



The Corporation of the City of Temiskaming Shores
Regular Meeting of Council
Tuesday, November 16, 2021 – 6:00 p.m.
City Hall – Council Chambers – 325 Farr Drive

Agenda

Land Acknowledgement

1. **Call to Order**
2. **Roll Call**
3. **Review of Revisions or Deletions to Agenda**
4. **Approval of Agenda**

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that City Council approves the agenda as printed / amended.

5. **Disclosure of Pecuniary Interest and General Nature**

6. Review and adoption of Council Minutes

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that City Council approves the following minutes as printed:

a) Regular Meeting of Council – November 2, 2021.

7. Public Meetings pursuant to the Planning Act, Municipal Act and other Statutes

None

8. Question and Answer Period

9. Presentations / Delegations

a) Mr. Justin Jones, Consultations Lead + Programs and Policy – WSP
Canada Inc.

Re: Active Transportation Plan

10. Communications

a) The Honourable Sylvia Jones, Solicitor General

Re: Community Safety and Well-Being (CSWB) Plans, 2021-10-14

Reference: Received for Information

- b) James Pearce, Director, Municipal Programs Branch – Ministry of Transportation

Re: Fall Economic Statement (Gas Tax Program and Safe Restart Agreement Funding), 2021-11-05

Reference: Referred to the Treasurer and the Transit Committee

- c) Lori McDonald, Director of Corporate Services/ Clerk – Town of Bracebridge

Re: Request for Action Related to “Renovictions”, 2021-11-08

Reference: Received for Information

- d) Canadian Mental Health Association (CMHA) - Cochrane Timiskaming Branch

Re: Proclamation - National Addictions Awareness Week from November 21 to November 27, 2021, 2021-11-10

Reference: Motion Presented Under New Business

- e) Guylaine Coulombe, CAO/Clerk – Municipality of Mattice – Val Cote

Re: Request to provincial government to reconsider postponement of MPAC property assessment updates, 2021-11-10

Reference: Received for Information

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that City Council agrees to deal with Communication Items 10. a) to 10. e) according to the Agenda references.

11. Committees of Council – Community and Regional

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that the following minutes be accepted for information:

- a) Minutes of the Temiskaming Shores Climate Change Committee meeting held on September 28, 2021;
- b) Minutes of the Temiskaming Shores Development Corporation meeting held on October 20, 2021; and
- c) Minutes of the Temiskaming Shores Police Services Board meeting held on October 18, 2021.

12. Committees of Council – Internal Departments

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that the following minutes be accepted for information:

- a) Minutes of the Recreation Committee meeting held on October 18, 2021.

13. Reports by Members of Council

14. Notice of Motions

15. New Business

a) Proclamation - National Addictions Awareness Week from November 21 to November 27, 2021

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Whereas the purpose of Addictions Awareness Week is to highlight solutions to help address harms related to alcohol and other drugs; and

Whereas Addictions Awareness Week provides an opportunity for Canadians to learn more about prevention, to talk about treatment and recovery, and to bring forward solutions for change; and

Whereas the theme for the 2021 National Addictions Awareness Week is Driving Change Together; and

Whereas this year's theme, Driving Change Together, celebrates community partnerships and initiatives that work together to create positive, lasting change within our communities.

Therefore be it resolved that Council hereby proclaims November 21st to November 27th, 2021 as "Addictions Awareness Week" in the City of Temiskaming Shores.

b) January to October 2021 Year-to-Date Capital Financial Report

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that the Council of the City of Temiskaming Shores hereby acknowledges receipt the January to October 2021 Year-to-Date Capital Financial Report for information purposes.

c) Memo No. 039-2021-CS – Deeming By-law for Daniil Subbotin and Sara Worth – 604 Brewster Street

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Whereas the owners of 604 Brewster Street would like to merge lots on title through the adoption of a deeming by-law in compliance with the Planning Act, in order to create one property with one Roll number; and

Whereas the owners have acknowledged that registration of the pending deeming by-law on title will be at their expense.

Now therefore be it resolved that Council for the City of Temiskaming Shores hereby directs staff to prepare the necessary by-law to deem PLAN M54NB LOTS 33 TO 35 PT LOT 77 PLAN M37NB PT LOT 116 PT LANE AND RP 54R4188 PARTS 1 TO 4 RP 54R5366 PART 4 PCL 4159 3415 1030 24666 and PLAN M54NB LOT 78 PCL 23867SST to no longer be Lots on a Plan of Subdivision; and

Further that Council hereby directs staff to prepare the necessary deeming by-law for consideration at the November 16, 2021 Regular Council meeting.

d) Memo No. 040-2021-CS - Appoint Wildlife Control Agent

Draft Motion

Moved by: Councillor

Seconded by: Councillor

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Memo No. 040-2021-CS; and

That Council directs staff to prepare the necessary by-law to appoint Larry Durling as a Wildlife Control Agent for the City of Temiskaming Shores, for consideration at the November 16, 2021 Regular Council meeting.

e) Memo No. 041-2021-CS - Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Memo No. 041-2021-CS; and

That Council directs staff to prepare the necessary by-law to authorize the execution of the Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement between Her Majesty the Queen in Right of Ontario as represented by the Attorney General and The Corporation of the City of Temiskaming Shores, for consideration at the November 16, 2021 regular meeting.

f) Administrative Report CS-045-2021 – Site Plan Agreement: Haileybury Fire Hall, Rorke Avenue

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Administrative Report CS-045-2021;

That Council agrees to enter into a Site Plan Agreement with CGV Builders Inc. for the property described as PLAN M128NB LOTS 147 148 150 152 154 156 158 160 162 PT FOURTH ST PCL 3393NND 4120TIM 5396SST; and

That Council directs staff to prepare the necessary by-law to enter into a Site Plan Agreement with CGV Builders Inc. for the property described as PLAN M128NB LOTS 147 148 150 152 154 156 158 160 162 PT FOURTH ST PCL 3393NND 4120TIM 5396SST, for consideration at the November 16, 2021 Regular Council meeting.

g) Memo No. 013-2021-RS – Age Friendly Program Update

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Memo No. 013-2021-RS, regarding the Age Friendly Program update for information purposes.

16. By-laws

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that:

By-law No. 2021-171 Being a by-law to authorize the Execution of a Memorandum of Understanding with the Ontario Northland Transportation Commission for the cost sharing of the 2021-2022 Rail Safety Improvement Program (Radley Hill Road Railway Right-of-Way)

- By-law No. 2021-172 Being a by-law to designate any plan of subdivision, or part thereof, that has been registered for eight years or more, which shall be deemed as not a registered plan of subdivision 604 Brewster Street (Roll No. 5418-030-001-053.00 and 5418-010-001-082.02)
- By-law No. 2021-173 Being a by-law to amend By-law No. 2010-111, as amended, to appoint agents for the purposes of wildlife control (Larry Durling)
- By-law No. 2021-174 A By-law to authorize the execution of a Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement between Her Majesty the Queen in Right of Ontario as represented by the Attorney General and The Corporation of the City of Temiskaming Shores
- By-law No. 2021-175 Being a by-law to authorize the execution of a Site Plan Control Agreement with CGV Builders Inc. for the New Haileybury Fire Hall (Roll No. 5418-030-012-086.00)

be hereby introduced and given first and second reading.

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that:

By-law No. 2021-171; By-law No. 2021-174; and
By-law No. 2021-172; By-law No. 2021-175;
By-law No. 2021-173;

be given third and final reading, be signed by the Mayor and Clerk and the corporate seal affixed thereto.

17. Schedule of Council Meetings

- a) Regular – Tuesday, December 7, 2021 at 6:00 p.m.
- b) Regular – Tuesday, December 21, 2021 at 6:00 p.m.

18. Question and Answer Period

19. Closed Session

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that Council agrees to convene in Closed Session at _____ p.m. to discuss the following matters:

- a) Adoption of the October 19, 2021 and November 2, 2021 Closed Session Minutes; and
- b) Under Section 239(2)(b) of the Municipal Act, 2001 – Personal matter (identifiable individual) – Human Resources Update; and
- c) Under Section 239 (2) (c) of the Municipal Act, 2001 – Proposed or pending acquisition or disposition of land by the municipality – 468 Georgina Avenue.

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that Council agrees to rise with report from Closed Session at _____ p.m.

20. Confirming By-law

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that By-law No. 2021-176 being a by-law to confirm certain proceedings of Council of The Corporation of the City of Temiskaming Shores for its Regular meeting held on **November 16, 2021** be hereby introduced and given first and second reading.

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that By-law No. 2021-176 be given third and final reading, be signed by the Mayor and Clerk and the corporate seal affixed thereto.

21. Adjournment

Draft Resolution

Moved by: Councillor

Seconded by: Councillor

Be it resolved that Council hereby adjourns its meeting at _____ p.m.



The Corporation of the City of Temiskaming Shores
Regular Meeting of Council
Tuesday, November 2, 2021 – 6:00 p.m.
City Hall – Council Chambers – 325 Farr Drive

Minutes

Land Acknowledgement

Mayor Kidd began the meeting by observing the following Land Acknowledgement:

We acknowledge that we live, work and gather on the traditional and unceded Territory of the Algonquin People, specifically the Timiskaming First Nation.

We recognize the presence of the Timiskaming First Nation in our community since time immemorial, and honour their long history of welcoming many Nations to this beautiful territory and uphold and uplift their voice and values.

1. Call to Order

The meeting was called to order by Mayor Kidd at 6:00 p.m.

2. Roll Call

Council: Mayor Carman Kidd; Councillors Jesse Foley, Patricia Hewitt (electronic), Doug Jelly, Jeff Laferriere, Mike McArthur, and Danny Whalen

Present: Kelly Conlin, Deputy Clerk
Christopher Oslund, City Manager
Shelly Zubycck, Director of Corporate Services
Mathew Bahm, Director of Recreation
Steve Langford, Fire Chief
Brad Hearn, IT Administrator
Steve Burnett, Manager of Environmental Services
Jennifer Pye, Planner

Regrets: N/A

Media: 1, Blake Christie, CJTT FM

Members of the Public: N/A

3. Review of Revisions or Deletions to Agenda

None

4. Approval of Agenda

Resolution No. 2021-462

Moved by: Councillor McArthur

Seconded by: Councillor Foley

Be it resolved that City Council approves the agenda as printed.

Carried

5. Disclosure of Pecuniary Interest and General Nature

None

6. Review and adoption of Council Minutes

Resolution No. 2021-463

Moved by: Councillor Jelly

Seconded by: Councillor Laferriere

Be it resolved that City Council approves the following minutes as printed:

a) Regular Meeting of Council – October 19, 2021.

Carried

7. Public Meetings pursuant to the Planning Act, Municipal Act and other Statutes

None

8. Question and Answer Period

None

9. Presentations / Delegations

None

10. Communications

- a) Rural Ontario Municipal Association (ROMA)

Re: Annual Report - 2020

Reference: Received for Information

- b) Mr. Jocelyn Blais, Resident

Re: Request to facilitate flow-through funds from The Temiskaming Foundation (TTF) – Niska Leadership Fund

Reference: Motion Presented Under New Business

- c) The Honourable Peter Bethlenfalvy, Minister of Finance

Re: 2022 funding allocations under the Ontario Municipal Partnership Fund (OMPF), 2021-10-21

Reference: Received for Information and Referred to the Treasurer

- d) Kelly Black, Chief Administrative Officer - District of Timiskaming Social Services Administrative Board (DTSSAB)

Re: Third Quarter (Q3) Update to Municipalities, 2021-10-22

Reference: Received for Information

Resolution No. 2021-464

Moved by: Councillor Jelly

Seconded by: Councillor Whalen

Be it resolved that City Council agrees to deal with Communication Items 10. a) to 10. d) according to the Agenda references.

Carried

11. Committees of Council – Community and Regional

Resolution No. 2021-465

Moved by: Councillor Laferriere

Seconded by: Councillor Foley

Be it resolved that the following minutes be accepted for information:

- a) Minutes of the Business Improvement Area Board of Management Meetings held on August 23, 2021; September 20, 2021 and October 4, 2021;
- b) Minutes of the District of Timiskaming Social Services Administration Board held on September 15, 2021; and
- c) Minutes of the Temiskaming Shores Public Library Board meeting held on September 22, 2021.

Carried

12. Committees of Council – Internal Departments

None

13. Reports by Members of Council

Councillor Whalen advised Council that Ms. Lois Perry was re-elected as Chair of the Timiskaming Municipal Association (TMA) at a recent meeting.

Councillor Jelly provided Council with information regarding the upcoming Remembrance Day Ceremony, hosted by Branch 33 – New Liskeard.

Mayor Kidd advised Council of a recent meeting with the Highway 11 North working group.

14. Notice of Motions

None

15. New Business

a) Approval of Attendance at the 2022 Rural Ontario Municipal Association Conference

Resolution No. 2021-466

Moved by: Councillor Laferriere

Seconded by: Councillor Foley

Be it resolved that Council for the City of Temiskaming Shores approves the attendance of **Mayor Carman Kidd** and **Councillor Doug Jelly** at the virtual Rural Ontario Municipal Association (ROMA) Conference, scheduled for January 24 to January 25, 2022; and

That Council acknowledges that **Councillor Danny Whalen** will also be attending the virtual ROMA Conference as President of the Federation of Northern Ontario Municipalities (FONOM); and

Further be it resolved that registration and expenses incurred for attending the conference be covered in accordance to the Municipal Business Travel and Expense Policy.

Carried

b) Request to facilitate flow-through funds from The Temiskaming Foundation (TTF) – Niska Leadership Fund

Resolution No. 2021-467

Moved by: Councillor Whalen

Seconded by: Councillor Laferriere

Whereas Council for the City of Temiskaming Shores received a letter dated October 21, 2021 from Mr. Jocelyn Blais requesting the City of Temiskaming Shores facilitate the flow-through of funds from The Temiskaming Foundation (TTF) – Niska Leadership & Entrepreneurship Fund to a non-for-profit corporation known as the Niska Leadership Centre for the distribution to approved recipients; and

Whereas the interest generated from the fund will be used to assist the development of innovative ideas and projects from entrepreneurs and social

enterprises to help the development and strengthening of our Northeastern Ontario communities; and

Whereas the non-for-profit corporation, which will be established in 2021, will also play a very important mentorship and networking role for the advancement of ideas and projects.

Now therefore be it resolved that Council for the City of Timiskaming Shores hereby approves being a sponsor of the Niska Leadership & Entrepreneurship Fund through The Temiskaming Foundation (TTF) and agrees to flow the interest earned to a non-for-profit corporation known as the Niska Leadership Centre for the distribution to approved recipients.

Carried

c) Memo No. 038-2021-CS – City Hall Holiday Hours

Resolution No. 2021-468

Moved by: Councillor McArthur

Seconded by: Councillor Jelly

Be it resolved that Council for the City of Timiskaming Shores acknowledges receipt of Memo No. 038-2021-CS; and

That Council approves the following City Hall operating schedule during the 2021 holiday season:

Friday, December 24, 2021	Normal hours of operation
Saturday, December 25, 2021	Closed
Sunday, December 26, 2021	Closed
Monday, December 27, 2021	Closed (Statutory Holiday)
Tuesday, December 28, 2021	Closed (Statutory Holiday)
Wednesday, December 29, 2021	Closed
Thursday December 30, 2021	Closed
Friday, December 31, 2021	Closed

Carried

d) Administrative Report CS-044-2021 – Shared Building Services with the Municipality of Temagami

Resolution No. 2021-469

Moved by: Councillor McArthur

Seconded by: Councillor Foley

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Administrative Report CS-044-2021; and

That Council directs staff to prepare the necessary by-law to enter into a shared services agreement with the Municipality of Temagami, for consideration at the November 2, 2021 Regular Council meeting.

Carried

e) Memo No. 020-2021-PW - Amendment to By-law No. 2021-095 (Agreement with Jade Equipment for the rental of Motor Graders)

Resolution No. 2021-470

Moved by: Councillor Whalen

Seconded by: Councillor Jelly

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Memo No. 020-2021-PW; and

That Council directs staff to prepare the necessary by-law to amend By-law No. 2021-095 for the short-term rental of one (1) Tandem Drive Motor Grader and two (2) 6-Wheel Drive Graders with Jade Equipment Company Ltd., for the addition of a rental agreement as Appendix 02 to Schedule A, for consideration at the November 2, 2021 Regular Council meeting.

Carried

f) Administrative Report PW-023-2021 – Annual Landfill Monitoring and Reporting – Contract Extension

Resolution No. 2021-471

Moved by: Councillor Laferriere

Seconded by: Councillor Foley

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Administrative Report PW-023-2021; and

That Council directs staff to prepare the necessary amendment to By-law No. 2013-054 to extend the current agreement with Wood (formerly Amec Foster Wheeler) for one year (2022), at a cost of \$67,364 plus applicable taxes for consideration at the November 2, 2021 Regular Council meeting.

Carried

g) Administrative Report PW-024-2021 – Ontario Clean Water Agency (OCWA) Agreement

Resolution No. 2021-472

Moved by: Councillor Laferriere

Seconded by: Councillor Jelly

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Administrative Report PW-024-2021; and

That Council directs staff to prepare the necessary by-law to enter into an agreement with the Ontario Clean Water Agency (OCWA) for a 5-year term to provide the operation and maintenance services for the City's water and wastewater treatment facilities, for consideration at the November 2, 2021 Regular Council meeting.

Carried

h) Administrative Report RS-018-2021 – Recreational Department Fee Update 2022-2024

Resolution No. 2021-473

Moved by: Councillor McArthur

Seconded by: Councillor Foley

Be it resolved that Council for the City of Temiskaming Shores acknowledges receipt of Administrative Report RS-018-2021; and

That Council directs staff to amend By-law No. 2012-039 (Departmental User Fees) to update Recreational Fees for 2022 to 2024, for consideration at the November 2, 2021 Regular Council meeting.

Carried

16. By-laws

Resolution No. 2021-474

Moved by: Councillor Jelly

Seconded by: Councillor Foley

Be it resolved that:

- By-law No. 2021-163 Being a by-law to appoint a Municipal Treasurer for The Corporation of the City of Temiskaming Shores - Stephanie Léveillé (Repeals by-law No. 2008-099)
- By-law No. 2021-164 Being a by-law to amend By-law No. 2009-051 to appoint a Municipal Lottery Licensing Officer and a Municipal Lottery Licensing Clerk for The Corporation of the City of Temiskaming Shores (Stephanie Léveillé)
- By-law No. 2021-165 Being a By-law to adopt an Agreement between the City of Temiskaming Shores and the Municipality of Temagami for Chief Building Official and Building Inspector Services
- By-law No. 2021-166 Being a by-law to amend By-law No. 2021-095 to enter into a Rental Agreement with Jade Equipment Company Ltd. for the short-term rental of one (1) Tandem Drive Motor Grader and two (2) 6-Wheel Drive Graders
- By-law No. 2021-167 Being a by-law to amend By-law No. 2013-054, as amended being a by-law to enter into an Agreement with Wood (formerly AMEC Environmental and Infrastructure) for the Groundwater Monitoring at the Haileybury and New Liskeard Landfill Sites – One (1) Year Extension
- By-law No. 2021-168 Being a by-law to authorize the entering into an Agreement with the Ontario Clean Water Agency (OCWA) for the Operation, Maintenance and Management of the Water and Wastewater Treatment Facilities and Associated Utility Infrastructure within the City of Temiskaming Shores
- By-law No. 2021-169 Being a by-law to amend By-law No. 2012-039, as amended being a by-law to adopt Schedules of Departmental User Fees and Services for the City of Temiskaming Shores – Schedule “D” Recreation Fees

be hereby introduced and given first and second reading.

Carried

Resolution No. 2021-475

Moved by: Councillor Laferriere

Seconded by: Councillor McArthur

Be it resolved that:

By-law No. 2021-163;	By-law No. 2021-167;
By-law No. 2021-164;	By-law No. 2021-168; and
By-law No. 2021-165;	By-law No. 2021-169;
By-law No. 2021-166;	

be given third and final reading, be signed by the Mayor and Clerk and the corporate seal affixed thereto.

Carried

17. Schedule of Council Meetings

- a) Regular – Tuesday, November 16, 2021 at 6:00 p.m.
- b) Regular – Tuesday, December 7, 2021 at 6:00 p.m.

18. Question and Answer Period

Councillor Whalen provided clarification on his attendance at the upcoming ROMA Conference, stating that the Federation of Northern Ontario Municipalities (FONOM) will be covering his registration costs. Councillor Whalen also stated that the 3rd Quarter Report that was presented as part of Communications contains an plenty of valuable information for Council's information.

19. Closed Session

Resolution No. 2021-476

Moved by: Councillor Whalen

Seconded by: Councillor McArthur

Be it resolved that Council agrees to convene in Closed Session at 6:40 p.m. to discuss the following matters:

- a) Under Section 239(2)(b) of the Municipal Act, 2001 – Personal matter (identifiable individual) – Labour Relations.

Carried

Resolution No. 2021-477

Moved by: Councillor Foley

Seconded by: Councillor Jelly

Be it resolved that Council agrees to rise with report from Closed Session at 7:02 p.m.

Carried

Matters from Closed Session

Under Section 239(2)(b) of the Municipal Act, 2001 – Personal matter (identifiable individual) – Labour Relations

Staff provided Council with an update.

20. Confirming By-law

Resolution No. 2021-478

Moved by: Councillor Whalen

Seconded by: Councillor Laferriere

Be it resolved that By-law No. 2021-170 being a by-law to confirm certain proceedings of Council of The Corporation of the City of Temiskaming Shores for its Regular meeting held on **November 2, 2021** be hereby introduced and given first and second reading.

Carried

Resolution No. 2021-479

Moved by: Councillor Jelly

Seconded by: Councillor McArthur

Be it resolved that By-law No. 2021-170 be given third and final reading, be signed by the Mayor and Clerk and the corporate seal affixed thereto.

Carried

21. Adjournment

Resolution No. 2021-480

Moved by: Councillor Laferriere

Seconded by: Councillor Foley

Be it resolved that Council hereby adjourns its meeting at 7:04 p.m.

Carried

Mayor

Clerk

ACTIVE TRANSPORTATION PLAN

CITY OF TEMISKAMING SHORES

CITY COUNCIL PRESENTATION | NOVEMBER 16TH, 2021

Introductions – the WSP Project Team

Justin Jones, Community Engagement Specialist and Active Transportation Planner	Project Manager and Engagement Lead
Dave McLaughlin, Manager, National Active Transportation Practice	Project Principal, Quality Assurance
Shawn Smith, Senior Project Manager	Project Engineer
Amanda Gebhardt, Manager, Landscape Architecture	Trails Design Lead
Sandy Yang, Planner	Network Development Lead
Abram Braithwaite, Transportation Planner	Network Development Support
Erica Stone, Transportation Planner	Engagement Support

Project Purpose



Identify a **continuous active transportation network** that builds upon existing routes (e.g. STATO Trail) and connects to all communities within the City (New Liskeard, Dymond and Haileybury).



Expand **education and promotion** to raise awareness of active transportation and normalize walking and cycling as everyday travel options.



Ensure the community's interests are addressed in a plan that outlines **short and long term actions**.

What is an Active Transportation Plan?

