, 2021, as detailed in Report PDL-LEG-21-23. The appropriate forms under the Expropriations Act (the “Act”) were served on or about June 15, 2021, in order to initiate formal proceedings under the Act for these properties.

No Hearings of Necessity have been requested within the statutory timeframe by the impacted property owners in connection with this expropriation process.

6. Area Municipality Communication and Public/Stakeholder Engagement:

All of the affected property owners were previously contacted by Legal Services staff and informed of the project as well as the Region’s intention to commence the expropriation process, and the Region’s Expropriation Information Sheet was provided to each of them. Some of the affected property owners have also been provided with offers to purchase. Legal Services staff contacted all property owners and informed them of the Region’s intention to continue with the expropriation process in order to ensure that the construction timeline is maintained, including this Report being presented to Council, as detailed in the Region’s Expropriation Information Sheet.

Legal Services staff has been negotiating property acquisitions over the past several months and intends to continue negotiations with property owners in an effort to achieve settlements of their claims under the Act.

7. Financial Implications:

There are sufficient funds in the Region’s approved 2022-2032 Transportation Capital Program to acquire the properties as set out in this report. The Region’s approved 2022-2032 Transportation Capital Program includes a budget of $1,090,000 in 2022 and $4,300,000 in 2023-2026 for Main Street East, Franklin Boulevard to Chalmers Street (project #05933) to be funded from the Transportation Capital Reserve (97%; $5,225,300) and from the Roads Regional Development Charges Reserve Fund (3%; $164,700).

8. Conclusion / Next Steps:

Council approval of the expropriations is required to advance this project within the

noted timelines.

Upon Council approval of the expropriation of the properties, such approval will be endorsed upon on a certificate of approval on the Plan of Expropriation for those properties not acquired under agreement. The Plan will then be registered within three months of the approval. Ownership of the property vests with the Region upon the registration of the Plan. Notices of Expropriation and Notices of Possession are then served upon all registered owners, including tenants as shown on the assessment roll. The Region will take possession of the required lands at least 3 months after service of the Notice of Possession.

After the registration of the Plans of Expropriation and prior to the taking of possession of the property, the expropriating authority is required to serve the registered owners with an offer in full compensation for their interests in the land. The offer must be accompanied by the immediate payment of one hundred (100%) of the appraised market value of the land to the registered owners as estimated by the Region's appraiser. The registered owners are also to be served with a report appraising the market value of the property, which report formed the basis for the offer of compensation.

9. Attachments / Links:

A list of the corporate owners of the fee simple interest in the subject lands is attached hereto as Appendix "B". Regional staff have conducted corporate profile searches of affected corporate property owners and the directors and officers are listed for each. This list does not include tenants, easement holders or holders of security interests in the subject lands.

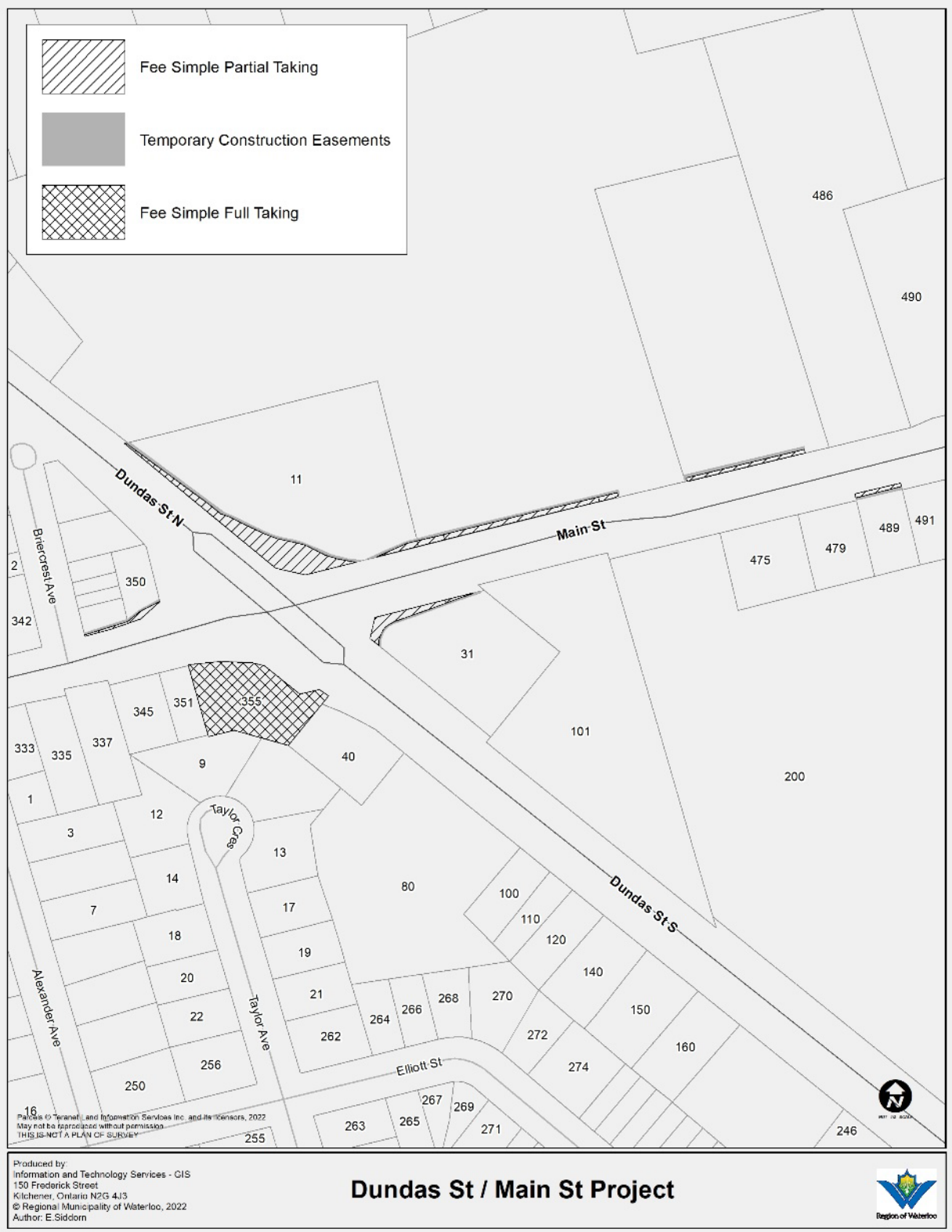
Appendix "A" – Map of Subject Lands

Appendix "B" – Corporate Profiles of Corporate Owners

Prepared By: Andy Gazzola, Solicitor, Property

Approved By: Jeff Schelling, Regional Solicitor, Director of Legal Services

Appendix “A” – Map of Subject Lands



Appendix “B” – Corporate Profiles of Corporate Owners

1. Subject Property Address: 11 Dundas Street North, Cambridge
   Property Owner: EDMUND TAYLOR HOLDINGS INC.
   Annual Return: 2021/03/25
   Directors/Officers: John Philip Taylor