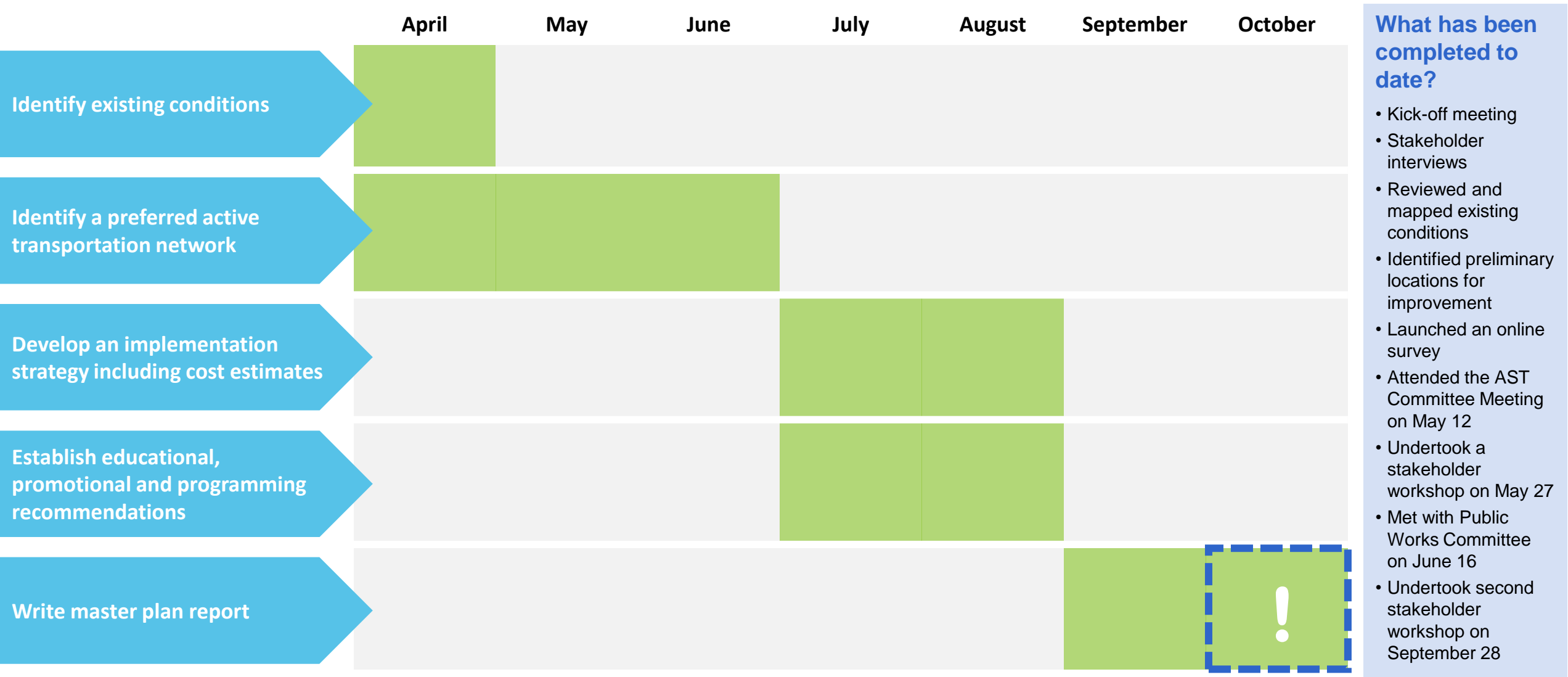
What a master plan is

- ✓ Long-term vision
- ✓ Flexible document
- ✓ Community building asset and communication tool
- ✓ Implementation guide
- ✓ Support for existing initiatives and plans

What a master plan is not

- ✗ Detailed or final design
- ✗ Authority to construct
- ✗ Prescriptive
- ✗ Requirement
- ✗ Financial commitment

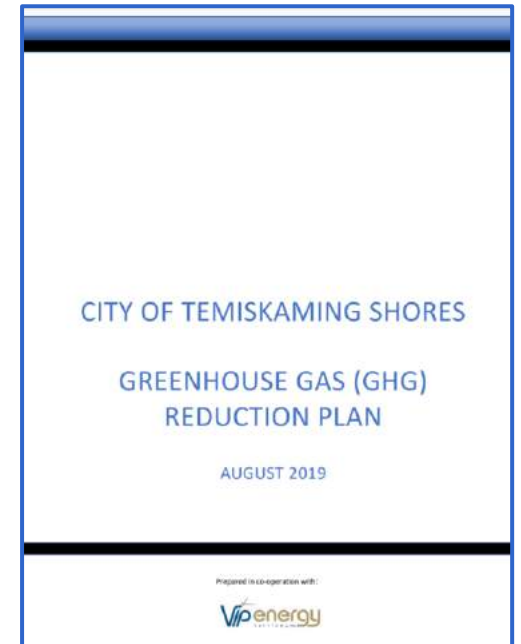
Project Schedule



Policy Review

The ATP is influenced by policies at the municipal level, most notably:

- Temiskaming Shores Official Plan (2015);
- Recreation Master Plan (2020);
- Age Friendly Community Plan (2016); and
- Greenhouse Gas (GHG) Reduction Plan (2019).



Vision and Objectives

The Vision for the ATP is...

Active Transportation in Temiskaming Shores will be safe and accessible and contribute to a healthy, sustainable, and supportive community where people of all ages and abilities can participate.

To support the Vision, the following objectives have been developed:



Enhance Safety



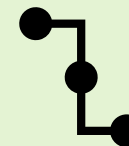
Improve Maintenance



Raise Awareness

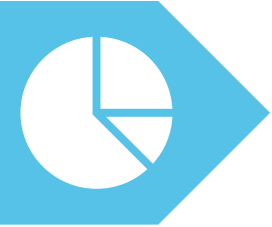


Improve Transportation Equity



Create Connectivity

Key Themes from Public and Stakeholder Engagement



Temiskaming Shores already has a strong foundation of walking and cycling



Main barriers to walking and cycling are infrastructure-related:

- Lack of adequate facilities
- Conditions of sidewalks/trails
- Speed and noise of motor traffic



Key Themes from Public and Stakeholder Engagement



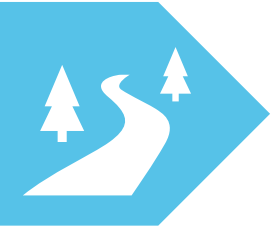
Clear desire to improve walkability in Temiskaming Shores



Most destinations in Temiskaming Shores are accessible by walking or cycling based on how long people are willing to travel



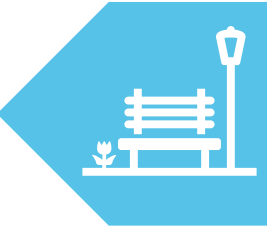
Key Themes from Public and Stakeholder Engagement



Existing STATO trail is excellent but there are still opportunities to improve (e.g., address gaps, increase connections)



Opportunities to improve public spaces for active transportation users, especially in the downtown cores



Network Development Process

Step

1. Identify existing conditions and routes that have been proposed in past planning documents
2. Identify priority gaps and missing links through community engagement
3. Identify a set of criteria to help select, assess and refine routes to form part of the preferred active transportation network.
4. Identify potential candidate routes to be investigated that could form part of the City's active transportation network
5. Undertake field work to investigate existing routes and locations for potential new routes
6. Verify candidate routes with City Staff and key Stakeholders to ensure feasibility
7. Confirm the City's preferred network including the proposed facility types
8. Identify a proposed phasing plan for the City's preferred active transportation network
9. Verify proposed phasing with Stakeholders, City Staff and members of the public to produce a final network development plan for the ATP

Existing Conditions

Off-Road Multi-Use Path



43.5 KM

Locations: STATO Trail System

Sharrows Markings / Signed Route



0.1 KM

Locations: Wabi River Bridge Crossing, Elm Street

Sidewalk



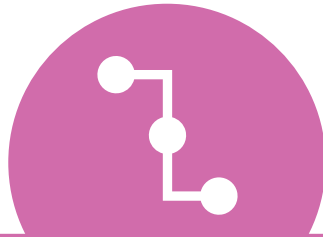
36.5 KM

Locations: New Liskeard, Haileybury, North Cobalt, Dymond

Identifying Candidate Routes... Route Selection Criteria



Safety



**Community
Connections**



Feasibility



Services Demand



**Connections to
STATO Trail**



Scenic Routes

Desktop and Field Investigations

Conflict: Lack of available boulevard limits opportunities to inexpensively design off-road facility

Conflict: Multiple driveways may intersect cycling facility

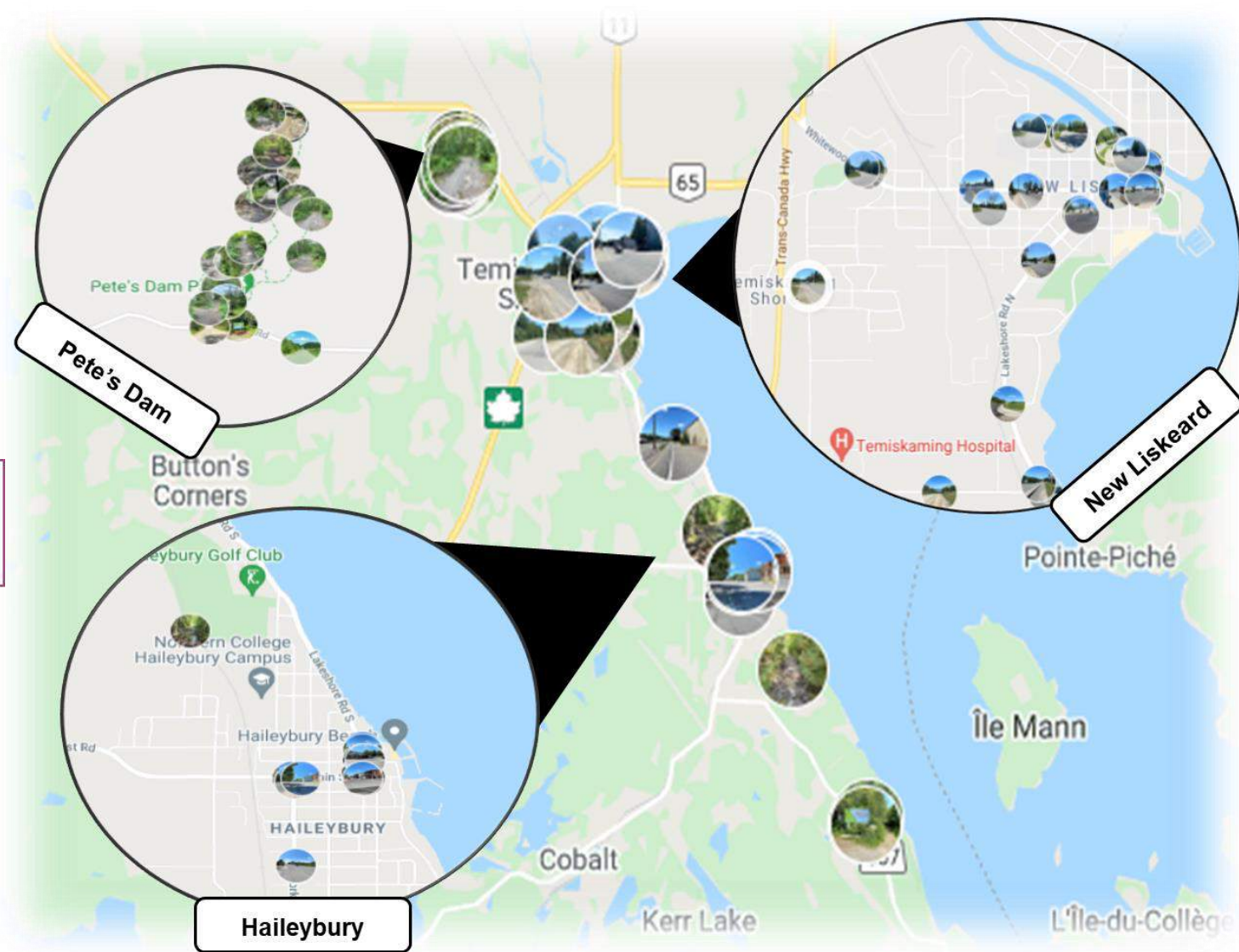
Opportunity: Existing parking lane may be converted into AT facilities through road diet

Whitewood Ave

Opportunity: Existing crossings can be enhanced, especially with a road diet condition.

Rorke Ave

Opportunity: Additional vehicular lane may be converted into AT facility

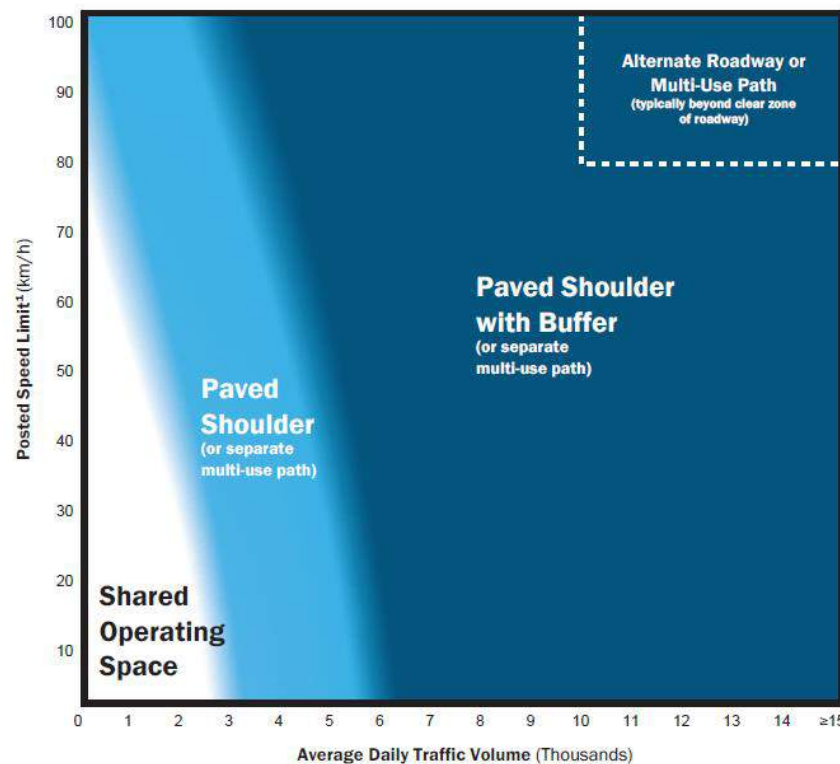


Facility Confirmation with OTM Book 18

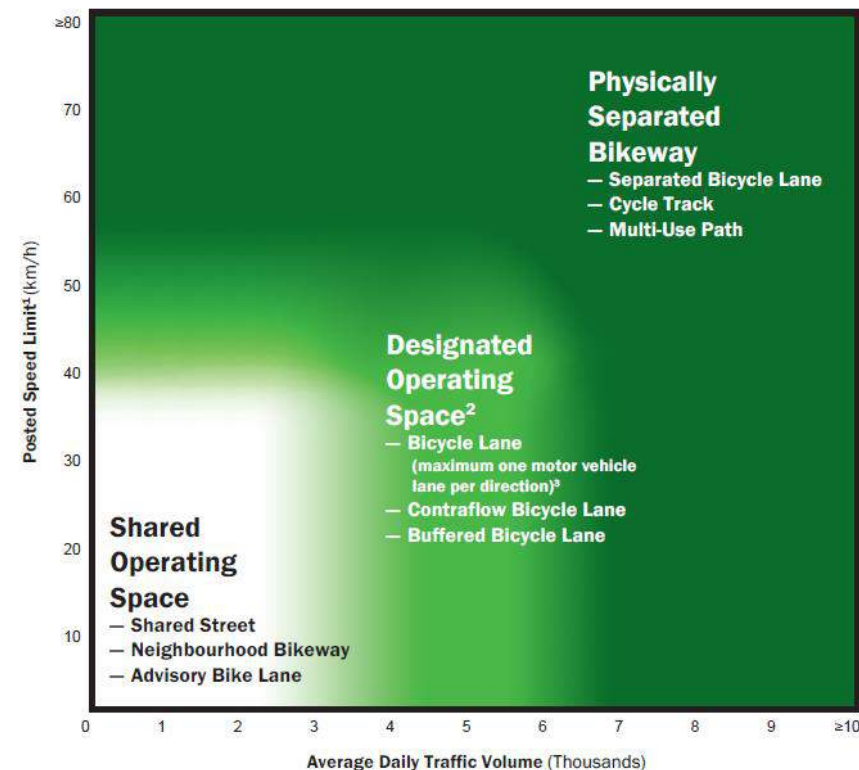
Applying Book 18...

1. Plot traffic volumes and speeds on updated nomographs
2. Compare suggested level of separation with the level of anticipated use and its importance in the overall network
3. Where roadway work has been identified in the capital works plan, the proposed AT routes are suggested to align with the planned roadway constructions

Desirable Cycling Facility Pre-Selection Nomograph
Rural Context¹



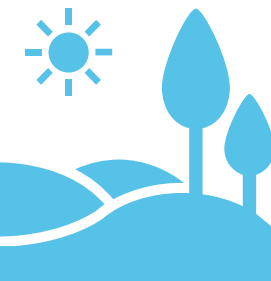
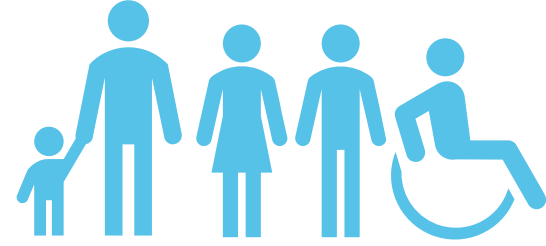
Desirable Cycling Facility Pre-Selection Nomograph
Urban/Suburban Context



Urban and rural nomographs featured within the recently updated OTM Book18

Key Design Principles

- Designing For All Ages And Abilities (AAA)
- Motor Vehicle Speed Influences Cyclist Safety
- When In Doubt, Design For Safety
- Integration Of Complete Streets Planning And Design
- Providing Equitable Means Of Transportation
- Supporting Economic Development And Tourism Goals



Building the AT Network

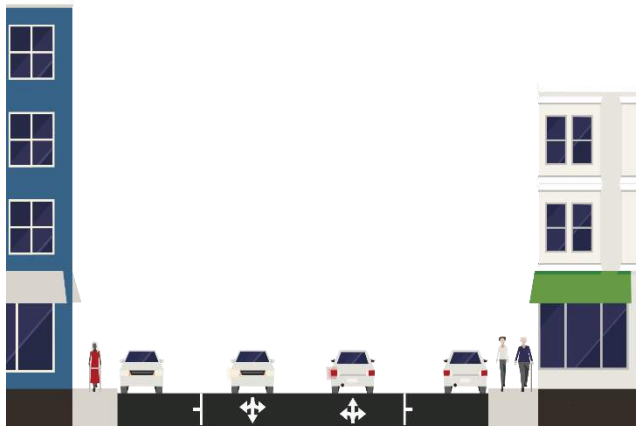


Facility	Existing KM	Proposed KM	Total KM
Off-Road Multi-Use Trails	43.5	5.5	49.0
In-Boulevard Multi-Use Path		1.6	1.6
Buffered Bike Lane		3.7	3.7
Buffered Bike Lane or Two-Way On-Road Facility		1.4	1.4
Bike Lane		0.4	0.4
Buffered Paved Shoulder		6.6	6.6
Paved Shoulder		12.3	12.3
Sharrows Markings	0.1	1.1	1.2
Signed Route		8.0	8.0
Candidate Locations for Pilot Projects		0.2	0.2
Candidate Locations for Traffic Calming Measures		3.6	3.6
Pedestrian Bridge		0.1	0.1
Sidewalks	36.5	14.4	50.9
Total	80.1	58.6	138.7

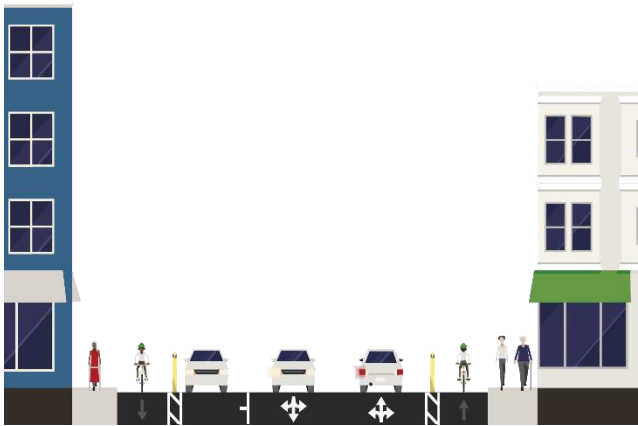
Suggested Design Treatments/ Interventions

Whitewood Avenue (New Liskeard)

Existing Conditions

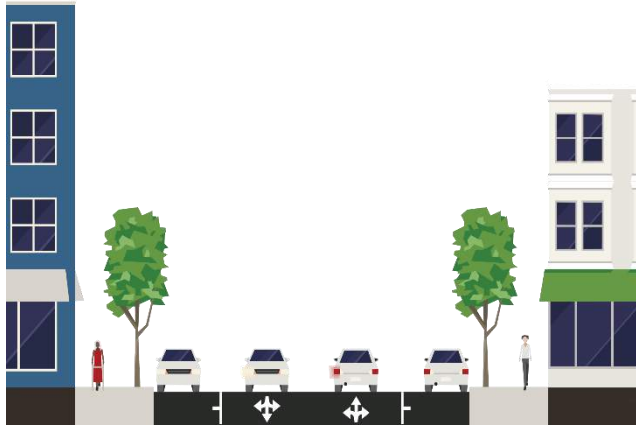


Suggested Transformation

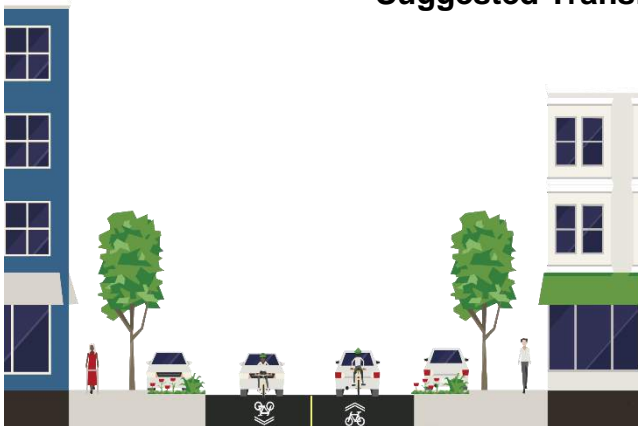


Ferguson Avenue (Haileybury)

Existing Conditions

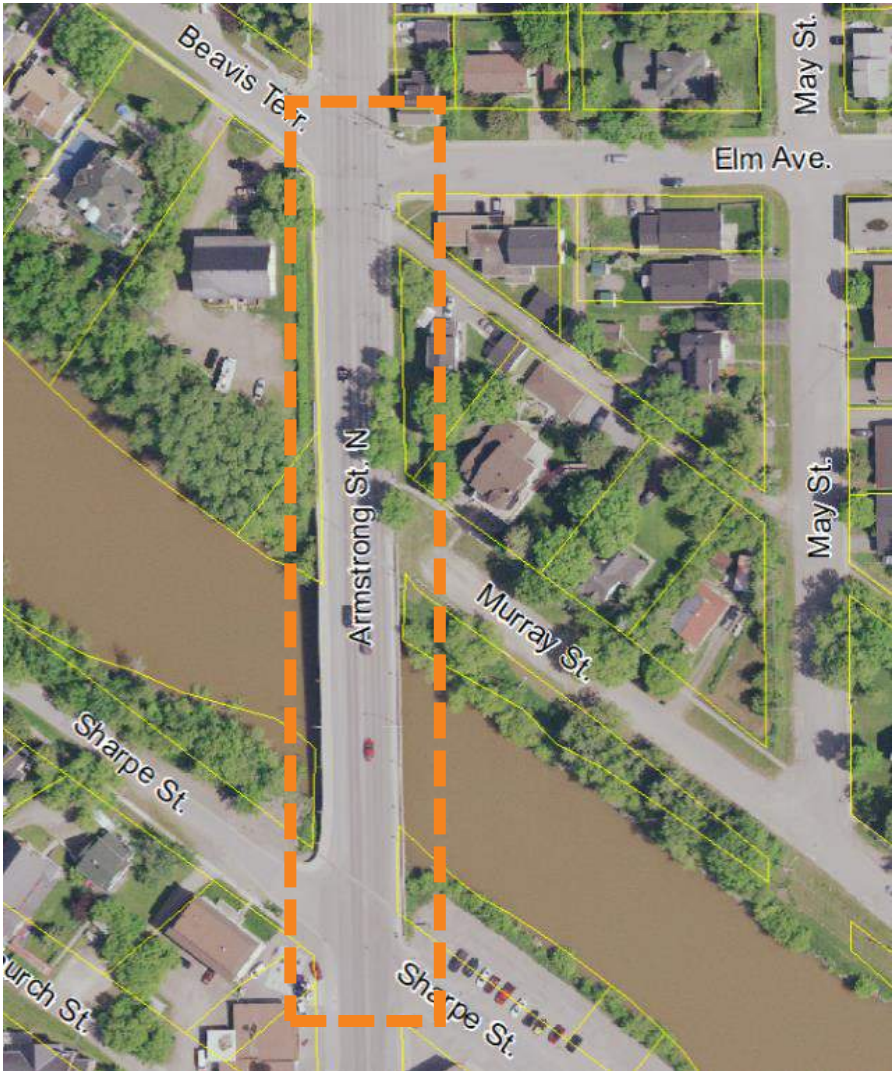
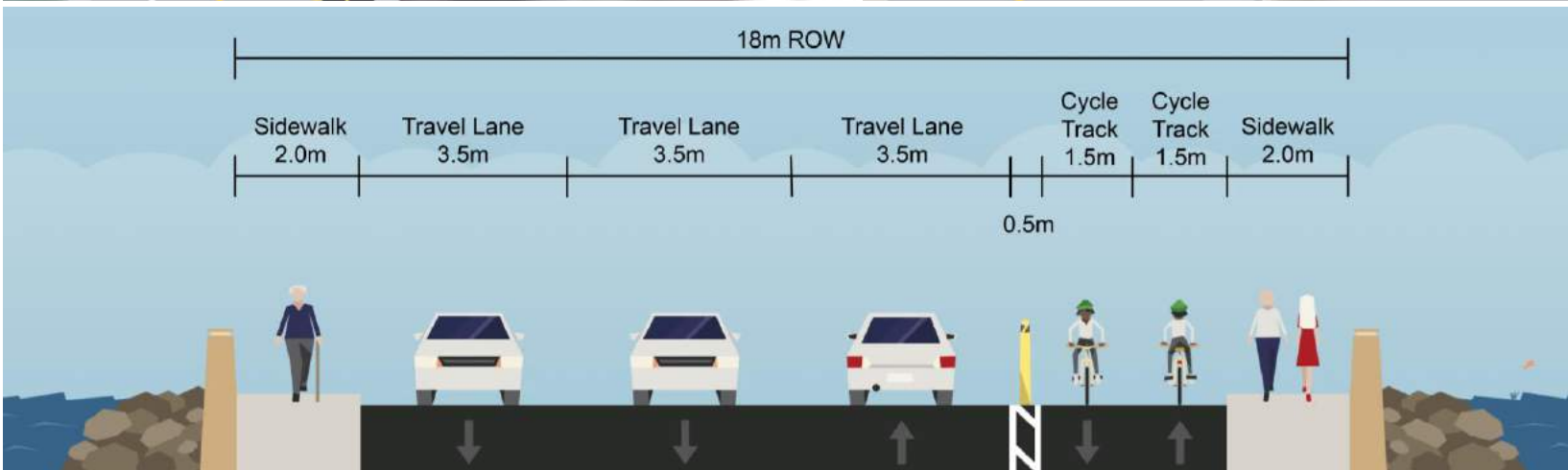


Suggested Transformation



Wabi Bridge

Proposed left turn intervention at the intersection north (left) and south (right) of the bridge



Key Trail Infrastructure & Amenities

End of Trip Facilities



- Parking
- Waste receptacles
- Regulatory signage & mapping
- Shelter
- Accessibility information

Sharing & Learning Signage

- User guidance
- Sharing stories
- Honoring people and events
- Educational opportunities
- Branding and marketing



Key Trail Infrastructure & Amenities

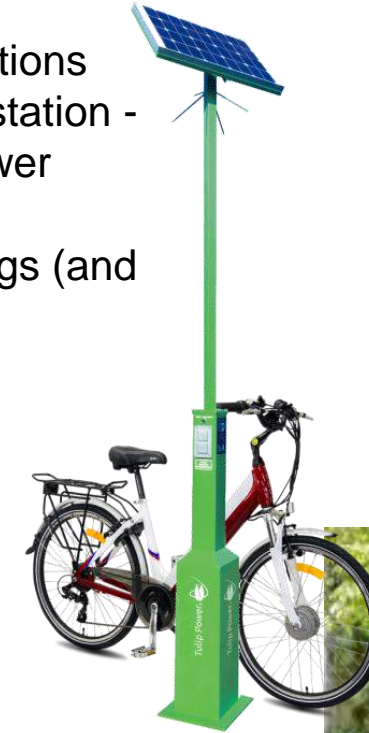
Rest and Refuge

- Formal/informal seating
- Informal seating (rocks) at greater intervals along steep slopes to aid accessibility.
- Shelters
- Lit trail sections or lit refuge points where evening use is encouraged/desired.



Maintenance & Mobility

- Bike repair stations
- Ebike charge station - supporting power aided users
- USB/GFCI plugs (and even wifi)



Safety & Accessibility

Wilderness trails can conform to accessibility standards and still maintain their character and opportunities for challenge. Reducing uneven surfaces and slopes where possible and providing supportive amenities to enable users will be key tools to a more inclusive and safe trail system.

Recommended tools:

- Minor grading to improve surface and drainage/erosion.
- Infill surfacing to elevate and smooth.
- Minor rerouting to reduce slopes.
- Railings, bike assess ramps, and landing breaks with seating to improve stairs and slopes.
- Rest areas integrated with long/steep slopes.
- Signage to communicate specifics about challenges ahead.



Safety & Accessibility

Barriers and railings are important to keeping users safe, and with smart design, will still offer fantastic views.

In addition to safety, they will work as a tool for placemaking and location for interpretive signage.

Options for materials, design and features to help you build your trail brand and entice users to destinations.

Example: Devils Rock lookout.



Addressing Problem Areas

Establishing sustainable trail design and alignments is key to minimizing maintenance, reducing liability and improving user experience. Mitigating reoccurring issues through limiting and avoiding adverse impacts. Recommended tools include:

Trail Structure Design

- Elevate trails in low lying areas, utilizing retaining stones and culverts to convey water.
- Reinforce trail surfacing with geogrid/cell to manage erosion and sustain seasonal use.
- Install structures (boardwalks and bridges).



Trail Alignment

- Reroute trail alignments to less problematic areas
- Create destination vistas over continuous trails along sensitive edges (slopes, riverbank, shorelines, cliff edges).
- Reduce conflicts with users types /vehicles with adequately sized/separated facilities.



Use of Structures

When water continues to be an obstacle, investment into a structure can reduce maintenance and create a destination feature. Structures can limit environmental impacts and enable access.

Applications include; Wabi River, Pete's Dam, and other waterfront locations.



Costing the Network: Short-Term Priorities

Facility	Short-Term (0 to 5 Years)	
	Proposed KM	Proposed Cost
Off-Road Multi-Use Trails	0.1	\$ 23,595
In-Boulevard Multi-Use Path	0.0	\$ -
Buffered Bike Lane	3.3	\$ 149,292
Buffered Bike Lane or Two-Way On-Road Facility	1.4	\$ 110,038
Bike Lane	0.4	\$ 14,574
Buffered Paved Shoulder	3.9	\$ 227,912
Paved Shoulder	2.0	\$ 416,305
Sharrows Markings	1.1	\$ 15,813
Signed Route	3.1	\$ 4,711
Candidate Locations for Pilot Projects	0.2	\$ 45,016
Candidate Locations for Traffic Calming Measures	3.6	\$ 51,796
Pedestrian Bridge	-	\$ -
Sidewalks	-	\$ -
Crossing Enhancements (6)	-	\$ 123,000
Total	19.1	\$ 1,182,052

Costing the Network: Long-Term Facilities

Facility	Long-Term (5+Years)	
	Proposed KM	Proposed Cost
Off-Road Multi-Use Trails	5.5	\$ 2,505,503
In-Boulevard Multi-Use Path	1.6	\$ 739,214
Buffered Bike Lane	0.4	\$ 32,794
Buffered Bike Lane or Two-Way On-Road Facility	0.0	\$ -
Bike Lane	0.0	\$ -
Buffered Paved Shoulder	2.7	\$ 995,516
Paved Shoulder	10.3	\$ 2,764,183
Sharrows Markings	0.0	\$ -
Signed Route	4.8	\$ 7,222
Candidate Locations for Pilot Projects	0.0	\$ -
Candidate Locations for Traffic Calming Measures	0.0	\$ -
Pedestrian Bridge	0.1	\$ 1,950,000
Sidewalks	14.4	\$ 5,389,125
Crossing Enhancements (4)	-	\$ 230,000
Total	40.9	\$ 14,613,557

Costing the Network: Overall Costs

Facility	Total	
	Proposed KM	Proposed Cost
Off-Road Multi-Use Trails	5.5	\$ 2,529,098
In-Boulevard Multi-Use Path	1.6	\$ 739,214
Buffered Bike Lane	3.7	\$ 182,085
Buffered Bike Lane or Two-Way On-Road Facility	1.4	\$ 110,038
Bike Lane	0.4	\$ 14,574
Buffered Paved Shoulder	6.6	\$ 1,223,429
Paved Shoulder	12.3	\$ 3,180,488
Sharrows Markings	1.1	\$ 15,813
Signed Route	8.0	\$ 11,933
Candidate Locations for Pilot Projects	0.2	\$ 45,016
Candidate Locations for Traffic Calming Measures	3.6	\$ 51,796
Pedestrian Bridge	0.1	\$ 1,950,000
Sidewalks	14.4	\$ 5,389,125
Crossing Enhancements (10)	-	\$ 353,000
Total	58.9	\$ 15,795,609

Programming Recommendations

Three phases were developed to prioritize the different programming recommendations

Phase 1: Foundations *Initiatives likely to generate the greatest participation that ought to be adopted first to establish a foundation upon which further involvement within active transportation can grow.*

Phase 2: Basic Programming *Initiatives that maintain the momentum of increasing active transportation involvement and begin the process of facilitating a deeper cultural shift in support of active transportation.*

Phase 3: Advanced Programming *Initiatives that tailor to a wider range of potential active transportation audiences and help to establish a more complex cycling culture*

Phase 1: Foundations

1. Routine Community Slow Roll Events



2. Increase Enrollment within the Active School Travel Program



3. Open Street Events



4. Wayfinding Maps and Signs



5. Active Transportation Advisory Committee



6. Support for marginalized communities



Phase 2: Basic Programming

1. Winter Wheels Program



2. 1m Safe Passing Public Awareness Campaign



3. Lunch and Learn Workplace Active Transportation Workshops



4. E-Bike Loan Service



5. Community Cycling Challenge



6. Amenity Hubs



Phase 3: Advanced Programming

1. Earn a Bicycle Repair Program



2. Bike Valet at Community Events



3. Comprehensive Monitoring & Evaluation Scheme



4. Bike Equipment Giveaways



5. Bike Rodeos



Funding the Network

The success of an ATTMP is dependent on provision of **reliable and adequate funding** to secure the implementation of all recommendations.

Internal Funding Sources

- Allocations from the operational and capital budgets of the City's traffic, transportation and recreational services departments
- Levy funds from new development through a revised development charges scheme

External Funding Sources

- Funding from the Federal government's recently announced Active Transportation Strategy
- Funding partnerships with adjacent municipalities
- Funding through the Ontario Provincial Government's Trillium Fund & Green Infrastructure Fund

Thank you!

Questions?

Matt Bahm

City of Temiskaming Shores

mbahm@temiskamingshores.ca

705-672-3363 ext. 4106

Justin Jones

WSP

Justin.Jones.2@wsp.com

+1 289-982-4933

Active Transportation Plan

Discussion Paper #1:
Policy Review and Draft Vision Statement Development



City of Temiskaming Shores
Draft November 2021



Temiskaming Shores Active Transportation Plan
Prepared by:

wsp

Table of Contents

1.	INTRODUCTION TO THE ACTIVE TRANSPORTATION PLAN	3
2.	POLICY REVIEW AND VISION STATEMENT DEVELOPMENT	4
1.1	Policy Background	4
1.2	Vision Statement	7

1. INTRODUCTION TO THE ACTIVE TRANSPORTATION PLAN

Nestled along the shoreline of Lake Temiskaming, the City of Temiskaming Shores has positioned itself as one of Northern Ontario's leading communities with regards to active transportation. Beginning in 2011 with the investments into the first phase of the STATO Trail, the City set itself on a path towards developing a community where access to mobility supports the City's overall goals of providing a "healthy, safe and liveable community"¹. Recognized in 2016 as just the second municipality in Northern Ontario to achieve a Bicycle Friendly Community Designation from the Share the Road Cycling Coalition, the City's support for Active Transportation has only grown in recent years. With new and growing programs to encourage residents of all ages and abilities to get active and with a strong foundation of existing infrastructure, the City is well positioned to become one of Ontario's leading communities for active mobility in the near term.

With this strong foundation in place, the City is creating an Active Transportation Plan (ATP) – a long-range guiding document that will provide the City and its partners with the tools needed to grow both the physical and social infrastructure necessary to support active transportation. This master plan is intended to provide strategic direction for an active transportation network that is equitable and accessible for people of all ages and abilities, and that can facilitate active living within the City in all of its settlement areas. The plan is also intended to provide direction and guidance on emerging trends that can shift the future of transportation within the City such as vision zero, micro-mobility, complete streets and age-friendly design.

An ATP is not a prescriptive document – it does not bind the City to specific investments, nor does it confer authority upon the City to construct projects. It is, for lack of a better term, a roadmap towards a future where every trip made in the City, regardless of whether it is by car, on foot, by bike or using a mobility device feels safe, comfortable and convenient. It communicates the concrete actions that could be taken to achieve that vision and provides the necessary policies and guidelines to ensure that actions taken align with best practices. Through the community engagement process associated with the development of the Plan, it also allows the community to make their voices heard. The Plan provides an ongoing method of building accountability, as it allows the progress made towards implementing the plan to be checked against the goals contained within it. It also provides a valuable baseline – a snapshot of where the City's active transportation programs are in 2021 as the Plan is prepared, which can be a useful reference as the Plan is implemented and the transportation habits of the residents of Temiskaming Shores begin to shift.

This Plan is the most recent document prepared by the City to advance its broader goals of becoming a more liveable, sustainable and prosperous community. It functions best when considered within the broader policy context of both the City and the Province, which help to provide the strategic foundations upon which the finer details of this Plan are built.

¹ City of Temiskaming Shores Official Plan, 2015

2. POLICY REVIEW AND VISION STATEMENT DEVELOPMENT

1.1 POLICY BACKGROUND

The City of Temiskaming Shores' Active Transportation Plan (ATP) aims to build on previous municipal planning documents to ensure that the ATP contributes to the goals and vision previously established by the City. In the past decade, there has been an increase in support for active transportation and recreation from all levels of government. Provincial and municipal governments are working together and establishing policies, research, strategies and initiatives that provide support for investments and improvements in active transportation.

One of the first steps in the process of creating the ATP was developing an understanding of the plans and policies that have helped set the foundation for the Plan, including those that have a direct influence on active transportation planning, design and implementation within Temiskaming Shores. The following is an overview of all plans and policies that were reviewed to inform the Active Transportation Plan.

1.1.1 POLICY REVIEW

PROVINCIAL POLICIES

The Province of Ontario has a robust suite of policies which lend support to active transportation and accessible, universal design. These policy documents provide guidance to local municipalities which can range from suggested actions to legislated requirements. In general, provincial guidance relating to active transportation tends to take the form of suggestions, guidance and support rather than legislative requirements for municipalities.

Policies Reviewed:

- Accessibility for Ontarians with Disabilities Act (2005)
- Ministry of Transportation Ontario Bikeways Design Manual (2014)
- Ontario Traffic Manual Book 15: Pedestrian Crossings (2016)
- Tour By Bike: Ontario's Cycling Tourism Plan (2017)
- #CycleON Strategy (2013) and Action Plan 2.0 (2018)
- Minimum Maintenance Standards for Municipal Highways O.Reg.239/02 (2018)
- Provincial Policy Statement (2020)
- Ontario Traffic Manual Book 18: Cycling Facilities (2021 update)

Policy Considerations:

- Increase collaboration between government and industry partners to develop and enhance products and experiences that support cycling tourism (e.g. heritage trails, trail tourism programs), particularly in rural regions of the province. (Ontario's Cycling Tourism Plan, 2017)

- Promote the use of active transportation and transit in and between residential, employment (including commercial and industrial) and institutional uses and other areas (s.1.8.1.b – Provincial Policy Statement).
- Technical and legislative requirements are outlined in the Accessibility for Ontarians with Disabilities Act built environment guidelines and O.Reg.239/02.
- Minimum Maintenance Standards for Municipal Highways sets out the requirements that the City is required to adhere to when designing AODA-compliant facilities and maintaining all highway facilities, including cycling and pedestrian infrastructure. Additional design guidance is provided in Ontario Traffic Manual Book 15 and 18, which provide direction on pedestrian crossing treatments and cycling facilities, respectively.

CITY POLICIES

The ATP will be influenced by policies at the municipal level such as the City's Official Plan, Recreation Master Plan, Age Friendly Community Plan and other planning documents. The City's Official Plan provides the most guidance on future development, as it is a statutory document required under the Planning Act and the Provincial Policy Statement. Policies that have the highest degree of relevance to the ATP are indicated in **bold** below.

Policies Reviewed:

- **Temiskaming Shores Official Plan (2015);**
- **Recreation Master Plan (2020);**
- Municipal Cultural Plan (2013);
- **Age Friendly Community Plan (2016);**
- Municipal Energy Plan (2016); and
- **Greenhouse Gas (GHG) Reduction Plan (2019).**

It is important that the Active Transportation Master Plan's vision aligns with the City's existing policies to ensure all future decisions meet the City's overall vision and reflect the needs of the Temiskaming Shores community. The following sections summarize relevant visions, objectives, and/or purposes of these policy documents and highlight common themes among the documents that were used to develop the draft vision statements for the City's Active Transportation Master Plan.

Table 1: Relevant Policies from Local Policy Documents
*Bolded ideas identify common themes among the documents

POLICY DOCUMENT	RELEVANT VISION(S), OBJECTIVE(S), AND/OR PLAN PURPOSE(S)
OFFICIAL PLAN	<p>Relevant Purpose of the Plan</p> <ul style="list-style-type: none">– “A blueprint that reaches out to incorporate the concepts of a healthy community, the building blocks for economic development, and the optimization of its social capital.” <p>Relevant Objectives of the Plan</p> <ul style="list-style-type: none">– “To create a unifying force that creates and fosters an identity for the City”;– “To build a City with strong, distinctive and liveable Settlement Areas with a range of housing choices, employment, parks, open space and which provides a range of services and facilities that are accessible by walking, cycling and transit”;– “To build a healthy, safe and liveable community that encourages active living, healthy lifestyles and which integrates planning for a healthy community as a component of the City’s land use planning process”;– “To plan and provide infrastructure that meets current and projected growth needs”;– “To protect resources of provincial interest, public health and safety and the quality of the natural environment through the policies of this Plan and through consultation with Provincial agencies”; and– “To consider the impacts of climate change and measures to support the reduction of greenhouse gas emissions through urban and rural design practices and to encourage and support green infrastructure” (Temiskaming Shores Official Plan, 2015).
RECREATION MASTER PLAN	<p>Relevant Guiding Principles</p> <ul style="list-style-type: none">– “Uniquely Temiskaming Shores;– A Dynamic Framework;– Environmentally Sustainable;– Accessible and inclusive;– Fosters partnerships;– Cost effective;– Municipal Budgeting; and– Proactive” (Temiskaming Shores Recreation Master Plan, 2020).
AGE-FRIENDLY COMMUNITY PLAN	<p>Relevant Purpose of the Plan</p> <ul style="list-style-type: none">– “Increase the quality of life of older adults”; and– “To determine the best, most fiscally responsible way to make Temiskaming Shores as age friendly as possible.” <p>Relevant Vision</p> <ul style="list-style-type: none">– “To promote a diverse, inclusive, accessible, safe and respectful community, that enables independence, health and wellness and full participation at all stages of ageing while celebrating the diversity of our community” (Temiskaming Shores Age-Friendly Community Plan, 2016).
GHG REDUCTION PLAN	<p>– Relevant Purpose of the Plan</p> <ul style="list-style-type: none">– “Establish the City of Temiskaming Shores as a leader in reducing our impact on climate change and is designed to build on our previous steps towards environmental sustainability” (Temiskaming Shores GHG Reduction Plan, 2019).

1.2 VISION STATEMENT

The policy review brought forward several key themes surrounding the future of the Temiskaming Shores community and active transportation. These themes were then combined with input received through the consultation process to help guide the development of draft vision statements for the Active Transportation Plan. Based on the existing policy directions from the City and the feedback received throughout the project, the Vision for the ATP is:

Active Transportation in Temiskaming Shores will be safe and accessible and contribute to a healthy, sustainable, and supportive community where people of all ages and abilities can participate.

OBJECTIVES

To support the broad vision statement, a series of more detailed Objectives have also been created based on the City's existing policy directives and the feedback received throughout the process of developing the ATP. The Objectives for the ATP are:

Enhance Safety – Ensure that all trips in Temiskaming Shores, regardless of travel choice, feel safe.

Improve Maintenance – Ensure that existing infrastructure for active transportation is well maintained, providing a high level of service at all times of the year.

Create Connectivity – Connect the City's major population centres and destinations and fill gaps in the City's existing networks

Improve Transportation Equity - Ensure that residents of all ages, abilities and backgrounds can move safely and conveniently through the City using any transportation mode that they choose

Raise Awareness - Leverage the strong sense of community in the City of Temiskaming Shores to develop a culture of care around active transportation

As the recommendations for this plan begin to take shape, the Vision and Objectives will provide an important accountability tool for the project – at each step, we will be checking our proposed next steps against these criteria to ensure that we are meeting the objectives as laid out in the Foundations of the Plan.