2. Subject Property Address: 75 Dundas Street North, Cambridge
   Property Owner: CANADIAN TIRE CORPORATION, LIMITED
   Annual Return: 2021/06/30
   Directors/Officers: Eric Y. Anderson, R. Jamie Anderson, Martha G. Billes, Owen G. Billes, Diana L. Chant, James R. Christie, David C. Court, Gregory G. Craig, Eleni Damianakis, Mark E. Derbyshire, James L. Goodfellow, Gregory H. Hicks, Norman Jaskolka, Claude L’Heureux, Donald A. Murray, J. Michael Owens, Maureen J. Sabia, Cynthia M. Trudell, Steve Frazier, Sylvain Leroux, Nadir Patel, Daniel A Roy, James Christie

3. Subject Property Address: 75 Dundas Street North, Cambridge
   Property Owner: 2447359 ONTARIO INC.
   Annual Return: 2020/10/04
   Directors/Officers: Heribert E. Polzl

4. Subject Property Address: 31 Dundas Street South, Cambridge
   Property Owner: MAC'S CONVENIENCE STORES INC.
   Annual Return: 2021/06/03
   Directors/Officers: Helene Drolet, Steve Pitts, Claude Tessier, Stephane Trudel, Valery Zamuner

5. Subject Property Address: 489 Main Street, Cambridge
   Property Owner: 489 MAIN STREET PROPERTY INC.
   Annual Return: 2021/05/23
   Directors/Officers: Dannie Morris, Karen Murphy

Region of Waterloo

Planning, Development and Legislative Services

Community Planning

To:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Region of Waterloo Climate Action and Energy Transition Progress Report

---

1. Recommendation:

That the Regional Municipality of Waterloo take the following action with respect to PDL-CPL-22-16 dated June 7, 2022:

a) continue with time sensitive corporate climate and energy transition work as outlined in PDL-CPL-22-16 (dated June 7, 2022), while work to develop the corporate carbon budget and transition strategy continues; and

b) include, to the extent possible, initial estimates of the investments required to meet the Region's climate action goals in the preliminary 2023-2032 Capital Plan.

2. Purpose / Issue:

To provide a progress report and preliminary financial information on the work underway to achieve transformational climate action and the energy transition through the Region's work, and to confirm Council's expectation that, in parallel with transition planning, staff will be proceeding with time sensitive work and related updates to the 10-year capital forecast in the 2023 budget.

3. Strategic Plan:

Transformational climate action addresses all of the Strategic Focus Areas of the Strategic Plan, including Sustainable Transportation, Thriving Economy, and Healthy, and Safe and Inclusive Communities. Reducing GHG emissions is a key component of the Region's Strategic Imperative of Climate Action, and is directly addressed by Strategic Objective 3.1: Reduce greenhouse gas emissions.

4. Key Considerations:

a) Regional staff are working across departments to develop a corporate climate

and energy transition strategy. The strategy will outline the Region's contribution to meet the Council endorsed target of reducing community emissions by 50% by the year 2030, and to implement TransformWR by 2050, along with the Community Climate Adaptation Plan for Waterloo Region.

b) The corporate strategy will address both GHG emissions and climate adaptation, as well as the corporate carbon budget (see PDL-CPL-21-31). The data review and framework is expected to be fully outlined by the end of 2022, the full carbon budget by mid-2023, and the full corporate transition strategy by the end of 2023.

c) The Region's role is both as a large corporation, and as a key capacity holder in changing local systems to enable community members to make changes in their lives. Based on TransformWR, in particular, the Region has committed to corporate energy transition work to show leadership on decarbonization (reducing energy needs and switching to clean energy), and to a specific list of actions to decarbonize our corporate operations.

d) To achieve the existing community GHG reduction goals, by 2050, transportation across the region must be fully decarbonized through the modal shift and zero-emission vehicles, and both public and private buildings throughout the region need to be almost fully decarbonized.

e) To achieve an equivalent scale and scope of corporate GHG reductions, all of the Region's energy-related GHG emissions need to be eliminated by 2050. This is because methane from organics that have historically been landfilled will remain a large source of annual GHG emissions from the Region's operations, even with Waste's industry-leading work to capture it and divert organics.

f) Work to date has determined that by 2050, the Region as a corporation needs to have achieved four key outcomes through its work:

    1. Infrastructure has been de-risked for a changing climate through asset management.
    2. Fossil fuel use has been eliminated in corporate operations.
    3. Fugitive methane emissions have been minimized; and
    4. Transportation and transit infrastructure has been built that has enabled the achievement of the modal shift to most trips being made by active transportation, supported by a robust transit system and compact and energy efficient urban form.

g) To achieve these outcomes, time sensitive work – which will be supported by the full strategy – needs to move forward now, prior to the full corporate strategy being available for Council endorsement at the end of 2023. To achieve these goals, the Region will need to make substantial investments over the next 10, 20

and 30 years.

h) Staff recommend continuing with time sensitive work in three key categories:

1. Work with short timelines that can reduce GHG emissions and/or climate risk quickly (such as fleet transition to zero-emission vehicles);
2. Work with long timelines that needs to begin immediately to complete the transition by 2050 (such as building the transportation system to enable the modal shift); and
3. Work that is needed to plan and prepare to implement solutions as soon as they are available.

i) Continued work in this area will be supported by a staff governance structure described in Appendix A.

j) As was the case for the 2022 budget, staff are working interdepartmentally with the support of the sustainability group in Community Planning to coordinate 2023 climate action needs associated with immediate next steps for the 2023 budget. These will be included in each division's recommended capital and operating budgets.

Background:

Climate change is a global problem with local causes and local solutions. The Region is a key capacity holder in local climate action and the community's energy transition, along with area municipalities and utilities, due to its ability to adjust local systems to enable people across the community to make significant emissions related changes in their lives while maintaining or improving overall quality of life.

Existing Commitments

The Region is leading on climate change by committing to bold and immediate action to address it (PDL-CPL-21-30). The Region has opportunity and responsibility for both corporate and community scale climate action, and through TransformWR, the Region has committed to leading, co-leading, collaborating, or supporting a broad range of 78 actions that are part of either the Region's corporate energy transition or the community's energy transition (PDL-CPL-21-30, Appendix D).