Active Transportation Plan

Discussion Paper #2:
The Active Transportation Network



City of Temiskaming Shores
Draft November 2021





Temiskaming Shores Active Transportation Plan
Prepared by:

wsp

Table of Contents

1	INTRODUCTION AND DEVELOPING THE FOUNDATIONS	1
2	DEVELOPING AN ACTIVE TRANSPORTATION NETWORK.....	2
2.1	Step 1: Existing Conditions	3
2.2	Policy Framework.....	8
2.2	Network Engagement.....	9
2.3	Step 2: Route Selection Criteria.....	11
2.4	Step 3: Candidate Routes	12
2.5	Step 4: Desktop and Field Investigations.....	16
2.6	Step 5: Confirm the Active Transportation Network.....	18
2.7	Step 6: Phasing Plan.....	27
3	DESIGNING THE NETWORK	29
3.1	Design Principles	29
3.2	Redesigning Main Streets	32
3.3	Separation Techniques for On-Street Facilities	33
3.4	Intersections and Trail Crossings.....	35
3.5	Accessibility.....	38
3.6	Off-road Trail design	39
3.7	SIGNAGE & Wayfinding.....	56
3.8	Wabi River Bridge	58
4	RECOMMENDATIONS.....	62

1 INTRODUCTION AND DEVELOPING THE FOUNDATIONS

The City of Temiskaming Shores is a picturesque destination located in Northern Ontario. An amalgamation of the former Towns of Haileybury and New Liskeard and the Township of Dymond, the City now has a population of 9,920 and is home to many natural features and tourism opportunities (Figure 1).

The City is a leader and positive example of how a small, northern community can reap significant benefits related to active transportation. The City's long-standing support for active transportation is best illustrated by the STATO Trail, a unique 21 km route consisting of on-road active transportation infrastructure and off-road trails that connects all three of the City's key settlement areas. As the STATO Trail builds out new connections across the City, interest and awareness about active transportation is growing, providing the City with an opportunity to establish itself as one of the leading communities in Northern Ontario when it comes to supporting and encouraging active transportation. This Active Transportation Plan (ATP) is a long-term strategy to guide future planning and decision-making to set Temiskaming Shores on the road to becoming a place where people of all ages and abilities can move safely through the community, and where walking, cycling and wheeling are accessible activities for all.

This network paper is the first step towards building the ATP. The proposed network was developed through a well-defined process informed by technical analysis, community and stakeholder feedback and best practices in design guidance. This will guide the City in achieving its future aspirations for active transportation by developing the tools, strategies and framework for how to implement recommended changes.



Figure 1 | Existing conditions in Temiskaming Shores. Clockwise from top left: STATO Trail in New Liskeard, Waterfront in Haileybury, Downtown Haileybury and STATO Trail on Lakeshore Road.

2 DEVELOPING AN ACTIVE TRANSPORTATION NETWORK

The process to develop the City's active transportation network is based on a combination of technical assessments and consultation with key stakeholders, City Staff and members of the public. An overview of the network development process including the steps and the outcomes of each step to date is presented in **Table 1** and is consistent with new Ontario Traffic Manual Book 18 (2021).

This discussion paper will cover steps 1 to 7 of the network development process, producing a network map that will show the desired active transportation network once the ATP has been fully implemented. The next discussion paper will explore the proposed phasing for the projects, helping to deliver projects in a manner that aligns with capital construction schedules and meets the needs of the residents of Temiskaming Shores.

Table 1 | Cycling Strategy Network Development Process

NETWORK DEVELOPMENT PROCESS

Step	Outcome
1 Identify existing conditions and routes that have been proposed in past planning documents.	Map 1 – Existing Active Transportation Conditions
2 Identify priority gaps and missing links through community engagement	SWOT Analysis and feedback for Candidate Route Selection
3 Identify a set of criteria to help select, assess and refine routes to form part of the preferred active transportation network.	Route Selection Criteria
4 Identify potential candidate routes to be investigated that could form part of the City's active transportation network.	Map 2 – Candidate Routes and Proposed Improvements
5 Undertake field work to investigate existing routes and locations for potential new routes.	Field work documentation
6 Verify candidate routes with City Staff and key Stakeholders to validate feasibility	Additional input into preferred network and proposed facility types
7 Confirm the City's preferred network including the proposed facility types.	Map 3 – Proposed Facility Types and Improvements
8 Identify a proposed phasing plan for the City's preferred active transportation network.	To be completed
9 Verify proposed phasing with Stakeholders, City Staff and members of the public to produce a final network development plan for the ATP	Short, Medium and Long-term plans for the City's active transportation facilities




2.1 STEP 1: EXISTING CONDITIONS

Information was gathered from the City of Temiskaming Shores to develop a geographic information systems (GIS) database of spatial information. The database included information regarding existing conditions and routes that were previously identified in approved planning documents including the City's Official Plan (2015) and the Recreation Master Plan (2020). The GIS database was updated on an on-going basis to reflect the iterative approach of the network development process.

It is important to note that not all previously proposed routes form part of the City's AT network. These routes were used as a starting point of the network development process and further investigated during each step of the process.

In total, the existing active transportation network for Temiskaming Shores is approximately 80 kilometres, including 44 kilometres of routes that accommodate cycling and 36 kilometres of sidewalks. A summary of the existing active transportation network is provided below within Table 2.

Table 2 | Summary of the Existing Active Transportation Network

Off-Road Multi-Use Trails	Sharrows Markings / Signed Routes	Sidewalks
		
<i>Locations:</i> STATO Trail System (Lakeshore Rd S, Waterfront Boardwalk Trail, Armstrong St N)	<i>Locations:</i> Wabi River Bridge Crossing	<i>Locations:</i> New Liskeard, Haileybury, Cobalt
<i>Total km:</i> 43.5	<i>Total km:</i> 0.1	<i>Total km:</i> 36.5
Total		80.1

**Armstrong St N
(Cycle Path)**



STATO Trail

Serving as the backbone of Temiskaming Shores' existing active transportation network is the South Temiskaming Active Transportation Organization (STATO) trail system. Comprised of both on-road and off-road facilities, the corridor was first formally identified back in 2004 by a group of community members interested in promoting active transportation within the area. Since then, the STATO trail system has been continually developed, with the addition of new facilities, enhancements to existing routes and the adoption of a seasonal maintenance program (excludes winter maintenance). Today, the corridor stretches 21.4km long, connecting key settlement areas and destinations across the City and offering scenic views of Lake Timiskaming, the Wabi River and surrounding natural areas. All segments of the network are also designed to be wheelchair accessible, with rest areas, lighting and other basic amenities provided at key junctures.

The significance of the STATO trail is not only measured in its cultural value to the local community but how it connects the communities that make up the City of Timiskaming Shores. The corridor serves as a vital active transportation connection between New Liskeard, Haileybury and Dymond. Building upon this existing trail, through expansions, upgrading existing segments, or connecting new destinations to the trail through the construction of high-quality active transportation infrastructure is a cost-effective way to expand the city's active transportation network. As new investments in the trail and the routes that connect to it are made, preference should be given to alignments that further enhance connectivity and access to the City's natural settings as well as its commercial destinations. All new investments should also be designed with all user abilities in mind, to uphold the trail system's existing reputation as a fully accessible facility.

**New Liskeard
Waterfront Boardwalk
Trail (Multi-Use Path)**



**Lakeshore Rd S
(bidirectional cycle
path)**



**Haileybury Beach
(cycle path)**





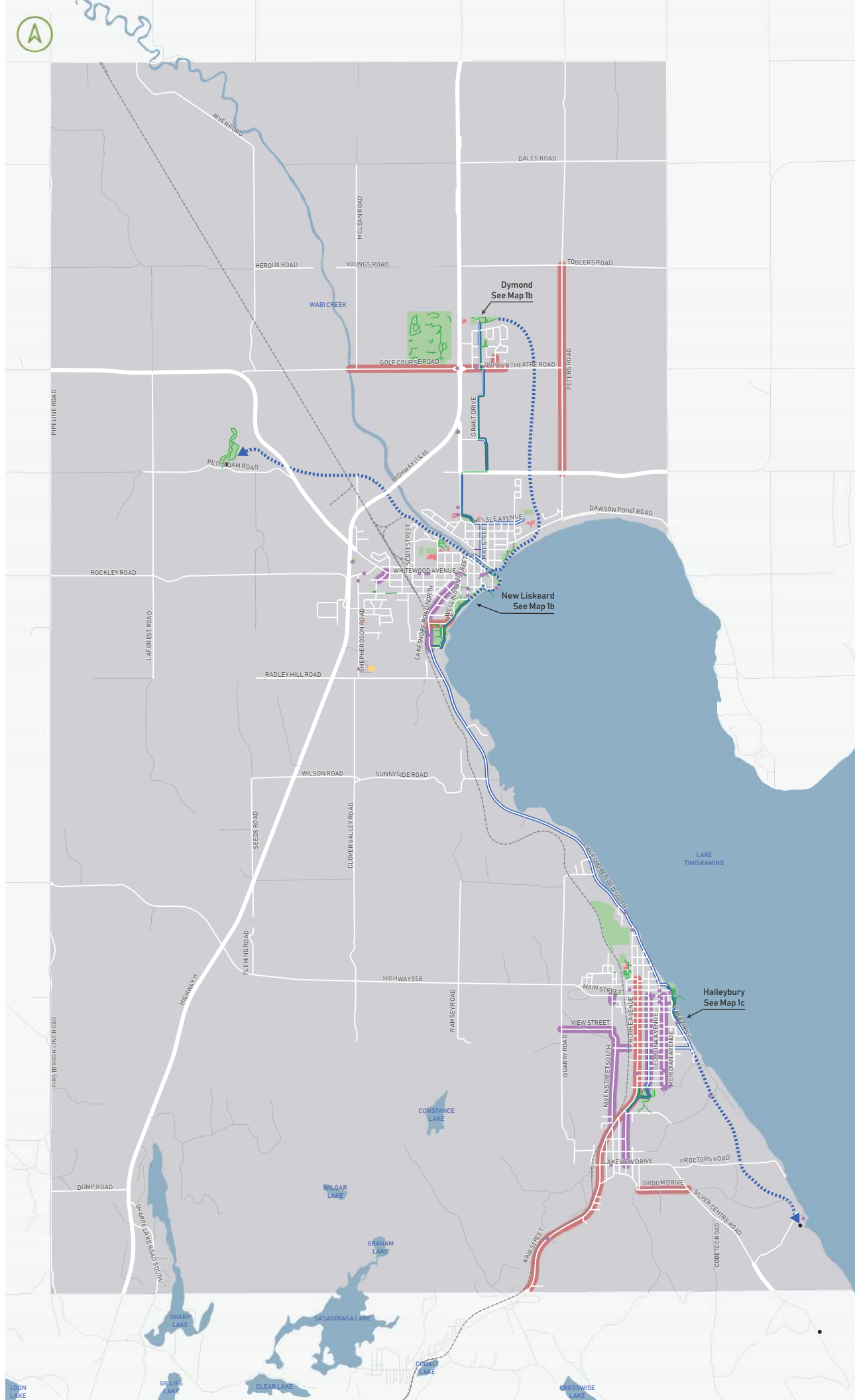
Map 1a.

Existing Active Transportation Conditions

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- Existing sharrow
- STATO Trail (existing)
- STATO Trail (proposed extension)
- MTO Highway
- Local Road
- MNRF Road
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only,
and not for navigation.

All rights reserved. Date Published: Draft Sept 2021

0 0.475 0.95 1.9 KM



Map 1b.

Existing Active Transportation Conditions

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- Existing sharrow
- STATO Trail (existing)
- STATO Trail (proposed extension)
- MT0 Highway
- Local Road
- MNRF Road
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only
and not for navigation.

All rights reserved. Date Published: Draft Sept 2021





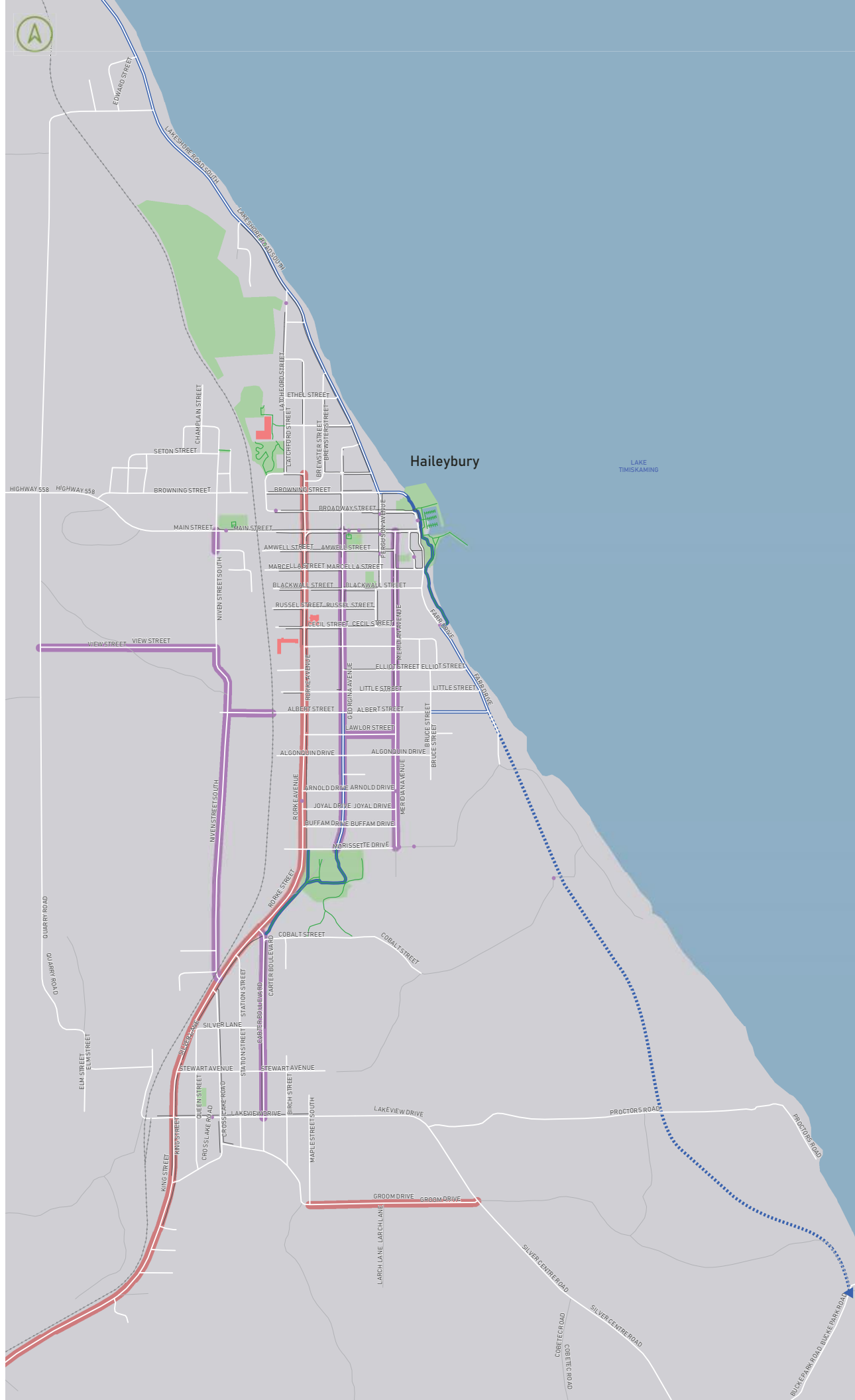
Map 1c.

Existing Active Transportation Conditions

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- Existing sharrow
- STATO Trail (existing)
- STATO Trail (proposed extension)
- MT0 Highway
- Local Road
- MNRF Road
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only.
and not for navigation.

All rights reserved. Date Published: Draft Sept 2021



2.2 POLICY FRAMEWORK

In addition to the physical assets that were reviewed as part of the existing conditions review, the City's existing policy conditions were also assessed to identify areas where support for active transportation already exists and where it could be strengthened. In Temiskaming Shores, policies at the federal, provincial and municipal level will all have an impact on how the ATP looks, feels and is implemented. These prior planning documents provide guidance on the planning, design, implementation and operations of active transportation facilities. They also offer a sense of the city's overall goals and culture, which are important elements for the active transportation plan to consider as it moves forward.

A policy review highlights where there are existing supports for active transportation within the community and helps to identify policy gaps that could be filled by this plan. A more detailed summary of the relevant policies relating to the ATP can be found in Discussion Paper #1 – Policy Review and Vision, but what follows here is a summary of the key existing policies at the local level which relate to active transportation within Temiskaming Shores.



Temiskaming Shores Official Plan (2015):

The Temiskaming Shores Official Plans is a core functional document which articulates how the city is to grow and develop for years to come. The plan recognizes the importance of designing facilities that accommodate walking and cycling to both support healthier lifestyles and reduce greenhouse gas emissions as the City grows.



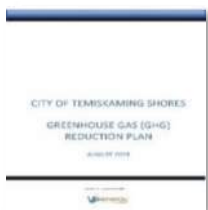
Recreation Master Plan (2020):

The Recreation Master Plan is a recently adopted document which both identifies the city's unique recreational needs and outlines a 10-year plan to address those needs. This plan includes investments into new active transportation facilities, including new on-road linkages and expansions of the existing STATO trail system.



Age Friendly Community Plan (2016):

The Age Friendly Community Plan strives to better accommodate and support people as they age through a series of equity seeking initiatives. While not specific to active transportation, the plan emphasizes the importance of an all ages approach to designing new infrastructure.



Greenhouse Gas (GHG) Reduction Plan (2019).

The Greenhouse Gas Reduction Plan actualizes the city's commitment to combatting climate change through a series of strategic measures to reduce local emissions. Among those listed include through the promotion of active transportation to decarbonize the City's transportation sector.

The Policy review offered important context and direction for the development of the ATP, shaping the document's overall goals and objectives (see Chapter 1 – Policy Review, Vision and Objectives). The remainder of the network development process was informed by technical evaluations, public consultation and in-depth conversations with City Staff. The Policy review helped to inform the route selection criteria and provided the rationale for the Vision and Objectives for the ATP, ensuring that this plan aligns with the City of Temiskaming Shores' broader policy goals.

2.2 NETWORK ENGAGEMENT

To gain a stronger understanding of the existing conditions and gaps within Temiskaming Shores’ active transportation network, a robust community engagement plan was implemented to gather public input across all stages of the development of the plan. This included a range of opportunities for local stakeholders to inform the development of a proposed active transportation network. Public input was important to identify existing travel patterns and facilities that define active transportation use today while also identifying barriers and the potential for new routes that can be developed in the future.

Community engagement focused on both the **physical** infrastructure and the **social** infrastructure necessary to support active transportation in Temiskaming Shores. While a more comprehensive discussion of engagement activities will be found in the Community Engagement Discussion Paper, this section will focus exclusively on some of the high-level feedback relating to the development of the active transportation network that was received during community engagement.

Stakeholder Group Workshop #1

The first stakeholder group workshop brought together a wide range of local decision makers to outline priorities and directives related to the future of active transportation within Temiskaming Shores. Key members present include City staff, City Councillors, local committee members and Health Unit staff. Using Miro, an interactive online whiteboard tool, attendees were invited to identify candidate routes for active transportation facilities and improvements and potential quick win projects. Listed below within **Figure 2** are key outcomes of these two exercises:

Candidate Route Improvements

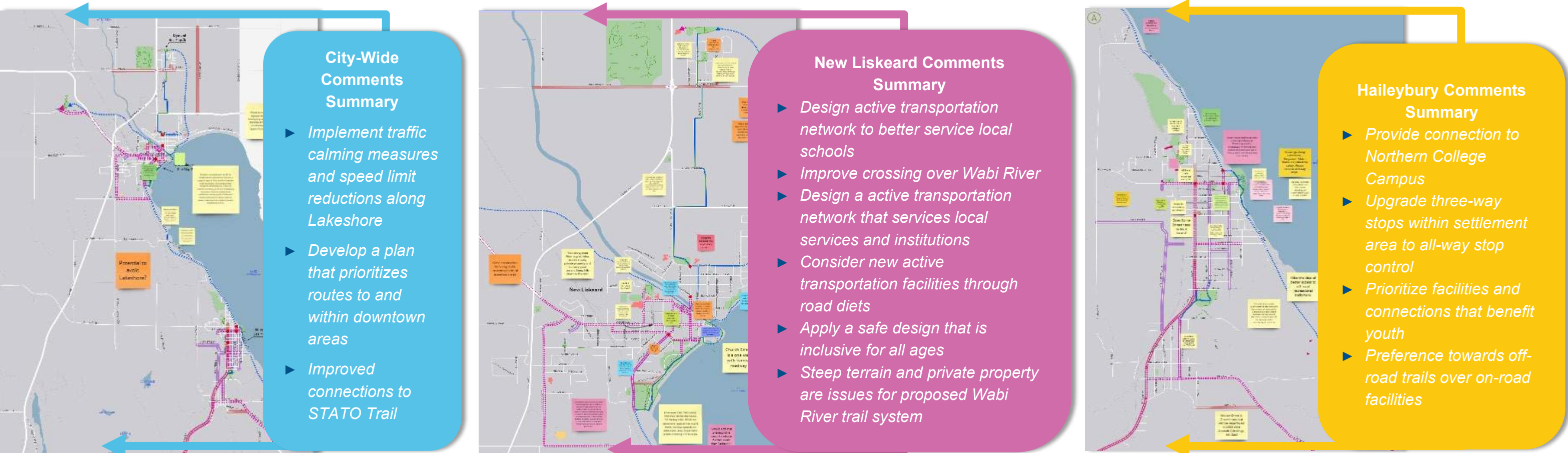


Figure 2 | Snapshots taken of the Miro boards used to record feedback on the City’s draft proposed active transportation network, with key themes highlighted

Quick Win Projects

In addition to a series of candidate active transportation routes, the working group session also identified a list of quick-win initiatives that would yield a considerable benefit to active transportation users immediately. Among the examples listed include those which directly contribute to the proposed active transportation network.



Increasing connections to schools and other public facilities



Adding traffic calming tools in designated residential and downtown areas to improve safety for people crossing the road



Improving cycling and pedestrian facilities along the Wabi Bridge

Stakeholder Outreach

In addition to the Stakeholder Workshop, 1-on-1 interviews were held with representatives from key stakeholder groups to gain a deeper understanding of the concerns, considerations and priorities that should guide the direction of this Plan. Interviewees were asked a series of 10 questions, which provided an opportunity to explore the history of active transportation in Temiskaming Shores, the priority areas where work still needs to happen and the potential for improvements and partnerships in the City.

“The [STATO] Trail is well designed and well used. Seniors, kids, parents’ families, racers, - they’re all on the STATO Trail”;

“I’d like to see us expand upon what we’ve done already – we already have this great linear route in the STATO Trail, so we should complete those missing links and then lay out a plan to connect the trail to other areas.

1. What is your vision for active transportation in the City?
2. What are the top 3 network priorities for an active transportation network?
3. Who is the network serving and who is it not?
4. What are some successes in the City?
5. What are some of the challenges?
6. Is there anything else you would like to add?

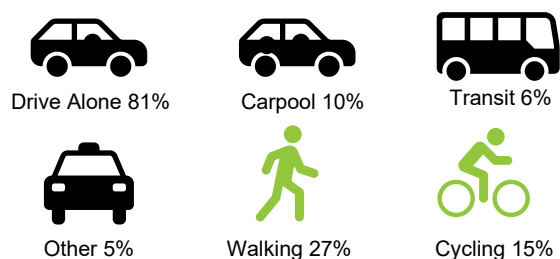
“I think adults more than kids are being served well in terms of comfort, especially downtown. Commuters are well served generally. Leisure riders who aren’t afraid of riding outside of the trail – experienced riders are well served. I’ve heard from other people who would ride more, but they don’t feel comfortable riding in traffic, so they are being left behind. Students are really being left behind too because we only have one school that we can get to from the trail. Most of our schools have nothing to connect them, so students are on their own”;

“More green paint on the roads to help delineate the cycling facilities”;

Public Survey

To support the stakeholder outreach, a public survey was also launched to capture how the public relates to active transportation. With a total of 283 responses, the survey’s results provided information useful to developing both a plan for physical infrastructure to support active transportation as well as ideas for new programs and policies to help to develop improved social infrastructure to make active transportation more common and acceptable in the City.

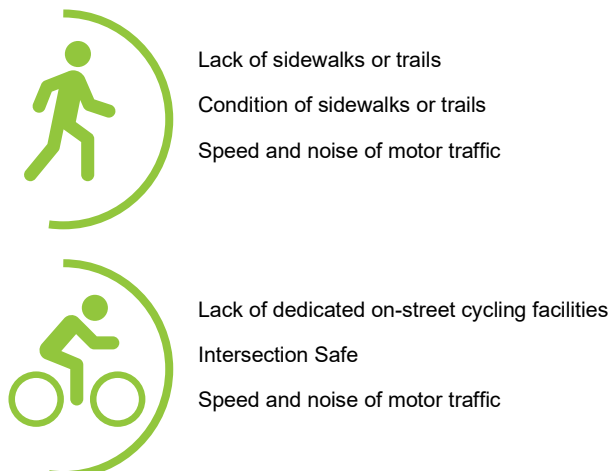
Mode Share



Main Active Transportation Recommendations

1. Build more paved trails or multi-use paths
2. Build more on-street cycling facilities
3. Improve maintenance on existing sidewalks, multi-use paths, cycling facilities etc.

Main Active Transportation Barriers



2.3 STEP 2: ROUTE SELECTION CRITERIA

A comfortable, connected system of active transportation infrastructure is the most important determinant when it comes to shifting transportation behaviour. For a community to unlock the potential demand for walking and cycling, each trip made on foot, by bike or using a mobility device should be direct, seamless and comfortable. Achieving a network that meets these criteria begins with a careful review of all candidate routes to decide which are best suited to form an active transportation network. Based on the Vision and Objectives of the ATP and informed by community engagement, a series of Route Selection Criteria were developed to evaluate candidate routes based off a consistent set of metrics, helping to prioritize future investments into active transportation projects that will make the biggest impact within the community. Based off established best practices, criteria were refined through the lens of the unique context of Temiskaming Shores, ensuring that criteria meet the needs of the City. While these criteria form the foundation of the candidate route evaluation, they do not preclude projects that have a high level of public demand, nor those that have been identified in previous planning processes, from moving forward.

The route selection criteria identified in **Table 3** are meant to serve as a tool to evaluate projects as the ATP moves forward into the implementation phase – they can provide guidance when new projects are proposed, or when conditions within the City change.

Table 3 | List of route selection criteria applied to identify candidate active transportation routes

	Safety	Active transportation networks must enhance the safety, both real and perceived, for people walking and cycling. Active transportation routes were prioritized based on their degree of safety improvement compared with current conditions.
	Community Connections	Temiskaming Shores is a community of communities, so the proposed active transportation network should serve to connect the communities of Dymond, New Liskeard and Haileybury to enhance community cohesion.
	Feasibility	Given the constraint of a limited financial budget, projects were prioritized by their cost effectiveness. This included those which either align themselves with existing capital works or can be implemented more quickly or inexpensively.
	Services Demand	To enhance use, active transportation facilities should be prioritized in areas with greater populations or greater trip making potential.
	Connections to STATO Trail	As the cornerstone of the City's existing active transportation network, it is vital that recommended expansions strive to either connect to or extend the existing STATO trail system.
	Scenic Routes	Active transportation facilities should offer new ways to both reach and travel through scenic natural areas. Key examples include the Lake Timiskaming Shoreline, Devil's Rock and other surrounding natural areas.

2.4 STEP 3: CANDIDATE ROUTES

With the goals and objectives of the City's active transportation network now outlined in the route selection criteria, the next step is to apply those criteria to a list of candidate routes for improvement. By applying the criteria to the various roads and trails connections within the City, it becomes clear which routes should be prioritized for implementation to develop a connected network of active transportation infrastructure around the City. Candidate routes serve as a "first draft" of a network – a series of potential routes that need to be refined and confirmed through technical assessments, conversations with City Staff and consultation with the community. Within Temiskaming Shores, candidate routes were distinguished within three categories: **Potential STATO Trail extensions**, **Potential Candidate On-road Routes** and **Proposed Sidewalk Expansion**.

Potential STATO Trail Extensions



As the existing backbone of the City's active transportation network, the STATO trail remains a logical starting point for further network expansions. These candidate routes were identified directly from the City's Recreation Master Plan (2020) which proposed routes to connect the City's settlement areas and its key parks spaces, particularly Pete's Dam and Devil's Rock.

Potential Candidate On-Road Routes



On-Road Cycling Routes are vital to provide connectivity between the City's existing off-road trails network and the key destinations within the City. On-road routes provide connectivity to schools, commercial areas, employment areas and more, helping to enhance access and safety for all road users.

Proposed Sidewalk Expansions



With almost all trips involving some portion made as a pedestrian, it is vital that improvements to the existing sidewalk network be included as a key recommendation. Like the Candidate On-Road routes, most sidewalk expansions are recommended within settlement areas, where there is a higher anticipated demand. Preference was also given to facilities that improve access to sites and areas with higher amounts of vulnerable users, such as older adults and youth.



Map 2a.

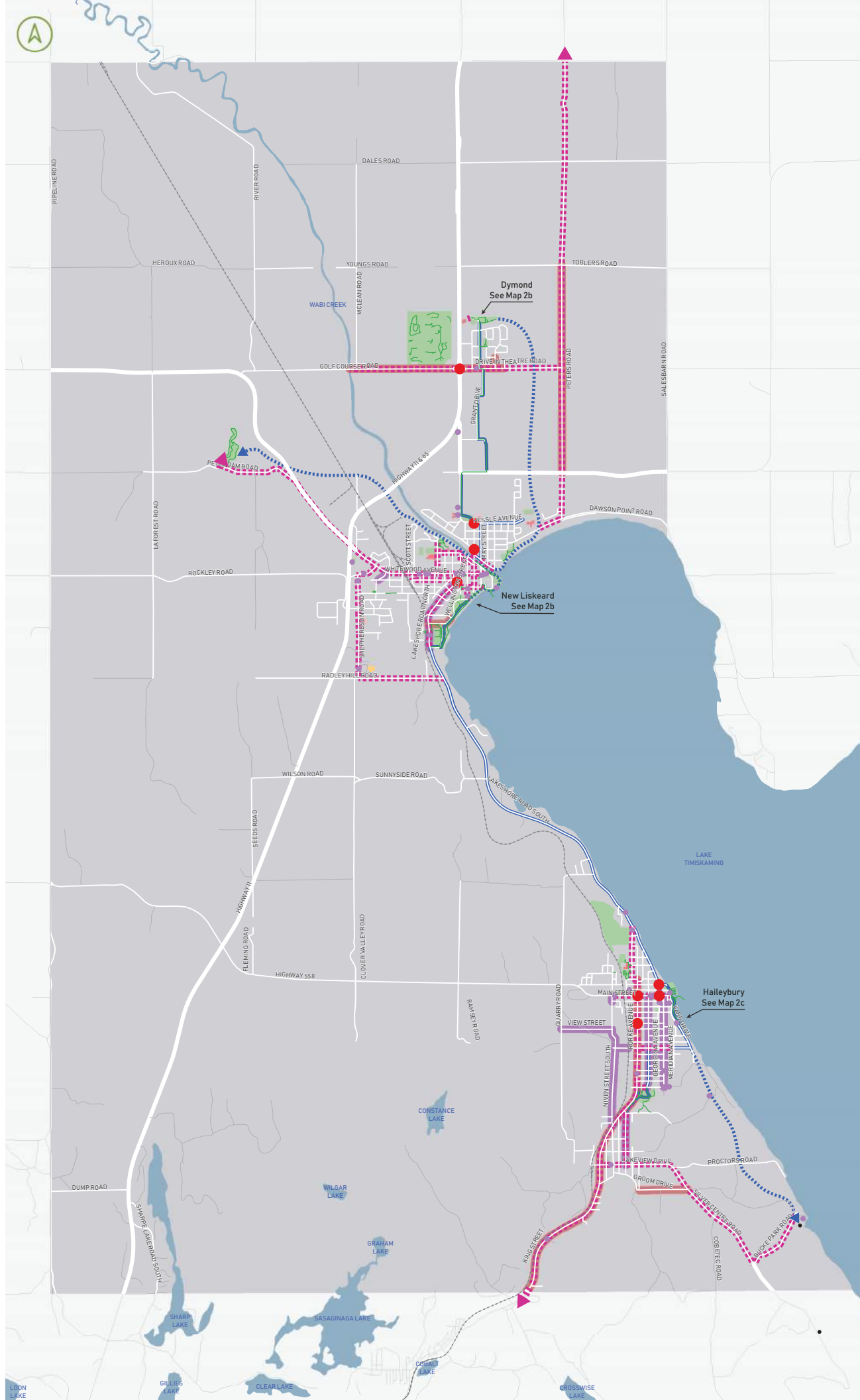
Candidate Routes and Proposed Improvements

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- STATO Trail (existing)
- STATO Trail (proposed extension)
- Potential candidate route
- Proposed crossing enhancement
- MTQ Highway
- Local Road
- MNRF Road
- 2021 Scheduled Road Project
- 2022 Scheduled Road Project
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the City of Temiskaming Shores.

This map is intended for information only and not for navigation.

All rights reserved. Date Published: Draft July 2021





Map 2b.

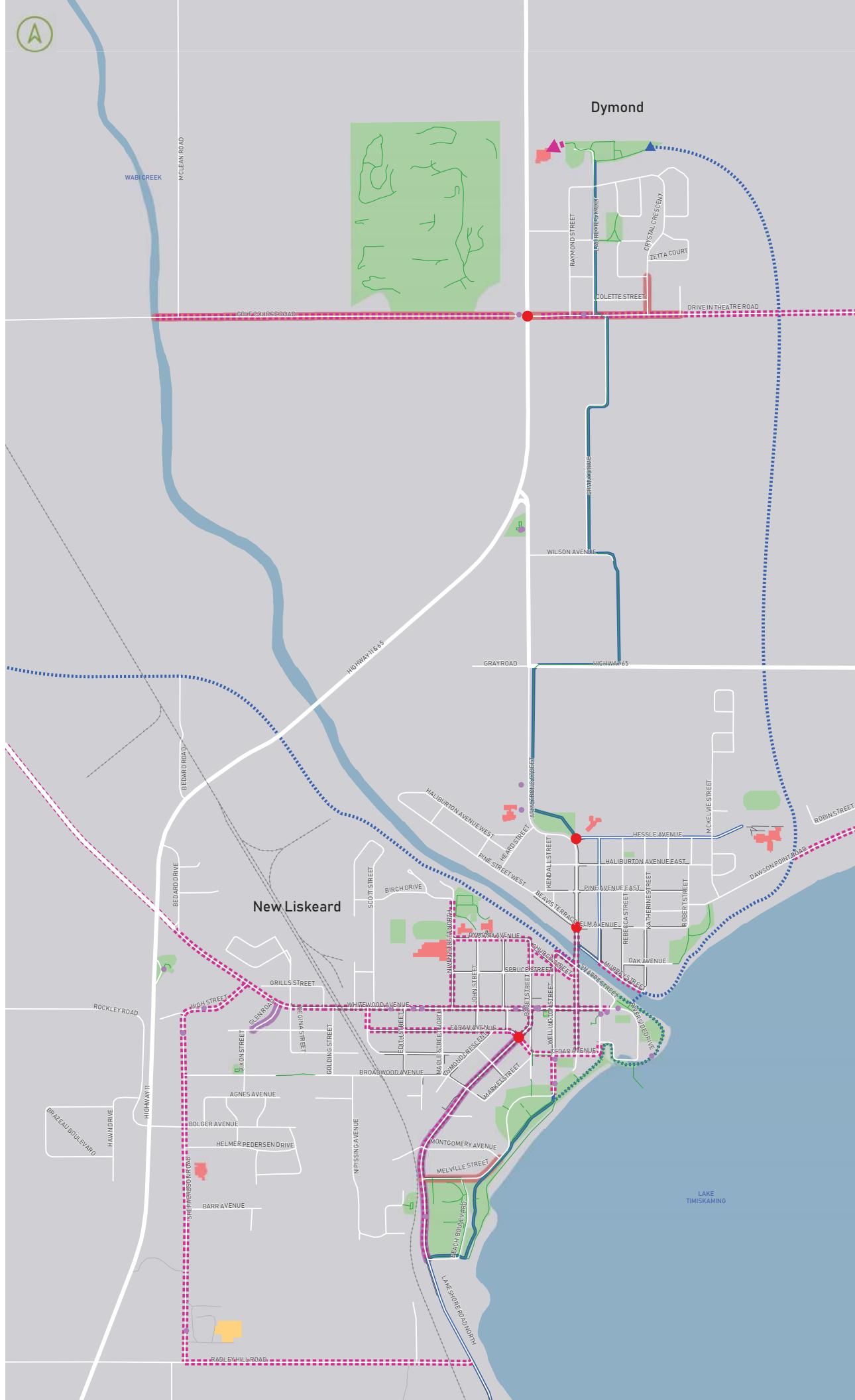
Candidate Routes and Proposed Improvements

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- STATO Trail (existing)
- STATO Trail (proposed extension)
- Potential candidate route
- Proposed crossing enhancement
- MTQ Highway
- Local Road
- MNRF Road
- 2021 Scheduled Road Project
- 2022 Scheduled Road Project
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only
and not for navigation.

All rights reserved. Date Published: Draft July 2021

0 0.125 0.25 0.5 KM



Map 2c.

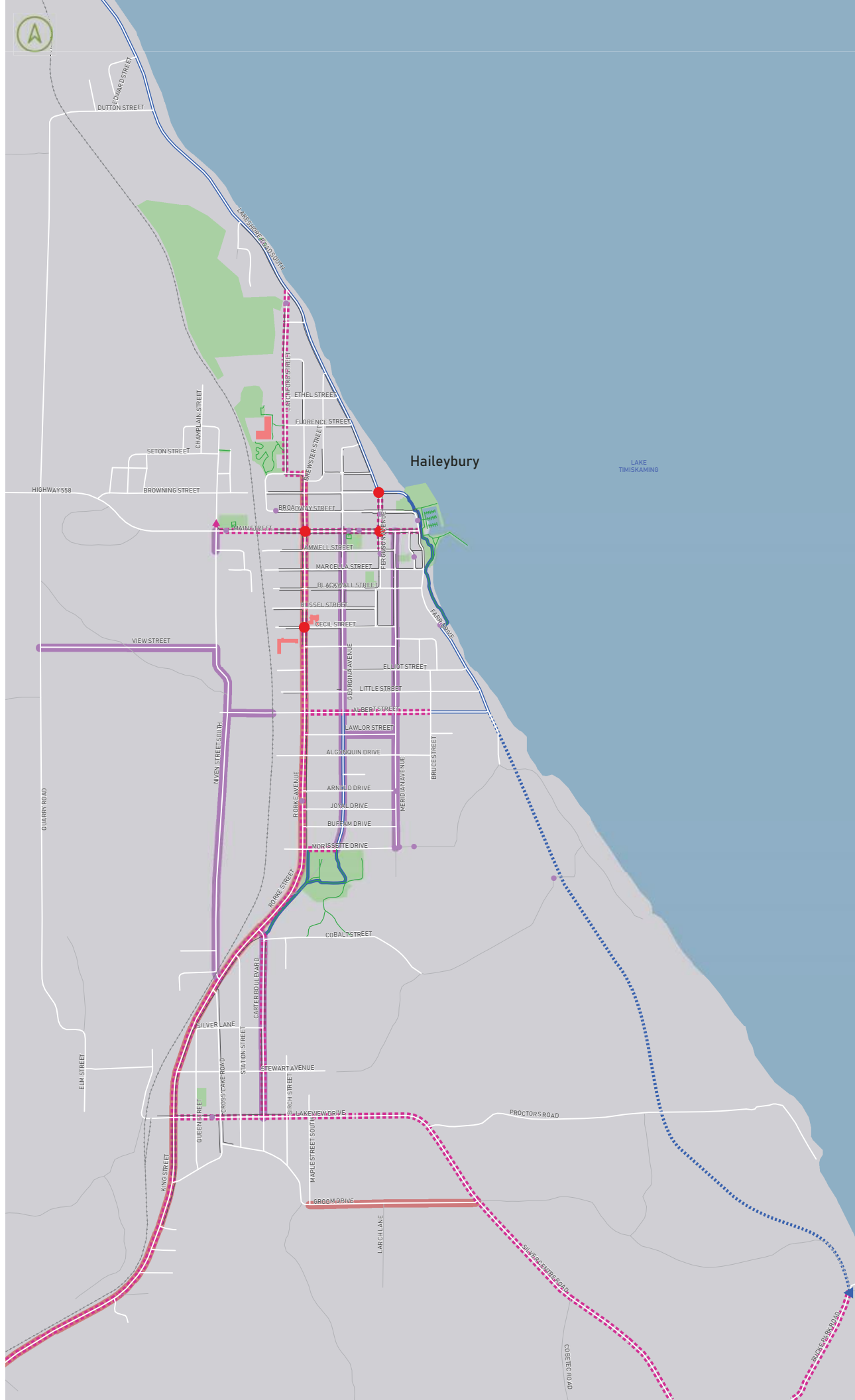
Candidate Routes and Proposed Improvements

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- STATO Trail (existing)
- STATO Trail (proposed extension)
- Potential candidate route
- Proposed crossing enhancement
- MTQ Highway
- Local Road
- MNRF Road
- 2021 Scheduled Road Project
- 2022 Scheduled Road Project
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only,
and not for navigation.

All rights reserved. Date Published: Draft July 2021



2.5 STEP 4: DESKTOP AND FIELD INVESTIGATIONS

To confirm the preliminary recommendations of steps 1-3 of the network development process, an extensive desktop analysis of the selected candidate network was performed. This work built upon the findings of our initial existing conditions review, seeking to both clarify and expand understandings of the candidate network's immediate and surrounding contexts. Using maps and satellite imagery provided from the City and Google Maps, the following details were identified for each candidate route:

- Available road width (based of visual observations and use of the measurement tool)
- Street function and design (i.e. lane widths, presence of on-street parking)
- Utility constraints (i.e. existing hydro poles, light poles, signage)
- Surrounding land uses (i.e. proximity of major trip generators, including businesses, schools, community centers, parks etc.)
- Scenic value (presence of scenic views, proximity to key natural amenities such as water bodies, forests or elevation changes)
- Presence of informal active transportation facilities (i.e. desire lines, vegetation clearing)
- Safety concerns (i.e. observations of heavy trucking, poor site lines etc.).

Depicted within the two images below are the outcomes of a desktop analysis performed along two travel corridors within Timiskaming Shores, Whitewood Avenue in New Liskeard (**Figure 3**) and Rorke Avenue in Haileybury (**Figure 4**) which are listed within the City's proposed active transportation network:

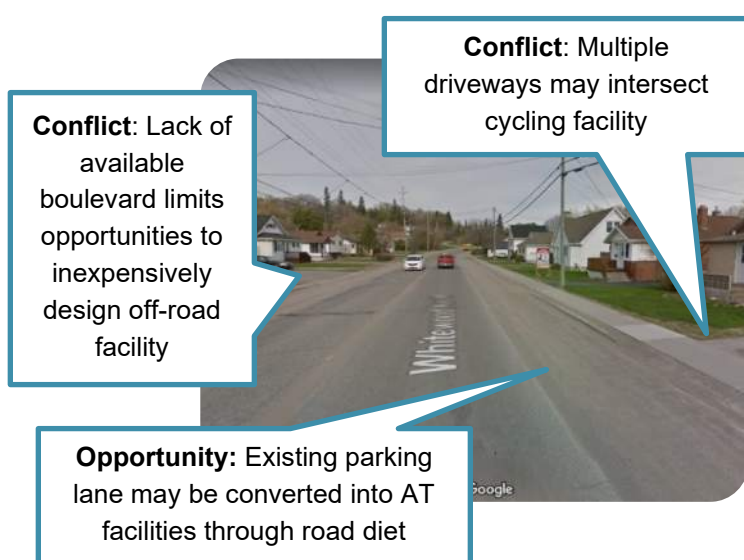


Figure 3 | Marked up photo image of Whitewood Avenue in New Liskeard, which was carefully reviewed for opportunities to implement enhanced active transportation facilities [Source: Google Streetview, 2021]

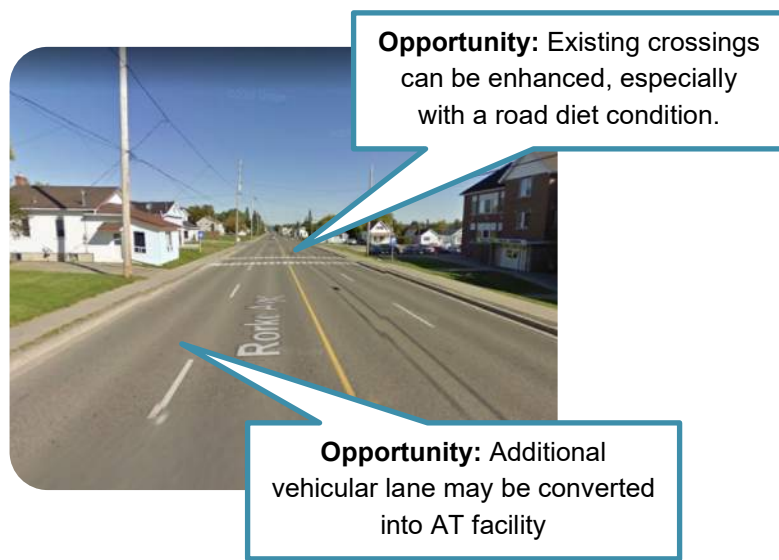


Figure 4 | Marked up photo image of Rorke Avenue in Haileybury, which was carefully reviewed for opportunities to implement enhanced active transportation facilities [Source: Google Streetview, 2021]

Complimentary to our desktop analysis, a series of field investigations were completed at key locations across the City. These sites represented either existing facilities where conditions needed to be updated or candidate routes, whose surrounding context needed to be verified. Key aspects documented within each visit included: slope gradings, surrounding lane uses, road and or trail surfacing, provision of supporting amenities (i.e. directional signage, trailheads, lighting) and facility widths. Overall a total of 184 strategic locations were visited, within the areas of Dymond, North Cobalt, Haileybury, New Liskeard, Pete's Dam and Devil's Rock. For each site visit, an accompanying photo was taken to properly capture all observations and to provide an accurate record for later review. A preliminary map of the site visit locations can be found within **Figure 5** below:

Field Visits (Photos)