Within a subset of these actions, the Region has agreed to undertake our corporate energy transition to show leadership on and commitment to decarbonization, to spur action by the private sector and the broader community. Through its support for TransformWR, Council has endorsed the following specific actions that are part of corporate decarbonization, some of which are part of the Region's responsibility as a municipality, and some of which are shared with all corporations in the community with respect to how we do business:

As a municipality, the Region has responsibility for:

- Action 2.1.2: Plan and begin to implement a transition to zero emission vehicles for municipal fleets, working towards a goal of at least half of municipal vehicles being zero emissions by 2030. [leading with all area municipalities]
- Action 2.1.4: Grand River Transit to pilot zero emission vehicles, and implement a full zero emission vehicle strategy (full transition expected to be complete by 2040) [leading]
- Action 3.2.7: Show leadership by building net-zero carbon in the public sector. [leading with area municipalities and public sector organizations]

As a large corporation in the community, like other corporations, the Region has responsibility for:

- Action 1.3.5: Post-pandemic continued adoption of work from home and flexible work schedules for reducing trips or shifting trips to off-peak times. [Region operations]
- Action 3.1.1 Upgrade commercial and residential building walls, foundations, attics, windows and doors to reduce heat losses. [within the Region's buildings]
- Action 3.1.3 Switch home and business heating and water heating off of fossil fuels. [within the Region's buildings]
- Action 4.1.2: Provide organics collection in all multi-residential buildings. [within multi-residential housing provided by the Region]
- Action 4.1.3: Support the use of compost/organics collection programs for all commercial buildings. [within the Region's commercial buildings]
- Action: 5.4.2: Provide a variety of low GHG food options and plant-based dining options in local restaurants, grocery stores, and catered events. [within the Region's operations/facilities]

Corporate Strategy Development and Time Sensitive Action

Beyond the Region's current commitments, additional work has been identified that is needed to align Regional operations with what Waterloo Region will need to thrive in a global decarbonized future while experiencing the effects of climate change. As a result of climate change and the energy transition underway, Regional investments and services need to prepare us for that future world, which will be very different from the one we live in right now. The work outlined in this report aligns with a "new normal" based on this future reality, and reflects the basic cost of doing business moving forward for both the public sector and the private sector.

Work is ramping up across divisions and departments to build a corporate climate transformation and energy transition strategy (PDL-CPL-21-31), in order to implement the Region's contributions to both the *TransformWR* community climate action strategy and to the Community Climate Adaptation Plan for Waterloo Region (PDL-CPL-19-38).

The data review and framework is expected to be compiled by the end of 2022. The full carbon budget, which will allocate the finite amount of carbon that the Region can spend from corporate operations while completing its energy transition (PDL-CPL-21-31), is expected to be available by mid-2023, with the full corporate climate and energy transition strategy compiled by the end of 2023.

The work outlined in this report is time-sensitive, and cannot wait until the completion of the full corporate strategy. This is because decisions and investments being made today will influence corporate and community emissions and vulnerability for decades or longer.

Taking action now will allow the Region to avoid exposure to significant future risks. Among these risks are exposure to rising fuel and carbon prices, as well as expenditures in the next few years on investments that are not “future proof” in terms of climate risks and emissions standards. This is particularly true of “carbon lock-in,” from investing in capital assets that rely on fossil fuel use, which can result in assets that need to be replaced prematurely at unnecessary cost. In addition to financial risks, without immediate action, the Region incurs the risk of not achieving the scope and scale of emissions reductions to meet our 2030 commitments, and overspending its finite carbon budget.

Based on work to date, staff have identified the specific actions that need to move forward now, and which will be supported by the full strategy. This is based on an assessment of our community and corporate emissions profile, as well as a division-by-division assessment of work to date, both of which are outlined below.

What we know about community emissions

As shown in Table 1, most community emissions come from energy used for transportation and buildings. These sources of emissions are also where the community has the greatest opportunity to significantly reduce emissions through the transition off of fossil fuels. This table describes both the short- and long-term emissions reduction potential in each community emissions sector, addressing both the proportion of emissions that can be reduced and the impact of those reductions on overall emissions.

Table 1: Community Emissions Assessment

Source of Emissions	Percentage of Community Emissions (2015)	Short-term emissions reduction potential (to 2030)	Long-term emissions reduction potential (to 2050)
Transportation (Gasoline and Diesel)	49%	High impact on emissions	Total reduction and high impact

Source of Emissions	Percentage of Community Emissions (2015)	Short-term emissions reduction potential (to 2030)	Long-term emissions reduction potential (to 2050)
Workplaces (Electricity and Natural Gas)	27%	Low/Medium impact on emissions	Almost total reduction and high impact
Homes (Electricity and Natural Gas)	18%	Low/Medium impact on emissions	Almost total reduction and high impact
Agriculture (Methane from Livestock)	5%	N/A	Low reduction and limited impact
Waste (Methane Emissions from Region Landfills)	1%	N/A	Uncertain, but likely limited reduction

The results of this assessment highlight three key conclusions, which are foundational to the TransformWR strategy:

> ***Eliminating transportation emissions is key to meeting the community's GHG reduction targets.*** By 2050, most trips must be made using active transportation using walking, cycling, and rolling, and both public transit and private vehicles used for remaining trips must be zero-emissions. The Region is a key capacity holder in the modal shift that must be achieved, and in the electrification of transit.
>
> ***Almost all workplaces and homes will no longer use fossil fuels to achieve the rest of the community's 80% emissions reduction.*** This means that all new buildings must be built to be net-zero carbon, and existing buildings must be retrofitted and fuel switched. The Region is also a key capacity holder to support the transition of public and private buildings across the community.
>
> ***Aggregate methane emissions from agriculture and waste are not expected to change significantly by 2050.*** As outlined in the TransformWR strategy, to avoid an increase in methane emissions, agricultural and landfill emissions must be reduced per capita and per production unit while Waterloo Region grows both its population and its local food economy.

What we know about corporate emissions

Based on the Region's corporate emissions inventory, the organization has limited options to achieve both short-term and long-term emissions reductions consistent with the scope and scale of the community's transition outlined in the *TransformWR* strategy.

As shown in Table 2, corporate emissions come from both our corporate energy use and from methane resulting from community waste and biosolids. This table describes both the short- and long-term emissions reduction potential in each community emissions sector, addressing both the proportion of emissions that can be reduced and the impact of those reductions on overall emissions.