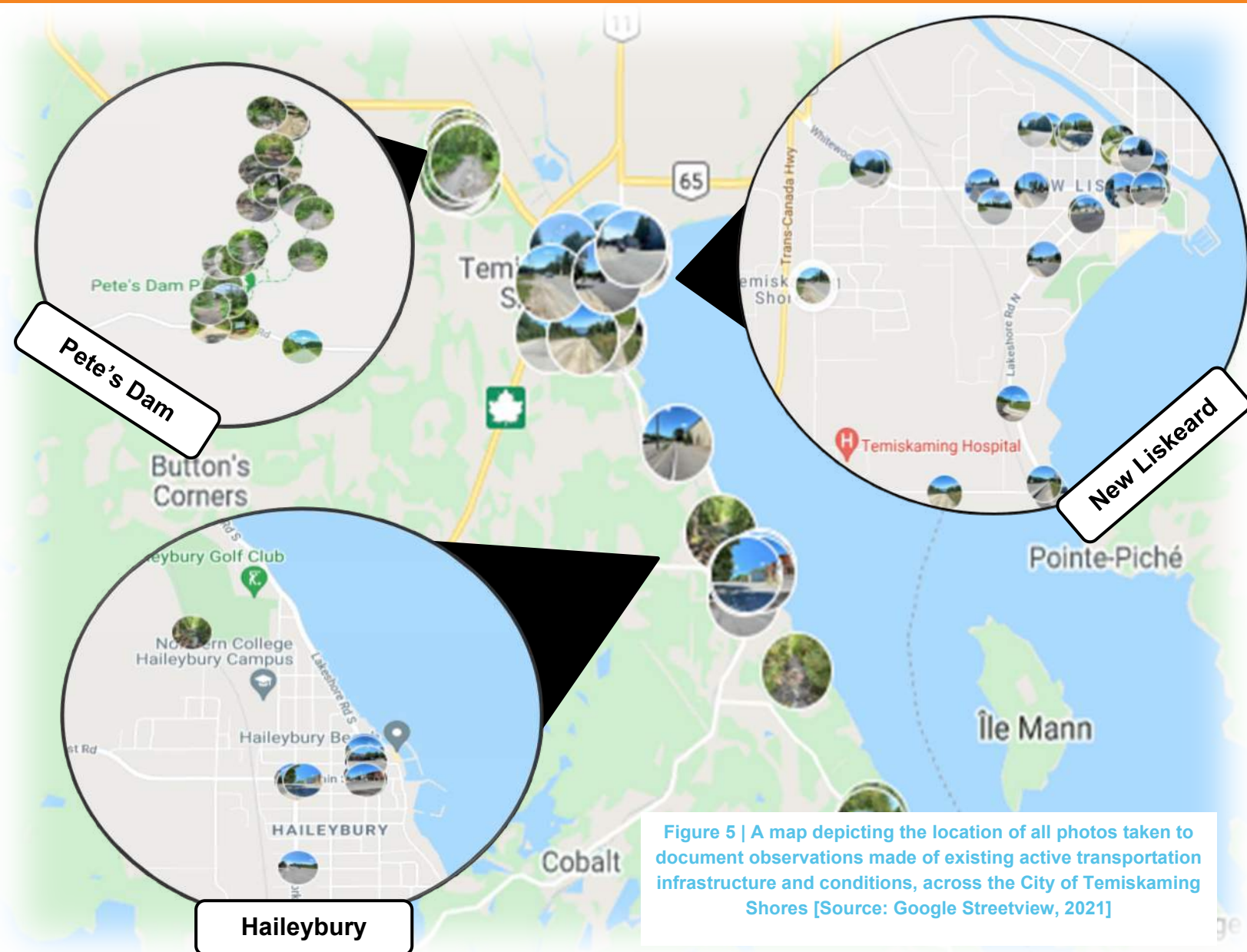


Figure 5 | A map depicting the location of all photos taken to document observations made of existing active transportation infrastructure and conditions, across the City of Temiskaming Shores [Source: Google Streetview, 2021]

2.6 STEP 5: CONFIRM THE ACTIVE TRANSPORTATION NETWORK

Using findings generated from steps 1 through 4 of the network development process and feedback collected from key project stakeholders, the cycling network and preferred routes were then confirmed. Once confirmed, the roadway conditions for each candidate route were assessed to determine the most appropriate facility type based on current best practices and design standards. All facility type recommendations rely on guidance from the newly updated OTM Book 18 (2021), with consideration given to the local context in Temiskaming Shores. Facility recommendations are based on OTM Book 18's 3-step facility selection tool, which is outlined below.

Step 1 of OTM Book 18's 3-step facility selection process involves an assessment of all candidate routes based on the road's posted speed limit (how fast motor vehicles are travelling on the road) and recorded traffic volumes (how many cars are on the road) to determine an appropriate level of separation for an on-road facility. To better account for relevant aspects of the roadway's surrounding context, separate assessment tools are provided depending on whether the facility is located along a rural or urban/suburban roadway. The graphics shown in **Figure 6** illustrate the nomographs applied in step 1 of the facility selection process.

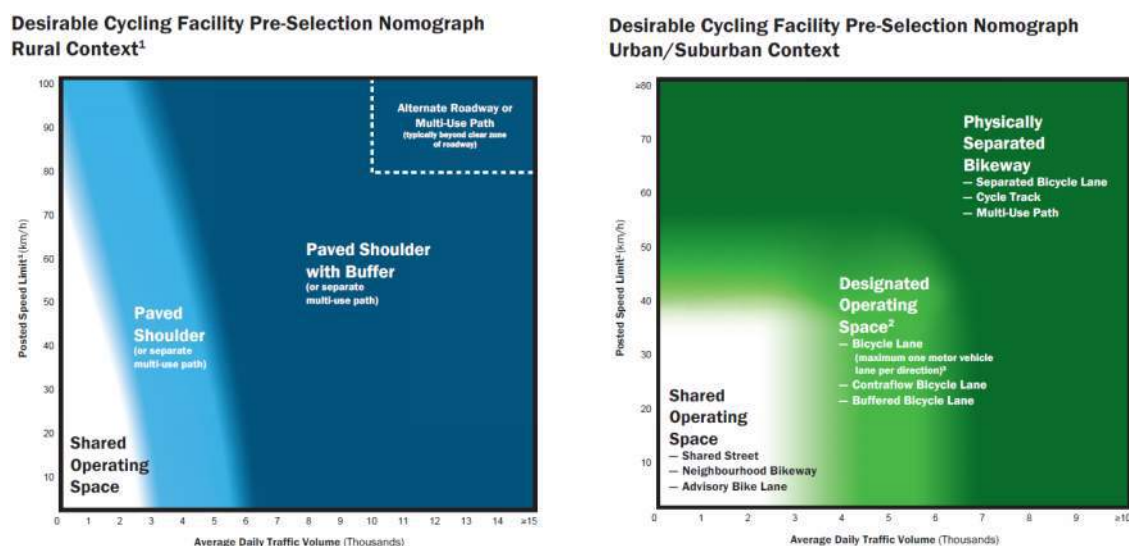


Figure 6 - OTM Book 18 Facility Selection Nomographs (2020 Draft)

Once preliminary facility assignments have been made based off the nomographs, **Step 2** of the OTM Book 18 facility selection process then involves revisiting the findings of previously conducted desktop reviews and field investigations to better understand the context of the corridor. This step is meant to provide additional context to the recommendations made in step 1 to confirm the desired level of separation – for example, if a roadway provides an important connection to a school or popular community destination, it may be desirable to design the active transportation facility to provide a higher level of comfort to those more hesitant users. The list of characteristics below, while not exhaustive, provides an example of the types of conditions a practitioner may wish to assess as part of their Step 2 Assessment:

Roadway Characteristics

- Speed
- Volumes
- Function
- Vehicle mix
- On-street parking
- Pedestrian activity
- Intersection frequency
- Operations

Availability

- Available space
- Project type

Attractiveness

- User skill level and stress tolerance
- Level of bicycle use
- Cycling route function

Finally, in **Step 3** practitioners should detail and justify facility decisions by following these steps.

- a. If the result of Step 2 differs from the level of separation and facility type options in Step 1, prepare a rationale for selecting a different facility type or separation option.
- b. Identify the specific elements of the roadway that were reviewed, the desired outcome of the facility type and the constraints that were considered when deciding facility types. Identify similar locations or other examples where the proposed facility type has been implemented, either within or outside of the project's jurisdiction.
- c. Identify potential design treatments and enhancements that may mitigate potential issues identified through the review of the local context and the implementation of similar facility types.

The results of Steps 1-3 in Temiskaming Shores resulted in the creation of a proposed facility type map, which is summarized in Map 3. This draft network has been reviewed and confirmed through public and stakeholder consultation, as well as through conversations with City Staff.

Currently, the City's active transportation network stretches approximately 80km, which includes off-road multi-use trails and sidewalks. For the purpose of this analysis, we are including all segments of the STATO Trail (including those that are on-road) in the Multi-Use Trails category.

The ultimate active transportation network as envisioned by this Plan would see Temiskaming Shores add an additional **57km** of active transportation facilities. The new facilities consist of approximately **13km of new sidewalks**, **7 km of new multi-use trail or in boulevard multi-use paths**, **5.5 km of new Bike Lanes** in urban areas, **19km of new Paved Shoulders** or buffered paved shoulders and **13km of new shared facilities**, including signed routes, traffic calmed corridors and sharrows.

Once completed, the active transportation network would stretch 137km, and would provide safer walking and cycling connections to nearly every area of Temiskaming Shores. A summary of the active transportation network is summarized in **Table 4** and shown in **Map 3 (A, B & C)**. The proposed and existing sidewalk networks for New Liskeard, Dymond and Haileybury are shown **Map 4 (A & B)**.

Table 4 | Summary of the Existing Active Transportation Network

Facility	Existing KM	Proposed KM	Total KM
Off-Road Multi-Use Trails	43.5	5.5	49.0
In-Boulevard Multi-Use Path		1.6	1.6
Buffered Bike Lane		3.7	3.7
Buffered Bike Lane or Two-Way On-Road Facility		1.4	1.4
Bike Lane		0.4	0.4
Buffered Paved Shoulder		6.6	6.6
Paved Shoulder		12.3	12.3
Sharrows Markings	0.1	1.1	1.2
Signed Route		8.0	8.0
Candidate Locations for Pilot Projects		0.2	0.2
Candidate Locations for Traffic Calming Measures		3.6	3.6
Pedestrian Bridge		0.1	0.1
Sidewalks	36.5	12.7	49.2
Total	80.1	57.2	137.3



Map 3a.

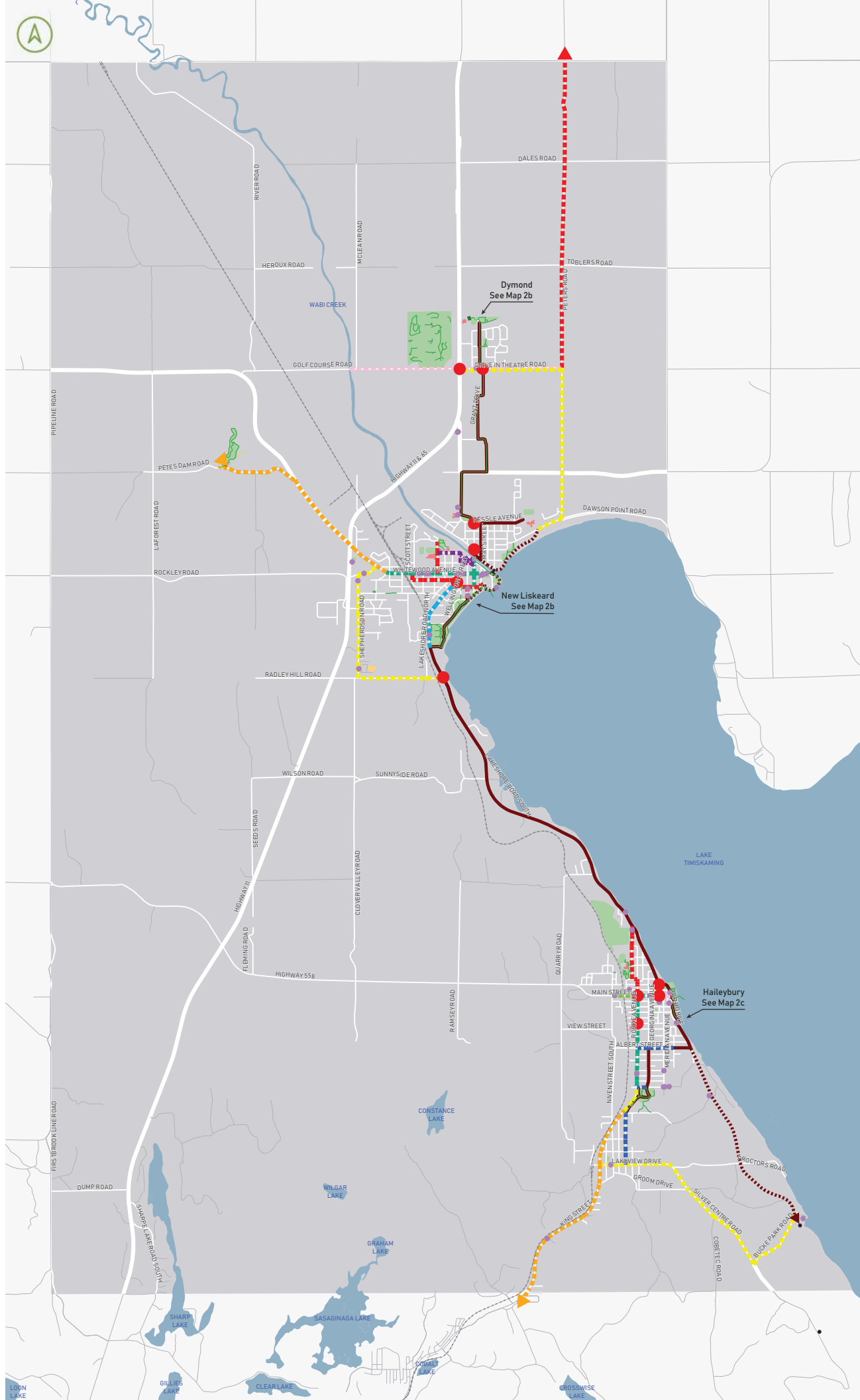
Proposed Facility Types and Improvements

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- STATO Trail (existing)
- Existing sharrow
- Proposed bike lane
- Proposed buffered bike lane
- Proposed buffered bike lane or two-way on-road AT facility
- Proposed buffered paved shoulder
- Proposed in-boulevard multi-use path
- Proposed off-road multi-use trail
- Proposed pilot project
- Proposed paved shoulder
- Proposed sharrow
- Proposed signed route
- Proposed traffic calming measures
- Proposed pedestrian bridge
- STATO Trail (proposed extension)
- Proposed crossing enhancement
- MTO Highway
- Local Road
- MNRF Road
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only.
and not for navigation.

All rights reserved. Date Published: Draft July 2021





Map 3b.

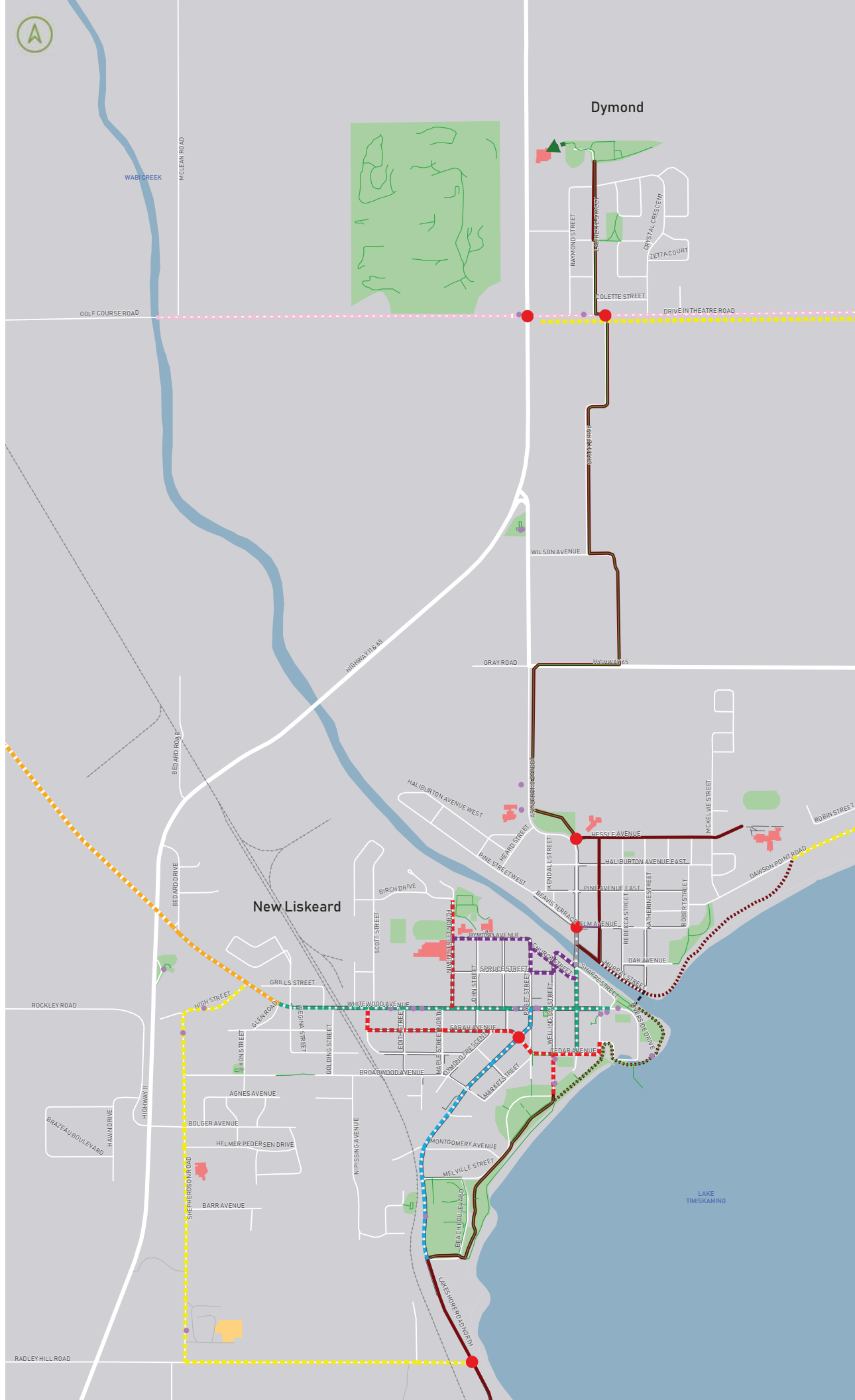
Proposed Facility Types and Improvements

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- STATO Trail (existing)
- Existing sharrow
- Proposed bike lane
- Proposed buffered bike lane
- Proposed buffered bike lane or two-way on-road AT facility
- Proposed buffered paved shoulder
- Proposed in-boulevard multi-use path
- Proposed off-road multi-use trail
- Proposed pilot project
- Proposed paved shoulder
- Proposed sharrow
- Proposed signed route
- Proposed traffic calming measures
- Proposed pedestrian bridge
- STATO Trail (proposed extension)
- Proposed crossing enhancement
- MTO Highway
- Local Road
- MNRF Road
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only
and not for navigation.

All rights reserved. Date Published: Draft July 2021



Map 3c.

Proposed Facility Types and Improvements

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- STATO Trail (existing)
- Existing sharrow
- Proposed bike lane
- Proposed buffered bike lane
- Proposed buffered bike lane or two-way on-road AT facility
- Proposed buffered paved shoulder
- Proposed in-boulevard multi-use path
- Proposed off-road multi-use trail
- Proposed pilot project
- Proposed paved shoulder
- Proposed sharrow
- Proposed signed route
- Proposed traffic calming measures
- Proposed pedestrian bridge
- STATO Trail (proposed extension)
- Proposed crossing enhancement
- MTO Highway
- Local Road
- MNRF Road
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).

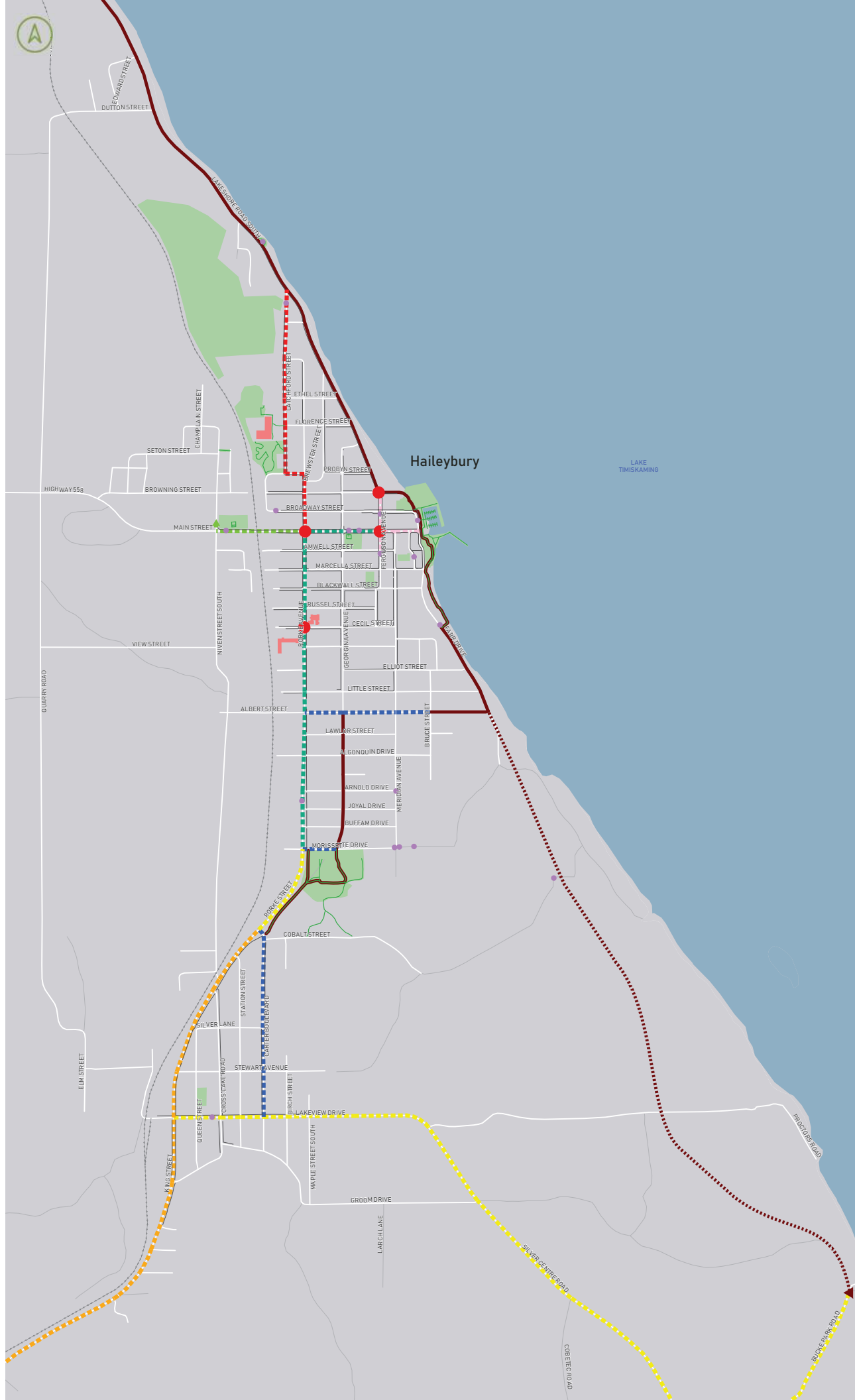


Produced in association with the
City of Temiskaming Shores.

This map is intended for information only,
and not for navigation.

All rights reserved. Date Published: Draft July 2021

0 0.125 0.25 0.5
KM





Map 4a.

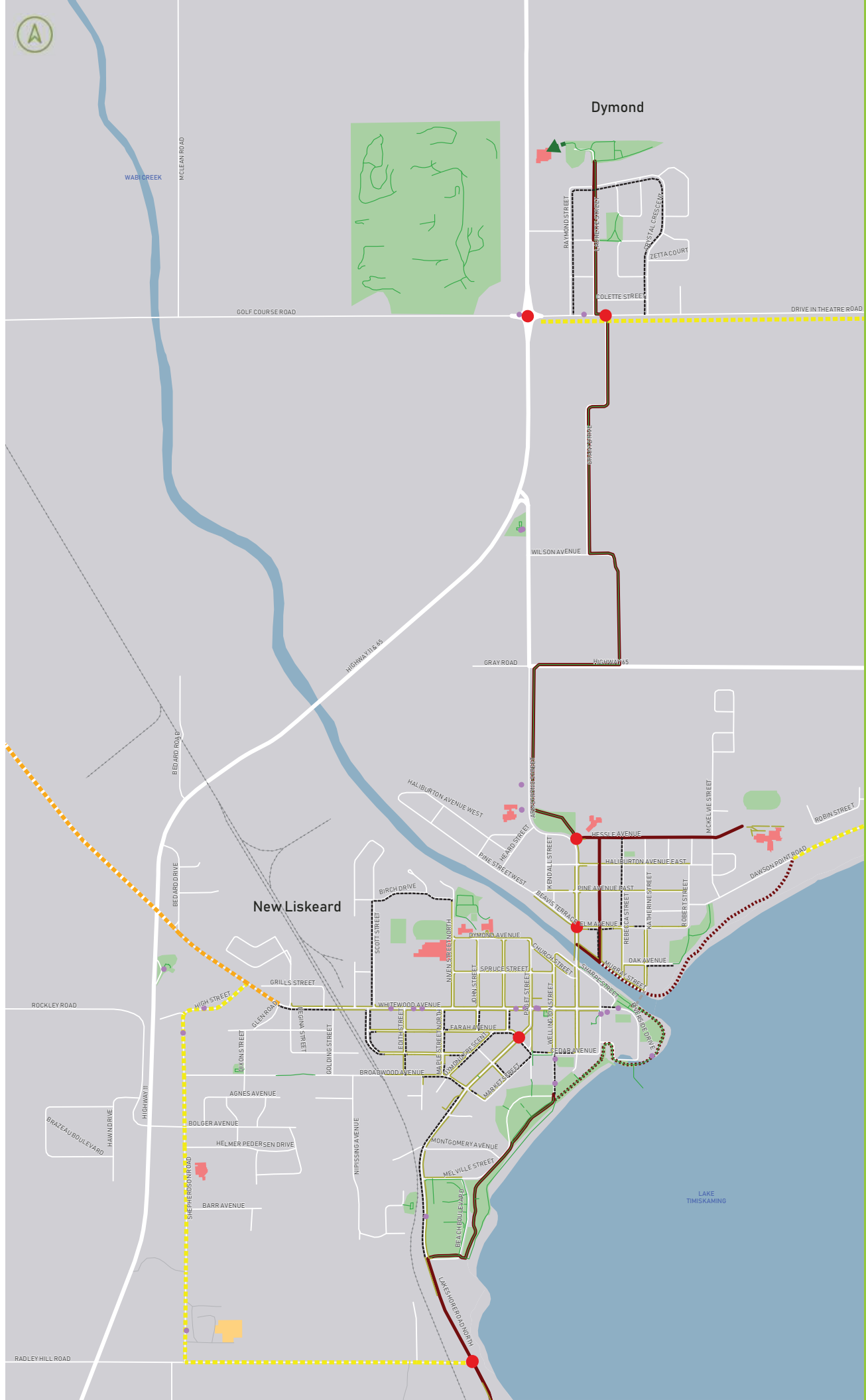
Proposed Priority Sidewalk Improvements

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- STATO Trail (existing)
- STATO Trail (proposed extension)
- Proposed sidewalk improvement
- Proposed buffered paved shoulder
- Proposed in-boulevard multi-use path
- Proposed off-road multi-use trail
- Proposed paved shoulder
- Proposed Pedestrian Bridge
- Proposed crossing enhancement
- MTO Highway
- Local Road
- MNR Road
- Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only.
and not for navigation.

All rights reserved. Date Published: Draft July 2021



Map 4b.

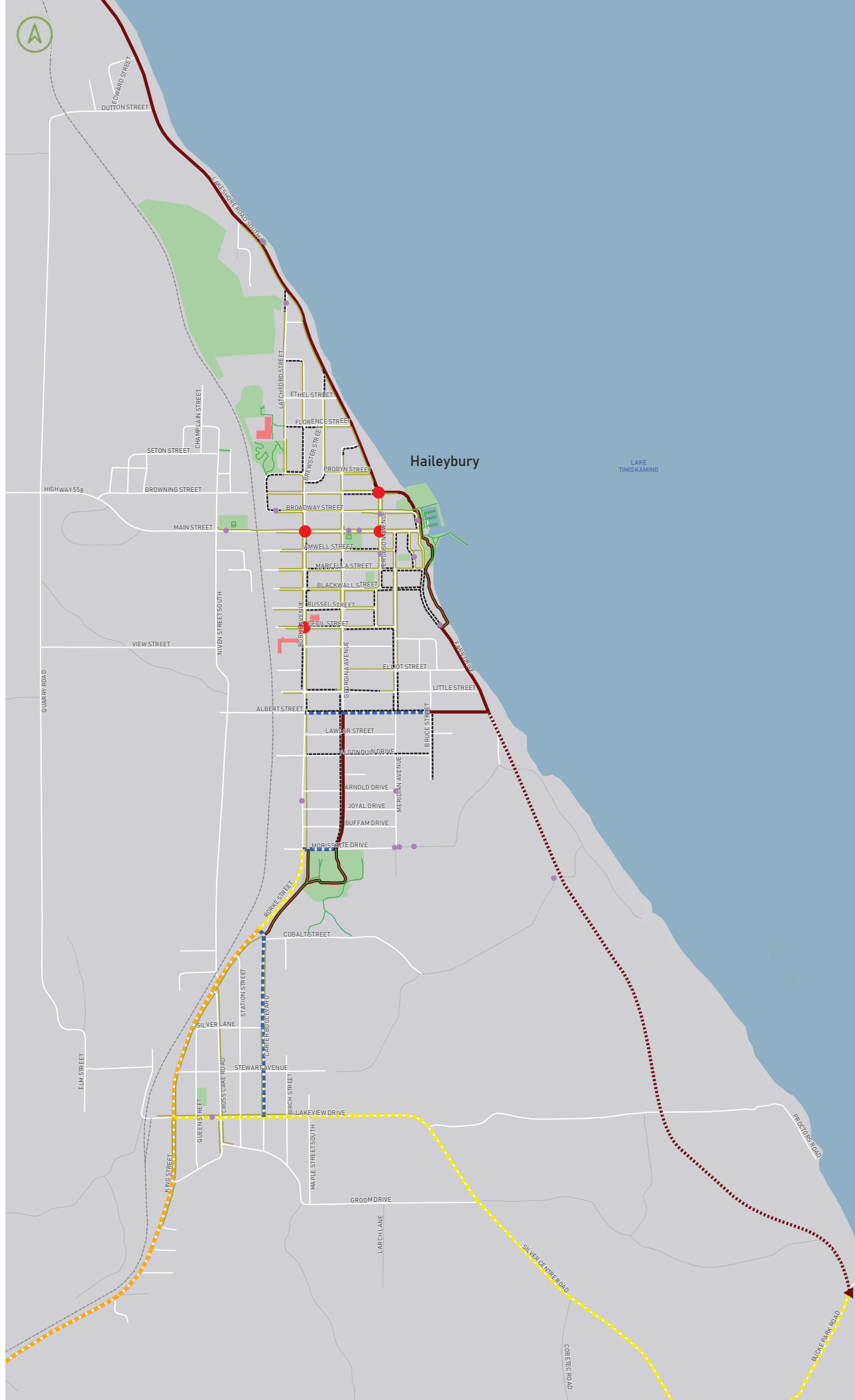
Proposed Priority Sidewalk Improvements

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Community Destination
- Trailhead
- Existing sidewalk
- Existing trail
- STATO Trail (existing)
- - - STATO Trail (proposed extension)
- - - Proposed sidewalk improvement
- Proposed buffered paved shoulder
- Proposed in-boulevard multi-use path
- Proposed off-road multi-use trail
- Proposed paved shoulder
- - - Proposed Pedestrian Bridge
- Proposed crossing enhancement
- MTO Highway
- Local Road
- MNR Road
- - - Railway
- Hospital
- School
- Recreation Area / Park
- Watercourse
- City Boundary

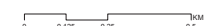
Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only,
and not for navigation.

All rights reserved. Date Published: Draft July 2021



2.7 STEP 6: PHASING PLAN

To conclude the network development process, a phasing plan will be developed create a rough outline of when each aspect of the network could be constructed. While beyond the scope of an ATMP to finalize specific project construction dates, forecasting implementation timelines at a relatively high level provides the types of support needed to develop the network. Developing a phasing plan for the active transportation network also supports longer-range budgeting and allows projects to be bundled with nearby capital projects, which can often reduce implementation costs.

Like other parts of the network development process, developing a phasing strategy for the plan requires a broad understanding of the local context and conditions. Proposed timelines can be based on alignment with capital works such as road rehabilitations or replacement of below-grade infrastructure like sewers, a connection's significance to the overall network (more important connections can be prioritized for earlier implementation), public demand or safety concerns.

Additional details on the Phasing Plan associated with Temiskaming Shores proposed active transportation network, including phasing horizons and costing estimates for individual projects will be discussed in the Phasing and Implementation Discussion Paper.

2.7.1 PROPOSED PHASING

While the phasing of all network recommendations will be determined in later stages of the ATP process, it is important to establish proposed implementation horizons early on to inform these later discussions. Key to developing these horizons is an understanding of both the network recommendations themselves as well as the way that the City implements infrastructure enhancements. Recognizing that circumstances change, phasing assignments within these horizons should not be considered a strict commitment but a list of recommendations that can be discussed and refined by City staff and Council on an ongoing basis. In particular, the items included in the short-term phasing horizon should be reviewed by City staff annually to confirm that projects vital to the completion of a safer, connected active transportation network are moving forward at a pace that is reflective of their significance.

For this Plan, the horizons for construction are defined as short term (0-5 years) and longer term (5 years and beyond). While this time horizon presents fewer categories of implementation (many plans will have a 0-5 year, 5-10 and 10-20 year horizon), the relatively small number of projects and the high degree of constructability for the majority of the high-impact projects outlined in this Plan lend themselves to a more ambitious program of **completing the network** during the early parts of the implementation of this Plan, with the longer-term priorities serving to **expand the network** and connect to some of the destinations that lie outside of the settlement areas of Temiskaming Shores. A brief explanation of some of the considerations that will lead to the categorization of each element of the network is included below in Table 5.

Table 5 | High level criteria used to distinguish recommended facilities scheduled within either a short-term (0-5 years) or long-term (5+ years) implementation horizon.

Short-Term (0-5 years) Completing the Network	Long Term (5+ years) Expanding the Network
<ul style="list-style-type: none"> — Accounted for within existing plans/projects — High priority projects vital to achieve active transportation connectivity — Meet all or most of the network criteria at a high level 	<ul style="list-style-type: none"> — Outside of capital considerations that are already scheduled — Don't meet as many of the network criteria but remain worthy aspirational projects — Challenged by geometric constraints and implementation costs.

3 DESIGNING THE NETWORK

3.1 DESIGN PRINCIPLES

When selecting routes and facility types to create a network that is considered safe, equitable and accessible, it is important to clearly define the principles that will guide the network development. Based on guidance provided in current design standards and the input received through the ATP Process, the network being proposed for the City of Temiskaming Shores is based on the following principles, which complement the network development priorities and could be used beyond the lifespan of this plan to inform future decision making.

DESIGNING FOR ALL AGES AND ABILITIES (AAA)

AAA refers to the planning and design of transportation networks and public realms that are considered safe, comfortable and equitable by the community. Historically, active transportation facilities in North America have favoured confident, able bodied users. An AAA approach considers the needs of populations that have been traditionally under-served when it comes to active transportation, particularly: children; seniors; women; people of colour; low-income users; people with disabilities; and people moving goods or cargo. Where possible, this plan strives to provide AAA facilities to open active transportation to the entirety of Temiskaming Shores' population, creating new opportunities to grow the community of active transportation users in the City. In practice, this means ensuring that road users are provided with physically separate space where possible and reducing vehicle speeds and volumes where separation cannot be achieved.

MOTOR VEHICLE SPEED INFLUENCES CYCLIST SAFETY

When designing for an interested but concerned user, practitioners should strive to provide as much physical separation between motor vehicle lanes and the facility as possible. However, it is recognized that it may not be possible or practical to design all facilities to an all ages and abilities standard. As assessment of design criteria of the roadway context should be undertaken to inform the selection of routes and facility types.

WHEN IN DOUBT, DESIGN FOR SAFETY

In some cases, a segment of road in Temiskaming Shores may be “on the edge” when it comes to recommended facility type based on the OTM Book 18 guidance. In these instances, this plan tends to select the higher comfort option (for example, recommending a separated cycling facility such as a protected bike lane rather than a designated facility like a painted bike lane) to generate a network that is future ready and will also encourage the highest number of new riders.

INTEGRATION OF COMPLETE STREETS PLANNING AND DESIGN

Complete Streets are streets for everyone – they are roads that are designed to balance the needs of all road users including pedestrians, cyclists, transit users, and motor vehicle. Active transportation is considered a key element of Complete Streets as walking and cycling infrastructure can offer greater transportation choice, accommodate people at all stages of life and facilitate equal access to goods and services.

It is important to note that using a Complete Streets lens doesn't mean that every road needs to accommodate every user type – it is a flexible, context specific approach that recognizes that different roads serve different purposes. For example, Main Street areas primary function is to provide access to local businesses, and to provide a positive experience for people visiting the area. This leads to very different design considerations when compared to an arterial road, where mobility of people and goods is the primary objective. This plan takes a Complete Streets approach to the development of the network, ensuring that all road users have access to a direct, connected network of transportation routes, regardless of how they move or where they are going.

PROVIDING EQUITABLE MEANS OF TRANSPORTATION

Research shows that enhancing opportunities for affordable and reliable transportation options is a key determinant to an equitable transportation system. Transportation equity refers to the ability to provide social and economic opportunities through equitable levels of access to affordable and reliable transportation options based on the needs of the populations being served, particularly populations that are traditionally underserved.

Traditionally underserved groups include individuals in at least one of the following categories: low income, minorities, elderly, immigrant populations, person(s) with disabilities, and/or youth; however, within each community there are unique and geographically specific groups and conditions that need to be considered and addressed. Active transportation is an affordable transportation mode which can help to provide transportation equity and support the diverse needs of all community members, especially when paired with reliable, affordable public transit.

SUPPORTING ECONOMIC DEVELOPMENT AND TOURISM GOALS

It is a goal of this plan to provide the City of Temiskaming Shores with an active transportation network that will highlight the City's natural beauty and connect residents and visitors to the City's unique amenities and local businesses. The plan prioritizes connections to the STATO Trail, the shoreline of Lake Timiskaming and the local conservation areas that have the potential to draw new tourism investment in the community.

In urban areas and neighbourhood main streets, it is important to consider how implementation of a route would impact local businesses and to leverage opportunities to improve the public realm through the development of new active transportation facilities. These efforts can support the City's existing initiatives to support small businesses such as the bump-out patios on Whitewood Ave, while also improving safety and access to local amenities for people who walk, bike or wheel.

The proposed Temiskaming Shores active transportation network is comprised of a variety of facility types, as assigned through the network development process. To support safer, comfortable and more convenient active travel, each facility type has their own design standards and considerations which reflect the needs of the end user. Listed within **Table 6** below are some key guidelines that inform both the selection and design of different active transportation facilities. The table also identifies applicable leading industry references, where additional guidance can be provided.

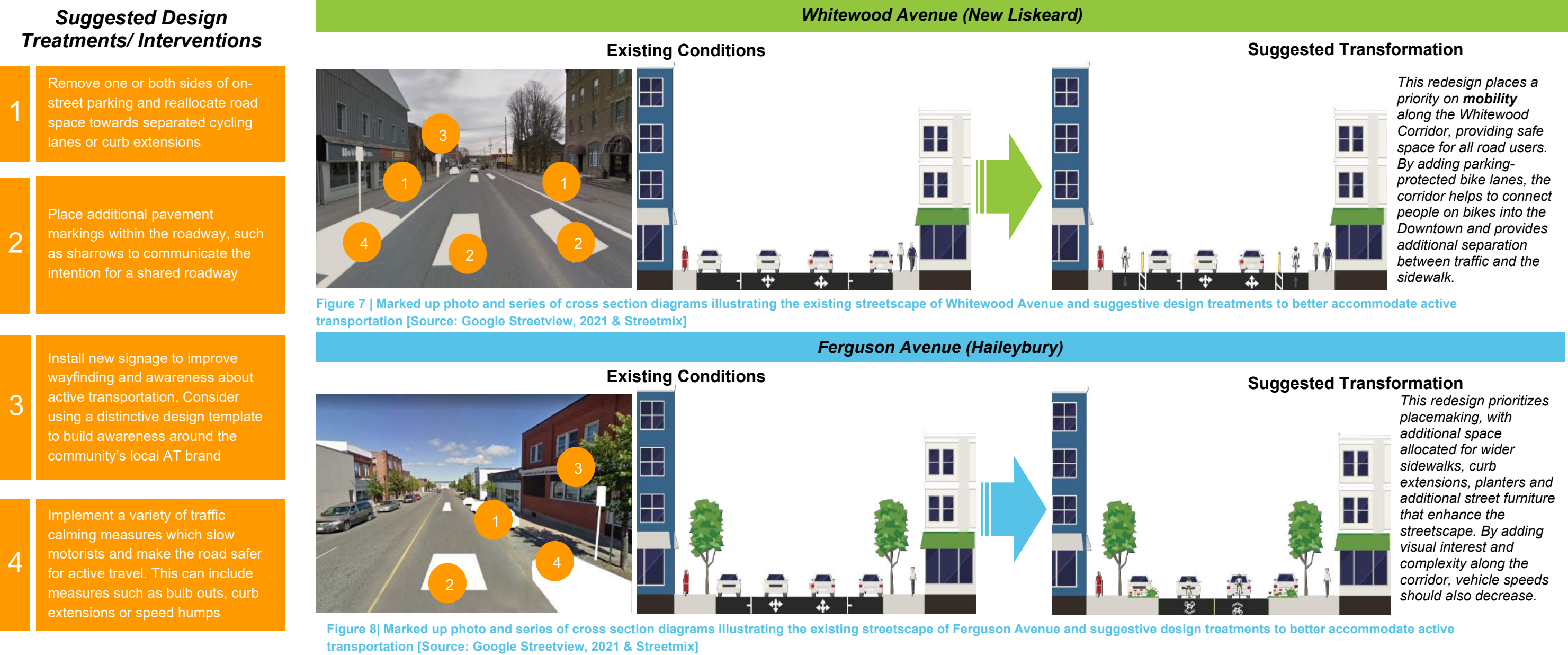
Table 6 | High-level design guidance for facilities listed within the proposed active transportation network

Facility	Two-way Traffic Volumes (ADT)	Operating Speed	Facility Width	Applicable References
Off-road Multi-Use Trail	N/A	N/A	3.0 – 4.0 metres	MTO Bikeways Design Manual, section 5.0 AODA – Built Environment Standards, section 2.2
In-Boulevard Multi-Use Path	≥6,000	≥40 km/h	3.0 – 4.0 metres + 1.5 metres desired offset from back of curb (0.6 m min offset)	OTM Book 18, section 4.3.4
Buffered Bike Lane	≥2,500	≥40 km/h	1.5 – 1.8 metres + 0.3 – 1.0 m buffer	OTM Book 18, section 4.4.2
Two-Way On-Road Cycle Facility			3.0 – 4.0 metres + 0.3 – 1.0 m buffer with physical separation treatment	
Bike Lane	≥2,500	≥40 km/h	1.5 – 1.8 metres	OTM Book 18, section 4.4
	Maximum one motor vehicle lane per direction, otherwise consider a buffered bike lane at a minimum			
Buffered Paved Shoulder			1.5 – 2.0 metres + 0.5 – 1.0 m buffer	OTM Book 18, section 4.5.4
Paved Shoulder	≥1,000	≥40 km/h	1.5 metres – 2.0m	OTM Book 18, section 4.5.4
	At higher volumes and speeds, consider a buffered paved shoulder			
Sharrow Marking	≤2,500	≤40 km/h		OTM Book 18, section 4.5.2, 4.5.3
Signed route	≤2,500	≤40 km/h ¹	3.0 – 4.5 metre travel lane	OTM Book 18, section 4.5.2, 4.5.3
Note: In locations where traffic volumes are very low (e.g. less than 1,000 cars per day), the threshold for speed could be higher. Practitioners are encouraged to reference the OTM Book 18 facility selection process to help identify the desirable level of separation for a facility based on traffic volumes and posted speed. The facility selection process includes three steps. It is important that practitioners complete each step to identify the best possible facility type based off the specific context and roadway characteristics.				

3.2 REDESIGNING MAIN STREETS

It is important to recognize that Temiskaming Shore’s active transportation network is designed to compliment the City’s existing transportation system. Designing for active transportation must balance the many roles and functions that streets already serve. Arguably some of the most important decisions in this Plan will need to be made as it relates to the City’s downtown areas, which serve as both important transportation corridors as well as commercial main streets. Balancing the needs of sidewalks, public spaces, traffic movement, on-street parking and cycling facilities within a narrow right of way presents many challenges. Based on the feedback received throughout the process of preparing this Plan, the fundamental objective of the Downtown Streets in Temiskaming Shores should be to **foster a stronger sense of place through the creation of a more human-scale public realm**. It is therefore important to consider how to balance the mobility of all road users with the provision of space to linger and explore, ensuring that these important areas of the City meet the needs the community.

Recognizing that the City’s Main Streets may not come up for a roadway reconstruction for several years, this Plan provides options for high quality active transportation and placemaking infrastructure in the City’s downtown areas without relying on extensive reconstruction. Given that the available pavement width in both downtown New Liskeard and Haileybury is relatively wide, this Plan offers some potential design solutions that would provide an enhanced environment for walking and cycling without significantly impacting vehicular operations or parking capacity in the Downtown areas. Using traffic calming measures, expanding the available space for walking and cycling and enhancing wayfinding and signage can help to reduce vehicle speeds in these corridors, providing a more comfortable environment for people walking or cycling in the area. These interventions would complement the City’s existing “bump out” program, enhancing the urban environment in these important retail corridors. Based on the feedback received and the importance of the Downtowns to this Plan, proposed cross sections for Whitewood Avenue in New Liskeard and Ferguson Avenue in Haileybury (**Figure 8**) are presented here. The Whitewood design places a higher priority on mobility, with new parking-protected bike lanes added, which the Ferguson design places a higher priority on placemaking and traffic calming.