Table 2: Corporate Emissions Assessment

Emissions Area	Percent of Corporate Emissions 2019*	Percent of 2010 baseline emissions remaining in 2019	Short-term emissions reduction potential (to 2030)	Long-term emissions reduction potential (to 2050)
Electricity	4%	26% (74% reduction to date)	Low impact on emissions	Total reduction and low impact
Natural Gas	15%	117% (17% increase to date)	Low/Medium impact on emissions	Total reduction and high impact
Solid Waste (Landfill Methane)	40%	86% (14% reduction to date)	Low impact on emissions	Uncertain, but likely limited reduction
Fleet (Corporate, GRT, Contracted Services)	33%	109% (9% increase to date)	High impact on emissions	Total reduction and high impact
Staff Travel (Mileage)	0.3%	77% (23% reduction to date)	Low impact on emissions	Total reduction and low impact
Biosolids (Methane)	8%	31% (76% reduction to date)	High impact on emissions	Low additional impact on emissions

**2019 has been used as the recent example year, as 2020 had an unusual emissions profile for reasons outlined in report PDL-CPL-22-08.*

The results of this assessment highlight two key conclusions:

Methane emissions will remain the most significant source of corporate emissions in the coming decades, and cannot be eliminated.

The Region has two primary sources of methane emissions. One significant source has been biosolids from wastewater (8%). In 2020, Water Services made significant program changes to reduce methane emissions from biosolids, and managed to reduce emissions to approximately 1% of corporate emissions because biosolids were not landfilled. Water Services is building this into the new biosolids contract, so future biosolids emissions are expected to remain minimal.

The landfill is the other significant source of methane emissions. Most of the current landfill emissions are from methane produced by organic waste added to the Region's landfills since 1973, which continues to decay. The Region has a leading-edge landfill gas collection system, but as an active landfill, 20% to 30% of landfill gas cannot be collected and escapes into the atmosphere. A full technical solution to change this is not expected. While some small but important emissions reductions are possible through waste collection program changes to minimize organic material landfilled and through continued upgrades to the landfill gas collection system, further reduction of methane from the landfill is not expected to be significant in the short-term, nor is it expected at a significant scale in the long-term. Landfill methane is expected to continue to be a significant source of emissions for the Region.

As a result, all of the Region's energy-related emissions will need to be eliminated by 2050.

To be able to achieve emissions reductions approaching the Region's 80% community reduction target, all energy-related emissions will need to be eliminated. The largest source of energy emissions are from corporate and Grand River Transit fleets, both of which have significant opportunities to reduce emissions through conversion to zero-emission vehicles in the next several years, and both of which will need to be fully decarbonized by 2050. While a smaller percentage of our energy emissions are from natural gas, it will need to be eliminated from Regional facilities and processes by 2050, as well, to achieve the scope and scale of reductions needed, and to complete the Region's energy transition. Because diesel, gasoline, and natural gas are burned on-site in the community and Regional facilities, these conversions are also expected to have the added benefit of reducing community illness due to exposure to air pollution (see PHE-HPI-22-01, Appendix A, section 7.1.).

While electricity is responsible for a small portion of the Region's emissions, it is expected to continue to play a role in the Region's emissions in the short to medium-term, until the Ontario electricity grid has been fully decarbonized.

Four Key Corporate Climate and Energy Transition Outcomes

Given the above emissions profiles, and the broader need for adaptation and GHG reduction and energy transition work, by 2050 the Region will need to have achieved the following four key outcomes:

Adapting to a Changing Climate

1) **Adaptation: By 2050, infrastructure has been de-risked through asset management.** The impacts of climate change are being felt in some areas of operations/infrastructure now. Climate risks to the Region's infrastructure and associated risks to community members need to be reduced as soon as possible through responsible asset management.

Greenhouse Gas Emissions and Energy

2) **Energy: By 2050, fossil fuel use has been eliminated.** All corporate non-electricity energy emissions need to be eliminated, including building heating and cooling, fleet operations, and energy-intensive processes.
3) **Methane: By 2050, fugitive methane emissions have been minimized.** Methane that escapes into the atmosphere from corporate operations needs to be minimized, and methane resources optimized for renewable energy purposes.
4) **Modal Shift: By 2050, transportation and transit infrastructure has been built that has enabled the achievement of the modal shift to most trips being made by active transportation.** This requires prioritizing active transportation and transit in the mobility system through transportation and transit infrastructure and services, and developing and implementing land use planning policies to achieve the transition of the urban structure into complete, efficient communities based on 15-minute neighbourhoods.

Work Underway

Over the past year, across the organization, the preliminary work of planning for the climate and energy transition has begun. Based on the four key corporate climate and energy transition outcomes, staff have identified and charted the Region's transformational climate action work with respect to availability of technical solutions and the time to implement. Each body of work is depicted in the chart below, as well as described by Division/Department in the following paragraphs.

It should be noted that this report captures the most significant climate action work in terms of emissions and risks reductions potential, and future financial impact. It is not meant to be a comprehensive list, and it is acknowledged that there are important climate action opportunities connected to the work of almost all Regional divisions.

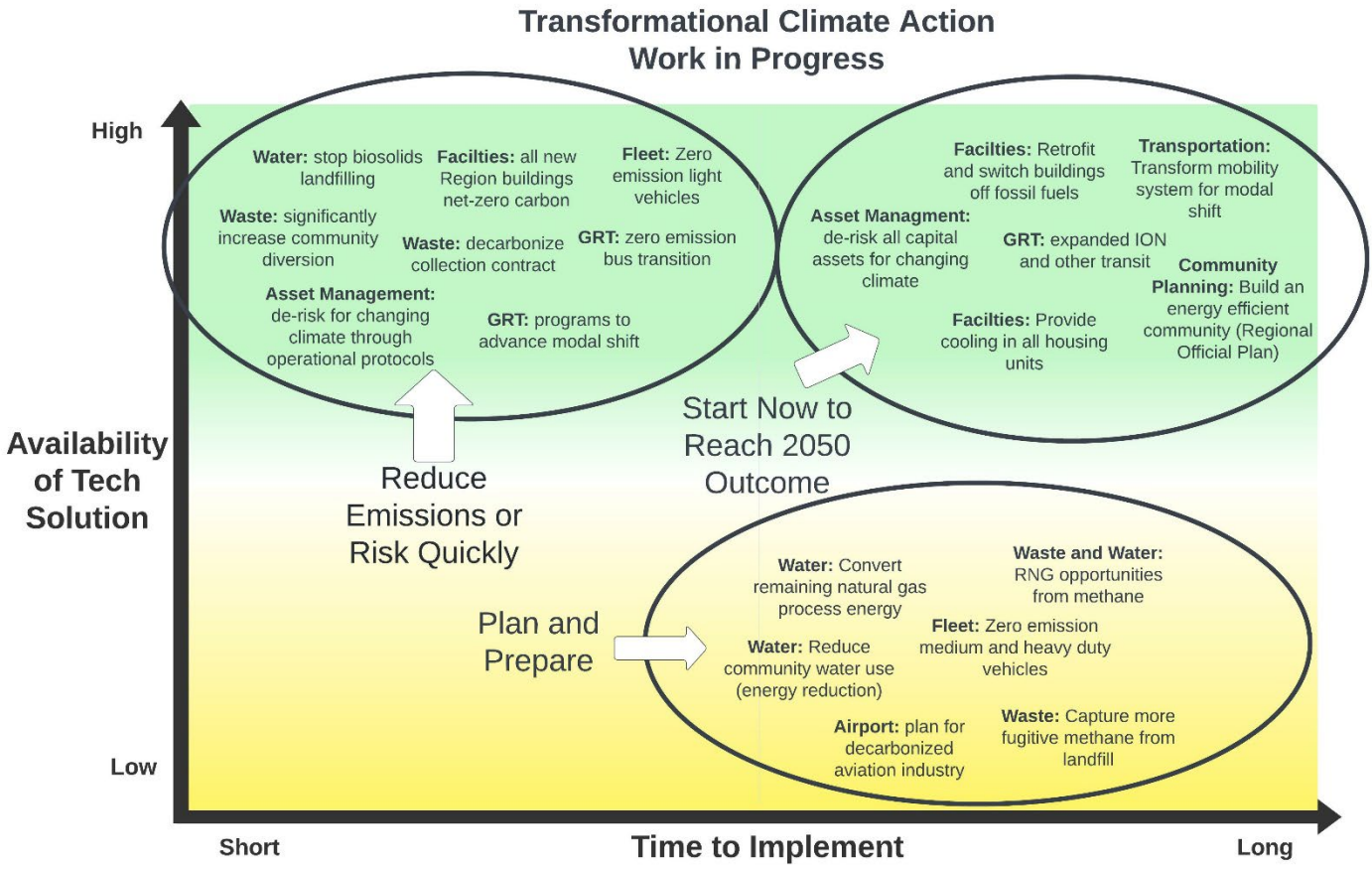


Figure 1: Transformational Climate Action Work in Progress, by availability of tech solution and time to implement.

The work outlined below in each area is underway, but will be coming back to Council for its consideration at key decision points, consistent with the Region's standard processes.

Asset Management Office:

The corporate Asset Management Office (AMO) is leading the work of planning how to evaluate the risk posed to infrastructure by a changing climate and determine the necessary adaptations and the associated investment or operational cost implications. This means *starting now* to identify, budget for, and implement de-risking capital assets to prepare for warmer, wetter, wilder weather. It also means *reducing risk quickly* by making adjustments to operational protocols.

Public Health:

Building on its recently released Climate Change and Health Vulnerability Assessment (PHE-HPI-22-01), Public Health is *starting now* to reduce community vulnerability to a changing climate for the long term. The first stage of this work is to use this new information to review and make appropriate adjustments to current programming, and to further inform Public Health's work related to items identified in the Community Climate Adaptation Plan for Waterloo Region. Public Health is also *starting now* by continuing to

support local partners in developing adaptation strategies to address health impacts of climate change.

Water Services:

Water Services is *reducing emissions quickly* by making changes to its biosolids disposal contract to eliminate landfill disposal of biosolids whenever feasible. It has also *reduced emissions quickly* through its new biogas co-generation facilities, which have recently been commissioned, which makes use of methane captured to offset energy used for wastewater treatment. Water Services will *plan and prepare* by evaluating long-term options to convert the approximately 1% of its water treatment energy use that still relies on natural gas, by piloting opportunities to reduce energy needs by reducing community water use, by optimizing chemical and hydro usage used during treatment, and by considering long-term opportunities for the use of methane as renewable natural gas.

Waste:

Waste is *planning and preparing* to maximize capture of the remaining 20% to 30% of methane emissions from the Waterloo Landfill based on available and proven technology options and landfill waste diversion policies, as well as exploring potential future renewable natural gas opportunities. Waste will also have an opportunity *reduce emissions quickly* through potential requirements in its new waste collection contract for contractors to use compressed natural gas, renewable natural gas, or electric vehicles for curbside collection starting in 2026, instead of diesel; this would meaningfully reduce emissions in the fleet category from contracted services. Waste can also *reduce emissions quickly* on a much smaller scale by continuing to change the curbside collection program to minimize the organic material that goes into the landfill.

Finance:

Finance staff is supporting work across the organization to *reduce emissions and risk quickly*, *start now*, and *plan and prepare* through their work to develop the corporate carbon budget, identify innovative financing opportunities, integrate climate considerations into financial planning, and explore opportunities for green procurement.

Facilities:

Facilities is *starting now* in order to be able to complete the transition of all existing Region buildings off fossil fuels by 2050, by advancing plans for retrofits and fuel switching at all Region facilities. Facilities is also *reducing emissions quickly* by working to prepare for all new Region buildings to be built to be net-zero operational carbon, to ensure that new buildings are aligned with climate goals and do not need to be retrofitted prematurely at additional cost. Incorporating these changes into the capital program immediately will ensure the Region avoids spending money on new equipment

that will need to be prematurely retired at a greater cost between now and 2050, and to make sure that the transition can be completed by the middle of the century.

Facilities is *starting now* to plan for cooling in all Region-owned housing units, to protect vulnerable residents from future extreme heat due to the effects of a changing climate; this work can be integrated with work in housing units to eliminate the use of fossil fuels.

Facilities also is also *starting now* to ensure that needed facilities for electric vehicle charging for fleet uses (for both corporate fleet and Grand River Transit buses) are available at the right Region facilities as soon as they are needed. This involves significant work on electrical capacity.

Housing:

In addition to the work that needs to be done to Region-owned housing properties, outlined above, Housing is also *starting now* to request that affordable housing built by other community partners on Regional lands meets demonstrate the ability to achieve net-zero operational carbon and be built for future climate conditions. This is being embedded in the evaluation criteria for future RFP processes, both for lands and funding related to affordable housing. This area of work is critical from an equity perspective, to ensure that vulnerable community members and the organizations serving them are not left behind in the climate and energy transition. This includes protection both from high utility costs due to rising fuel and carbon pricing, and from risks associated with extreme weather.

Corporate Fleet:

Enabled by its telematics project, which is currently underway, Corporate Fleet is *reducing emissions quickly* with work to convert all non-police light-duty vehicles, such as sedans, minivans, cargo vehicles, and pickup trucks, to commercially available zero-emission vehicles in the next decade. This constitutes approximately half of the corporate fleet, excluding police vehicles. Some vehicles will be replaced in 2022/2023, but significant numbers of conversions are expected to take place beginning in 2024.

Corporate fleet will also *plan and prepare* for the future availability of vehicles to replace medium and heavy duty vehicles, to ensure that the transition of those vehicles can proceed as soon as possible.

Waterloo Regional Police Services has acted to *reduce emissions quickly* through changes to only purchase hybrid patrol police vehicles, and thorough committing to utilize hybrid and electric vehicles where possible. They will also need to *plan and prepare*, with support from Corporate Fleet, for future availability of suitable zero-emission police vehicles.

Community Planning:

Community Planning is *starting now* to build a more energy efficient community, through changes to the Regional Official Plan (ROP). The ROP is a key document for directing growth and development in the community, and for increasing the energy efficiency of our built form. In addition to advancing renewable energy generation and net-zero carbon new buildings, critical changes to land use planning are needed to enable residents to achieve the modal shift to most trips being made using active transportation by 2050. This means using intensification to retrofit existing neighbourhoods to function as 15-minute neighbourhoods, where people can meet their daily needs through a short and convenient trip by walking, cycling, and rolling.

Changes to Chapters 1 and 2, addressing the vision for the Plan and growth in Waterloo Region, have had an integrated climate lens, to ensure that the ROP is being used as an effective tool to support the development of an energy efficient community. This climate lens will also be applied to the second amendment, which will follow after the first, and address key areas including rebuilding the mobility system to prioritize walking, cycling, and rolling, as well as transit.

Community Planning staff are also working closely in a range of partnerships to *reduce emissions and risk quickly*, *start now*, and *plan and prepare* to enable the community transition, including with area municipal, utility, and community partners.

Grand River Transit:

Grand River Transit (GRT) is *reducing emissions quickly* by proceeding rapidly with plans to convert its bus fleet off fossil fuels. A pilot of fully electric buses to determine how to proceed with this transition will be taking place in 2023 and 2024, and information from the two pilots years will be critical to inform the subsequent transition to zero-emission buses. In the interim, all new bus vehicles are hybrid vehicles, which can reduce each bus’s emissions by up to 20%.

GRT is *reducing emissions quickly* through continuing and expanding programs and infrastructure to support the modal shift to most trips being made by walking, cycling and rolling by 2050. Most immediately, the launch of the new micromobility system is a critical component of supporting the community to change its travel modes.

GRT is also *starting now* to grow the transit system needed to support this modal shift, through the expansion of ION and other transit service. It will also be *starting now* through work with Transportation on the new Regional Transportation Master Plan, and through the creation of a new GRT Business Plan.

Transportation:

Transportation is *starting now* to be able to design and build a mobility system to enable community members to achieve the modal shift to most trips to being made by active

transportation by the year 2050. This will be done through significant revisions to the Regional Transportation Master Plan (RTMP), both to align with the updated Regional Official Plan and to achieve the transportation goals in the *TransformWR* strategy. This work will begin in the fall of 2022, and this new RTMP will lead to significant changes to the capital program in future years.

Transportation will also work with Corporate Fleet to *plan and prepare* for eventual conversion of specialised heavy-duty vehicles, such as snow plows, when the technology is readily available.

Airport:

The Airport is *planning and preparing* for a future decarbonized aviation industry, through collaboration with the Waterloo Institute for Sustainable Aeronautics (WISA). The Airport is also *starting now* through the Airport Master Plan to prepare the Airport to help Waterloo Region thrive in a decarbonized global future.

5. Area Municipality Communication and Public/Stakeholder Engagement:

Significant public and Area Municipal consultation and collaboration was conducted through the process to develop the Community Climate Adaptation Plan, endorsed by Council in November 2019 (PDL-CPL-19-38) and the TransformWR strategy, endorsed by Council in June 2021 (PDL-CPL-21-30). The strategy included a list of short-term actions that are the Region's responsibility (PDL-CPL-21-31, Appendix D).

The Region collaborates with Area Municipalities, local utilities, and the public on transformational climate action and energy transition initiatives through the ClimateActionWR collaborative and WR Community Energy, which the Region funds jointly with Area Municipal and utility capacity-holders.

6. Financial Implications:

The costs associated with climate adaptation, GHG reduction, and energy transition, such as green technologies and construction standards, is generally higher when compared to conventional materials and standards but there continues to be more option as the industry matures in this regard. Future operating costs can, in some instances, be reduced by strategies that reduce our energy needs and use. Costs related to infrastructure failure due to extreme weather events can be avoided in the future if adaptation strategies are undertaken now. By decarbonizing its operations, the Region will reduce its exposure to future fossil fuel price volatility, other carbon costs as well as premature asset replacement.

In order to provide context to the level of investment required to reach the Region's climate action goals, the following table describes the range of budget adjustments that would have been required to be added to the 2022-2031 capital program:

Impacts to the Region's current 10 year Capital Program				
Service/Infrastructure type	2022-2031 capital plan expenditure ($m, $2022)*	Incremental climate action investments to be added to the 10 year capital plan		
		<$25m	$25-$50m	>$50m
Transportation – roads, bridges, active transportation, facilities	$1,037.3			✓
Water supply	$610.9			✓
Water distribution	$2.8	✓		
Wastewater treatment	$460.0			✓
Wastewater collection	$2.2	✓		
Waste Management	$162.1		✓	
Public Transit – ION	$1,369.8			✓
Public Transit – Buses	$284.7			✓
Facilities excl. housing and police	$414.8			✓
Waterloo Region Housing facilities	$441.7		✓	
Police facilities	$112.3	✓		
Police fleet	$30.3	✓		
Corporate fleet excl. police & transit	$87.3	✓		

* Significant revisions to various capital programs are anticipated through the future updating of Master plans (Transportation, Housing, etc.)

Staff will refine options and estimates and to the extent possible, begin incorporating the cost of implementing actions to achieve climate action goals during development of the 2023-2032 capital program.

7. Conclusion / Next Steps:

Each of these Divisions has critical next steps that need to be taken to reduce emissions and risk quickly, start now, and/or plan and prepare for the Region's climate and energy transition. As was the case for the 2022 budget, staff are working interdepartmentally with the support of the sustainability group in Community Planning to coordinate climate action needs associated with these next steps in the 2023 budget. These will be included in each division's recommended capital and operating budgets, to reflect the new normal outlined in this report. Staff will also proceed with the creation of the staff governance structure outlined in Appendix A.

8. Attachments / Links:

Appendix A: Climate and Energy Transition (CET) Governance

Prepared By: **Kate Daley**, Environmental Sustainability Specialist

Kate Hagerman, Manager, Environmental Planning and Sustainability

Reviewed By: **Danielle De Fields**, Director, Community Planning

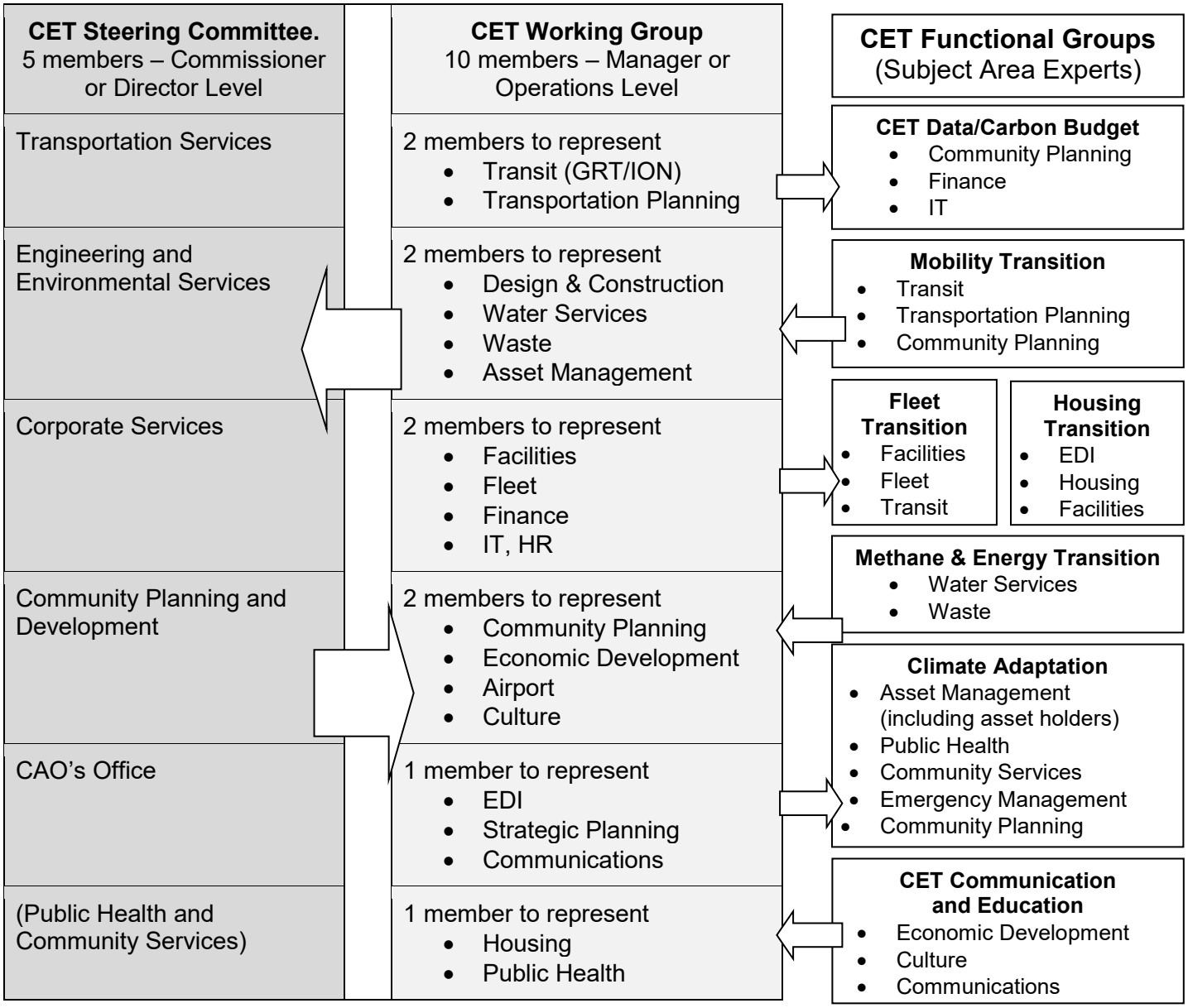
Approved By: **Rod Regier**, Commissioner, Planning, Development and Legislative Services

Appendix A:
Climate and Energy Transition (CET) Governance
Roles and Responsibilities for Committees

Purpose of Document

- Outlines the operational and decision-making structure and membership for the key committees governing the implementation of the Region's Climate and Energy Transition.
- Identifies the primary roles and responsibilities of participants on the various committees and groups.

Corporate Climate and Energy Transition Governance Chart:



Roles and Responsibilities

Chair of CET Steering Committee (Commissioner selected for a two-year term)

- Attends CLT and Council meetings to present information for approval and bring direction back to the Steering Committee.
- Ensures that CLT and Council is engaged appropriately for key decision points
- Ensures timely resolution of issues and escalates to CLT as necessary

CET Steering Committee (Commissioner and/or Director Level)

- Meets on a monthly or bi-monthly basis or as needed (min 6 times per year)
- Ensures the Chief Administrative Officer (CAO) and Corporate Leadership Team (CLT) is kept informed
- Provides executive level oversight and guidance regarding the strategic and change management elements of Climate and Energy Transition work
- Provides interdepartmental leadership: sets priorities, establishes consensus, resolves issues, and makes joint recommendations to CLT and Council. Endorses timelines, budgets, and key milestones
- Reviews and endorses CET related projects and work plans
- Ensures accountability: monitors key performance targets, in conjunction with the Working Group
- Delegates responsibilities to the CET Working Group
- Sample of Decisions/Approvals to be made:
    - Corporate CET Governance
    - Climate and Energy Transition Plans and Policies (adaptation and GHG/energy)
    - Carbon Budget Framework
    - Council/Committee Reports
    - Corporate Climate and Energy Transition Project Charters
    - Corporate Project Goals and High-Level Schedule
    - Corporate CET Communications Plans
    - Mandate and terms of reference for engaged professional services

Chair of CET Working Group (Manager selected for a 2-year term)

- Attend the Steering Committee meetings, along with sustainability staff, to present information for review/endorsement and bring direction back to the Working Group
- Ensures that Steering Committee is engaged appropriately for key decision points
- Ensures timely resolution of issues and escalate to the CET Steering Committee as necessary.

CET Working Group (Managers and operational staff)

- Meets on a monthly basis or as needed (min 6 times per year)

- Reports to CET Steering Committee, supporting their work in: priority setting, building consensus, resolving issues, and making joint recommendations to CLT and Council
- Works inter-departmentally, and through the Functional Groups, to develop and implement corporate-wide initiatives, including the CET strategy and carbon budget framework
- Integrates CET work into departmental and divisional work
- Prepares documents, as required, for review and approval by the Steering Committee, including but not limited to: Committee/Council or CLT reports, corporate plans, policies, etc.
- Prepares project charters, schedules, and budget proposals for review and/or endorsement by Steering Committee
- Assigns leads and determines membership for Functional Groups as well as provides direction and support
- Coordinates with Functional Groups and integrates their work into the corporate whole
- Develops, maintains and implements change management and communication plans
- Manages key performance metrics and informs Steering Committee as appropriate
- Decisions will be made primarily by consensus, with majority rule in event of dissent; minutes will be taken and dissent noted
- Sample of Decisions to be made;
    - Recommend Carbon Budget framework
    - Recommend Corporate CET Strategy
    - Review/Approval of:
        - CET related project plans and work plans
        - CET Communication Plans
        - Divisional Change Management Plans
        - Education/Training Plan

<u>Functional Groups</u>

Each Functional Group will be lead by an appointed participating Working Group member, and is responsible for the following:

- Prepares and provides subject specific input to develop and accelerate transition plans
- Consults and collaborates with others and reviews best practices as required
- Liaises with inter-municipal working groups when appropriate
- Documents project level transition plans and progress, with timelines and budgets
- Implements projects or specific initiatives within a Division or group
- Monitors progress and impact of work
- Provides regular reports to CET Working Group through Functional Group Lead

<u>Climate Transition and Sustainability Team Staff</u>

Climate Transition and Sustainability Team staff will provide administrative, facilitation, technical support, and strategic guidance to all levels of the governance structure, including but not limited to:

- Strategic oversight and long-term work planning
- Development and implementation of corporate plans and strategies, and decision making tools (Climate Implications Tool, carbon budget)
- Coordination of interdepartmental work
- Data creation, analysis, modeling, maintenance, and management
- Internal and external progress monitoring, reporting and communications
- Leadership and support for Region-wide collaborative initiatives
- Facilitation of Regional participation in municipal and community projects and partnerships
- Connection to external resources, expertise and opportunities
- Staff training and capacity building

Region of Waterloo

Transportation and Environmental Services

Waste Management Division

To:	Chair Tom Galloway and Members of Planning and Works Committee
Meeting Date:	June 7, 2022
Report Title:	Green Bin Organics Processing Strategy

---

1. Recommendation:

That the Regional Municipality of Waterloo extend Contract T2009-169 with the City of Guelph (City) for the Processing of Green Bin waste for up to two (2), five-year periods, with the first five-year extension being from October 1, 2023 to September 30, 2028, under the same terms and conditions as approved by Council in Report TES-WMS-E-10-020, on April 14, 2010, for processing of 20,000 metric tonnes per year; and,

That the Regional Municipality of Waterloo negotiate and finalize the contract extension with the City of Guelph, subject to the satisfaction of the Director, Waste Management Services and Director, Legal Services;

That a tender be developed to solicit bids from other 3rd party processors for the additional tonnage collected under the Green Bin Organics Program above the 20,000 tonne commitment to the City, with the contract timeline of this tender aligning with the above contract extension with the City, as described in report TES-WMS-22-05 dated June 7, 2022.

2. Purpose / Issue:

The purpose of this report is to inform the Planning and Works Committee, of recommendations for securing Green Bin Organics Processing capacity to allow staff to develop a longer term organics management strategy.

3. Strategic Plan:

The work described in this report supports the Corporate Strategic Plan objectives of the Environment and Climate Action Focus Area 3.3: Direct more waste away from landfill, improve recycling and better manage organic waste.

4. Key Considerations:

- Secure contracts with organics processors to ensure continuous diversion of food waste through the Green Bin Organics Program at a time when competition for organics processing capacity is expected to increase significantly due to

additional green bin organics programs coming online in Ontario.

- Securing the contract extension with the City of Guelph and a second 3rd party processor will provide staff an opportunity to develop a long term strategy including exploring upstream food waste options to sustainably reduce food waste as well as investigate opportunities for future food waste processing technologies, such as Anaerobic Digestion. This would also allow the Region to align with the Province's Organics Strategy, including potential legislation banning organic food waste from landfills, currently proposed to occur by 2030.

- The contract between the Region and the City of Guelph has been mutually beneficial by providing reliable diversion of food waste for the Region without any service disruptions to date. The City also provides value added support in quantifying and verifying the Carbon Credits associated with the Region's organics diversion program as well as collaborating and sharing related policies with respect to initiatives that utilize and positively affect avoidable food waste.

- The Region would tender the processing of the remaining Green Bin tonnage, in excess of the 20,000 tonne per year commitment to the City. The tender would be for tonnage estimated to be in the range of 10,000 tonnes/year and would allow for fluctuations in tonnage, both up and down, based on future projections of population growth and program participation, including the potential for food waste reduction opportunities, over the life of the contract.

5. Background:

In 2010, the Region of Waterloo entered into an inter-municipal partnership agreement with the City of Guelph, as approved by Council in Report TES-WMS-E-10-020. The agreement allowed for 20,000 metric tonnes of green bin waste to be processed annually at the City's organics processing facility for composting. The contract with the City allows for an option to renew for up to two (2) five-year periods beyond the initial expiry date of October 13, 2023.

With the introduction of the current curbside waste collection policies in 2017 and namely; the implementation of bi-weekly garbage collection, the Region's Green Bin Program has seen a significant increase in tonnage, with approximately 28,500 tonnes of organic waste collected per year. This increase in tonnage necessitated the need for a tender for additional processing capacity above and beyond the 20,000 tonnes committed to the City. At present, as per contract T2017-240, the remaining 8,500 tonnes are transported to, and processed by Walker Environmental at their organics processing site in Arthur, ON. The contract with Walkers has an initial 3-year term which expired on January 31, 2021 but allows for 3 additional one-year extension options which are currently being exercised, with final contract termination on January 31st, 2024.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Preliminary meetings have been held with the City of Guelph staff in the form of a working group and there is alignment in terms of meeting the needs of both the Region of Waterloo and the City of Guelph. As such, we are recommending to formally provide notice of intent to review the contract extension.

7. Financial Implications:

The Region expects to incur costs of approximately $2,720,200 under contract T2009-169 with the City of Guelph and $1,098,200 under contract T2017-240 with Walker Environmental, resulting in a total 2022 estimate of $3,818,400. The Region's approved 2022 Waste Management operating budget has a provision of $3,902,300 which is sufficient to fund these contracts.

The Region's 2023 budget for Green Bin materials collection and transportation to the Guelph facility and collection and processing of materials in excess of 20,000 tonnes is expected to be higher due to the current inflation and fuel price conditions, as well as due to increased tonnage collected. Staff will monitor these factors and adjust 2023 budget estimates accordingly through the 2023 budget process.

8. Conclusion / Next Steps:

There will be no interruption to services if T2009-169 Processing of Green Bin Material by the City of Guelph is extended for up to two (2) five-year periods, with the initial extension starting October 1, 2023 to September 30, 2028 and the option to renew the second five-year extension from October 1, 2028 to September 30, 2033.

The existing contract with Walker Environmental under T2017-240 will terminate on January 31, 2024. A new tender will be advertised and awarded to ensure provision of green bin processing for the period February 1, 2024 to September 30, 2028, with the option to renew for one, five-year period, to align with the City of Guelph contract extension.

9. Attachments / Links:

Nil.

Prepared By: **Thomas Alkema,** Supervisor, Waste Operations

Mike Ursu, Manager, Waste Operations

Reviewed By: **Jon Arsenault,** Director, Waste Management Services

Approved By: **Thomas Schmidt,** Commissioner, Transportation and Environmental Services