3.3 SEPARATION TECHNIQUES FOR ON-STREET FACILITIES

In circumstances where on-street facilities are adjacent to higher speed traffic (generally 60km/h and above), physical separation is preferred to improve the safety and comfort of people on bikes. Separation techniques can vary widely, from flex bollards mounted directly to pavement to curb-separated facilities located away from the roadway. Choosing an appropriate level of separation relies on the context of the roadway and the goals of the proposed facility. Ideally, physically separated facilities should be designed to support the safety and comfort of people who would fall into the “interested but concerned” group of cyclists to maximize their impact on ridership within the community.

One common approach to creating physical separation is through reallocating space previously used for motor vehicle lanes to create a buffer for on-road cycling facilities. Often referred to as a “road diet”, this method is a well-proven, cost-effective intervention that is shown to improve safety for all road users. The method is also known to have minimal impacts on traffic operations in most contexts where traffic volumes are under 20,000 vehicles per day. Road Diets often rely solely on restriping the existing pavement to create space for cycling, meaning that the cost of implementing them is relatively low. In some circumstances, creating separated cycling space may require the removal of one or both sides of on-street parking. In circumstances where parking is required, it either a wide buffer between the parked vehicles and the bike lane (to reduce the instances of “dooring” collisions) or, placing the bike lane against the curb to create physical separation and protection using parked cars to enhance safety, is recommended.

Emerging best practice and guidance stresses that physical separation should be considered as often as is feasible and practical when designing cycling facilities. Providing a physical barrier between people cycling and people driving can enhance both real and perceived safety, encouraging more people to ride. Physical separation can come in a variety of styles and formats, most types can be distinguished as either temporary or permanent. Listed below are some common types of each, as well as general guidance on where they are most appropriately applied:

Temporary

Temporary physical separation is preferred along roadways with lower traffic speeds but greater amounts of manoeuvring traffic (i.e. on street parking, delivery drop offs). Their ability to be installed and removed also make them ideal in places where specialized equipment for winter maintenance is not readily available.

Common examples: Hatched buffer (Figure 9) or Bollards

Common examples: Hatched buffer (Figure 9) or Bollards

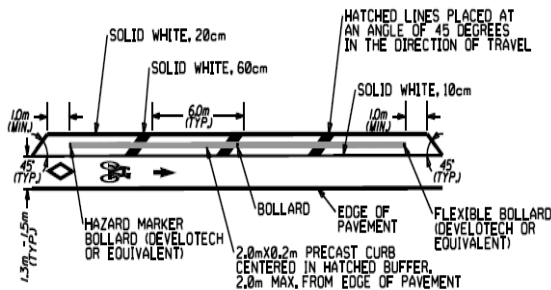


Figure 9 | Technical drawing of potential hatched buffer treatments [Source: Voddan Cycle Tracks Project, 2021]

Permanent

Permanent physical separation is preferred for on-road facilities that receive high ridership and are located on roadways with more hazardous traffic conditions (i.e. heavy trucking). They are more expensive to implement but are more durable and offer greater protection to facility users.

Common examples: Pinned Pre-cast curbs (Figure 10) or Low Concrete Wall Barrier

Common examples: Pinned Pre-cast curbs (Figure 10) or Low Concrete Wall Barrier

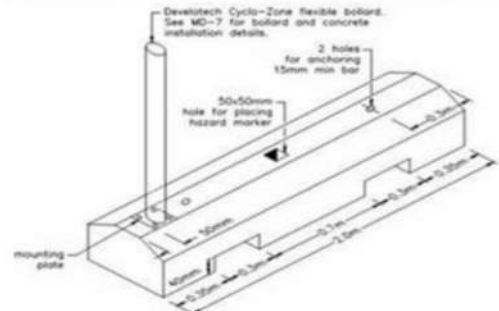


Figure 10 | Technical drawing of potential pinned pre-cast curb treatment [Source: Colborn St Cycle Tracks Project, 2018]



Figure 11 - Example of Bollards and Planters used for physical separation on a bike lane [Source WSP]



Figure 12- Example of permanent physical separation using rolled curbs [Source WSP]

3.4 INTERSECTIONS AND TRAIL CROSSINGS

Proper intersection and trail crossing design is a key component of the creation of a safer, connected network of active transportation infrastructure. Given the potential for collisions at these locations, it is important that best practices in design be referenced whenever a trail or cycling facility crosses a roadway. Intersection treatments can vary widely, with a variety of pavement markings, lighting options, signage and physical infrastructure changes being available to designers through OTM Books 18 and 15. While every crossing will be unique given the context of the crossing, facility types can generally be categorized into one of four options:

- Setback crossings, where a trail crosses an intersecting roadway
- Adjacent crossings, where a trail crosses an intersecting roadway
- Controlled mid-block crossings, where a trail crosses a roadway at a perpendicular angle
- Uncontrolled mid-block crossings, where a trail crosses a roadway at a perpendicular angle

General design guidance for Setback Crossings (**Figure 13**) and Adjacent Crossings (**Figure 14**), are provided here – these are the crossing types that are most applicable to the types of crossings that are proposed for Temiskaming Shores. Additional detail on each intersection treatment type can be found within sections of OTM Book 18 referenced.

3.4.1 INTERSECTION TREATMENTS

Setback Crossings (OTM Book 18 Section 6.3.2)

In this condition, the cycling facility or multi-use trail crosses the intersection set back from the adjacent motor vehicle travel lanes. Also known as a “protected intersection”, this treatment does not remove all potential conflict, but it does increase the user’s level of comfort and safety through partial physical separation and by encouraging slower motor vehicle speeds when turning. In a setback crossing, the cycling facility is offset from the parallel travel lane by 4 to 6 metres (desired). Applicable for in-boulevard facilities such as cycle tracks and MUPs.

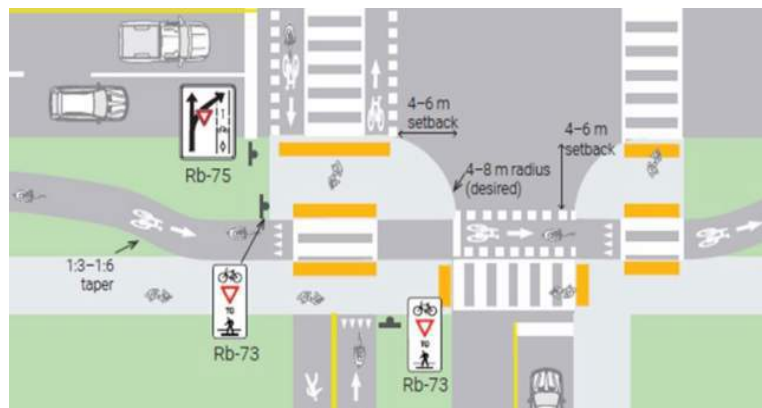


Figure 13 | Components of a possible setback crossing intersection [Source: OTM Book 18]

Adjacent Crossing (OTM Book 18 Section 6.3.3)

In this condition, the cycling facility crosses the intersection adjacent to (or with minimal setback from) motor vehicle travel lanes, either on-road or directly adjacent. Adjacent crossings can be applied for both on-road (bike lanes, paved shoulders) and in-boulevard cycling facilities (multi-use pathways).

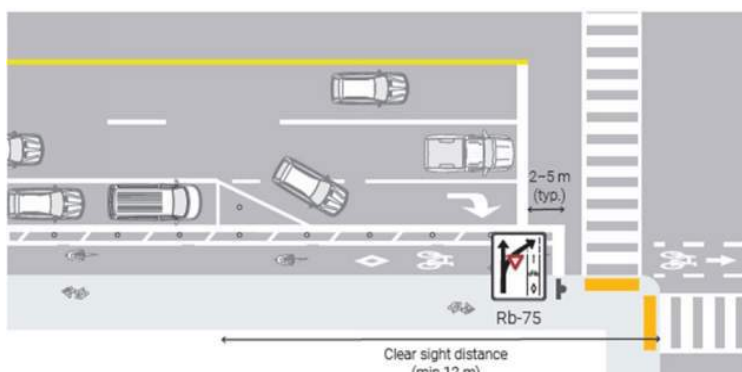


Figure 14 | Components of a possible adjacent crossing intersection [Source: OTM Book 18]

3.4.2 MIDBLOCK CROSSING TREATMENTS

In some circumstances within Temiskaming Shores, trails facilities directly intersect roadways at a location where there is no other crossing present. At these locations, it is important that both trails users and people driving understand their role in ensuring safety, which can be achieved through proper crossing design. Within Temiskaming Shores, grade-separated crossings (such as tunnels or bridges) would be prohibitively expensive, so this Plan is recommending a mix of controlled (Figure 15) and uncontrolled traffic crossings (Figure 16). In most instances in Temiskaming Shores, the combination of trail use volume and traffic volumes would likely lead to the selection of uncontrolled crossings, although there are several locations within the City where a controlled crossing could be warranted. Listed below is an overview of each crossing type's design, with additional details available in OTM Book 18.

Controlled crossings



Figure 15 | Diagram illustrating the design elements of a signalized mid block crossing and a photo of a sample application [Source OTM Book 18]

Controlled crossings are defined by the inclusion of some form of formal traffic control. This can include stop or yield signs, intersection pedestrian signals (IPS), mid-block signals or full traffic control signals. To control and separate the movement of cyclists and pedestrians across the intersection, controlled crossing can feature a crossride – a delineated space for people cycling to cross without dismounting.

Uncontrolled crossings



Figure 16 | Diagram illustrating the design elements of an uncontrolled mid block crossing and a photo of a sample application [Source OTM Book 18]

Uncontrolled crossings lack any form of traffic control and require active transportation users to safely yield to passing motorist traffic. These facilities typically incorporate specific signage and geometric design elements to reinforce proper traffic behaviour. As active transportation users do not maintain the right-of-way, cross rides or any other form of pavement markings should not be applied along the crossing. Traffic calming measures, however, are recommended to enhance safety by reducing the operating speed of motor vehicle traffic and minimize the crossing distance of active transportation travels.

3.5 ACCESSIBILITY

As a vital form of public infrastructure, it is essential that all active transportation facilities be planned and designed to accommodate the needs and abilities of all potential users. This maximizes the utility of investments while also affirming broader municipal imperatives related to supporting diversity and inclusion. Within Ontario, these requirements are not only encouraged but codified under provincial law through the Accessibility for Ontario with Disabilities Act (AODA). Through the legislation, a specific target has been set of making the entire province accessible to people with disabilities by 2025.

To action AODA in practice, the Government of Ontario has also adopted The Accessibility Standards for the Built Environment. This accompanying document serves as a key technical reference which prescribes specific guidelines and standards needed to support universal barrier-free access. Forms of public infrastructure to which these standards apply include both on-road and off-road active transportation infrastructure such as multi-use pathways and multi-use trails. While these standards only apply to projects involving either new construction or extensive renovation, the creation of a more accessible, equitable transportation system should be a goal of the City as this Plan moves into the implementation phase.

For multi-use trails, the AODA provides guidance on a wide range of design considerations. The City should apply guidelines outlined in the Built Environment Standards as a minimum unless the trail's location, surrounding environment or desired user experience warrants their exceedance. Following these guidelines is not only a legislative requirement but is vital in preserving the STATO trail's current designation as a fully accessible trail, amidst future expansions or enhancement projects. Sections 80.8 and 80.10 of the Accessibility Standards for the Built Environment provide the technical requirements for off-road multi-use trails, which includes the following:

- | | |
|--|---|
| × Minimum clear width 1.0m | × Maximum cross slope of 2% |
| × Minimum head room clearance of 2.1m above trail | × High tonal or textural changes to distinguish the edge |
| × Surfaces are to be firm, stable with minimal glare | × Standards also address changes in level, openings in the surface, edge protection (e.g. near water) |
| × Maximum running/longitudinal slope of 10% | |

In addition to adhering to AODA, all active transportation network signage and wayfinding should be easily understood and detectable by users of all abilities. This includes using simplified text, visual icons and clear and contrasting colours which help create signage and mapping / messaging that is informative, legible and visible. Wayfinding and signage systems should also clearly communicate which trails are accessible so that users can make an informed personal decision about which pathways they will use.

“The people of Ontario support the right of persons of all ages with disabilities to enjoy equal opportunity and to participate fully in the life of the province.” The stated goal of the AODA is “to make Ontario accessible for people with disabilities by 2025.” (Accessibility for Ontarians with Disabilities Act, 2004)



3.6 OFF-ROAD TRAIL DESIGN

In addition to on-road facilities and off-road multi-use pathways, Timiskaming Shore's proposed active transportation network features several off-road trails. This includes trail facilities found within the City's many local natural areas and parks, including Devil's Rock and Pete's Dame and Uno Park (**Figure 15**). Like all other facility types, it is vital that all trails be designed to reflect leading applicable technical guidance as well as local priorities and concerns, including an all ages and abilities approach. This guarantees a more streamlined and standardized process to better inform the implementation of new facilities and, refurbishment of existing ones. Additionally, identifying a clear set of trail design standards and guidelines also offers a more predictable travel experience for trail users. With few new trails recommended as part of the proposed network, guidelines listed below were tailored context and condition of those already found across the City.

3.6.1 TYPICAL TRAIL DESIGN STANDARDS

WILDERNESS TRAIL DESIGN STANDARDS

- **Width:** 1.2 – 2.0m width
- **Surfacing:** Compact dirt or woodchip
- **Maintenance:** Annual/reactive service (i.e. tree hazard removal, erosion repair). Includes topping up of mulch surface as necessary, keeping trail envelope free from obstacles (e.g. pruning to maintain clear zone).
- **Accessibility:** Maximum of 5-10% Slopes (AODA recreational trail standards), signage to inform level of challenge/conditions to users.
- **Grading/Drainage:** 1-2% cross slope to minimize longitudinal drainage. Culverts, swales, or water bars to manage overland flow crossing the trail.
- **Lighting/Security:** No lighting, future considerations for 'refuge' lighting at trailheads.
- **Amenities:** Low frequency of amenities in rural areas. Examples: trash receptacles at trail entry points. Seating at key locations (e.g. top of long climb, viewpoint). Natural materials used for seating opportunities.



Figure 17 | Photo of an existing wilderness trail facility within Timiskaming Shores

URBAN TRAIL DESIGN STANDARDS

- **Width:** 2.5 – 3.5m width
- **Surfacing:** Limestone screenings or asphalt
- **Maintenance:** Regular inspections to identify and repair trip hazards and debris (e.g. garbage, pruning to maintain clear zone).

- **Accessibility:** Maximum of 5% slopes, with minor occurrences of maximum of 5-10% (AODA recreational trail standards), signage to inform level of challenge/conditions to users.
- **Grading/Drainage:** 1-2% cross slope to minimize longitudinal drainage. Culverts, swales, or water bars to manage overland flow crossing the trail.
- **Lighting/Security:** Considerations for 'refuge' lighting and full lighting for trails in higher volume urban/ urban tourism areas.
- **Amenities:** High frequency in urban areas. Examples: trash receptacles at trail entry points and high-volume areas where litter is observed. Seating at regular intervals (e.g. every 200m on average, every 50m in select areas where there is a higher potential for users with mobility impairments). Formal bench seating with arm rests and back rests, augmented with natural materials for additional seating opportunities.



Figure 18 | Photo of an existing urban trail facility within Timiskaming Shores

3.6.2 REMOVING BARRIERS AND PROMOTING USE

Just as people with disabilities experience social and environmental barriers to full participation in society, they can also experience barriers to full participation and enjoyment of parks and trails. Creating parks and trail networks that support people of all abilities is based on the fundamental right to quality of life, individual empowerment, respect and dignity for all people, and the guarantee of equal access to and participation in society.

Barriers are not only physical, and future trail design and programming needs to consider mechanisms for mitigating barriers to use. Barriers can be derived from differing cognitive abilities and mental processes experienced by potential trail users. Barriers can be socially based and stem from issues related to income, language, race, religion, sexual orientation, health, and gender.

Examples of common barriers to use related to trails include:

- Concern or fear of a new trail experience for reasons of accessibility and/or other anxieties.
- Fear for safety after sundown and/or in secluded areas.
- Unavailability or unknown locations of rest areas and distances when selecting a route.
- Inability to read English for navigation and trail information purposes.
- Access in areas where people live and work, in particular low-income areas and factory/industrial employment areas.
- Worry over judgement and/or suspicion when using the trail.
- Concern over access to amenities such as washrooms, water

Temiskaming Shores should consider prioritization of upgrades, maintenance and programming that addresses barriers to usage as the plan is implemented. Below is a sample of specific strategies for areas of improvement that the network would benefit from.

WILDERNESS TRAILS & ACCESSIBILITY

Wilderness trails often present a challenge to users that can be perceived as both benefits and barriers to participation. It is important to offer various levels of challenge within a trail system, while making provisions to enable a wide range of users.

- Trailhead and wayfinding signage should clearly communicate level of challenge at discussion making junctions. Information to include; elevation gain, severity and length of slopes, surfacing, width and length of trail, and location of seating/other supportive amenities.
- Surfacing modifications to create smoother walking path including removal or infill around rocks and roots, installing geogrid/geocells to stabilize earthen surfaces over rocky terrain.
- Minor grading to improve surface and drainage/erosion that cause rutting.
- Rerouting of select trail sections to reduce slopes or need for stairs by meandering alignment.
- Adding railings, bike trough along stairs, and mid-rise landing breaks with seating provide a respite along stairs and slopes.



Figure 19 | Photo of sloped trail with rustic barrier/handrail to protect aid users.

REST AND REFUGE

It is important to incorporate places for people to rest and take refuge. It is recommended that trails strive for some form of informal or formal seating every 200m, in particular located at points of entry and vistas. This metric is based on accommodating the average user. In areas where there is a higher potential for users with mobility impairments, such as near seniors' homes or amenities, along transit routes, or trails within tourism destination locations, rest seating is recommended every 50m. Formal bench seating with arm rests and back rests are recommended for areas where accessibility is of greater need, however provision of seating outweighs the priority for quality and substitution or augmentation with natural materials such as flat-topped stones is always welcomed.



Figure 20 | Photo of informal rock seating wall in Simcoe County. Stones can be singular free standing, or small clusters.

Consider the provision of shelter in similar areas where accessibility is important, as well as areas where gathering is desired such as vistas, interpretive/commemorative nodes and where distances from point of entry/vehicular parking area significant.

LIGHTING

Lighting is often debated when assessing trail infrastructure. Women and people with young families are more likely to use a trail if lighting is provided, especially when daylight hours are reduced. Lighting a trail, in part or full, and remove barrier to recreational and commuter trail use. Consider lighting all urban trails, in particular those that facilitate connections to transit, amenities and community services. If full lighting is not feasible, consider 'refuge' lighting key areas is regular intervals to provide safe landing points. Solar lighting options are increasing in function and decreasing in cost, with options to delay light activation to concentrate seasonally limited battery function when needed most. Solar is an excellent solution for remote trailheads and short sections of trail that present safety/vandalism concerns.

ACTIVITIES & PROGRAMMING

Recreational and web-based programming for trail systems provides ample opportunity to draw in users, promote overall trail use, and remove user barriers which may have existed within the trail system. Incorporating programming activities into the trail experience can help draw in a multitude of users to the trail system in a dynamic and interactive way. These programs can be pivoted to target and attract specific user groups to the community's trail system and promote opportunities for people in the community to share experiences and connect with one another. This is especially



Figure 21 | Photo of small shade structure along trail in Guelph.

useful in reducing barriers for different age demographics, like teenagers, to get outside and benefit from collective social experiences, fitness opportunities, and educational resources. Targeting trail use from different demographics can be as simple as creating walking groups for specific age groups, genders, and interests. Walking groups can include storytelling walks for children, self-esteem walks for teenaged girls, mom and stroller walks, or walks for people new to the community.

Programing can be leveraged to shift users from busy sections of a trail and encourage use in underutilized areas where increased traffic is desired. Interaction can be further encouraged through the implementation of physical permanent or temporary signage along a trail that links users to activities on a municipal website, social media group, or other app platform. A 'spot and share' program, for example, can encourage the documentation of seasonal nature photos and social media sharing along the trails. Photo sharing can target themed educational opportunities, like the documentation of migratory birds, and can vary seasonally to attract users throughout the year. Fitness programming can also be used to encourage off season use of trails. Trail users can be encouraged to log and share location specific fitness achievements and photos as they travel throughout the trails.

Activities and programing can be used to remove barriers to participation and help to form social connections with other members of the community. Activities can be themed to respond to different seasons, or to other events and activities that are occurring within the community. Trail tourism can be a multi-disciplinary approach that combines the expertise of the City's different departments to determining the best means to attract users through specific trail programming. For example, a partnership between

the Recreation & Culture and Parks and Facilities departments may find combined programming opportunities to attract atypical trail users and provide them with a reason to experience local trails. Activities could include the temporary installation of game or challenge stations throughout the trail system. Stations can be based on nostalgic games and include oversized lawn components, spray lining on turf, or provide signed or digital signage to describe the intention of the challenge.

3.6.3 SUSTAINABLE DESIGN APPROACHES

Maintenance burdens and exposure to liability risk can be greatly reduced by implementing more sustainable design approaches. Examples of successful application of design techniques and materials have been provided below.

Before looking at engineered solutions, trail alignment should always be reassessed for possible modifications to remove the trail from the situation that is causing the problem. 'Avoid' is one of the best means of mitigating risk. Areas of extreme slopes and low-lying areas that flood are key examples of areas that may not be best suited for trails. Consider the following:

- Meander trails to reduce the degree of slope and mitigate erosion. Alignment adjustments can make a big difference. Avoid tight switch back style ramps where possible with longer deviations. Note, natural obstacles will need to be placed to force users onto a more indirect path.
- Move trail alignments away from running parallel with watercourse and cliff edges. Instead create destination vistas where the trail periodically leads users, directly or through off shoot trails. Pete's Dam is a good example of where this approach could be applied. Many of the problematic sections of trail are located along the desirable watercourse vistas. By relocating the trail further from the watercourse, select sections can come to the water's edge and be reinforced/elevated accordingly to focus engineered mitigation approaches to select areas only.
- Improve trail drainage through minor grading, elevation of trails with import of materials and/or provision of small culverts to convey water. Make efforts to redirect water around or under the trail.

ADDRESSING TRAILS ON SLOPES

Pedestrian and some self-propelled users are capable of ascending grades of 30% or more whereas some users are limited to grades of less than 10%. Once trail slopes exceed this threshold and slopes are long (i.e. more than 30m) it is important to consider alternative methods of ascending slopes, such as switchbacks and stairs, or alternative locations for the trail.

Where construction is feasible, switchbacks are generally preferred because they allow wheeled users such as cyclists to maintain their momentum, and there is less temptation to create shortcuts, as might be the case where stairways are used. Switchbacks are constructed with turns of about 180 degrees and are used to decrease the trail's longitudinal slope. A switchback with a trailbed that is properly “benched” also provides outlets for water runoff at regular intervals, thus reducing the potential for erosion. Switchbacks typically require extensive grading and are more suited to open locations where construction activity will not cause major disruption to the surrounding environment. Switchbacks can be difficult to implement in wooded areas without significant impacts to surrounding trees.

When designing switchback and stair structures on trails the following should be considered:

- Use slip resistant surfacing materials, especially in shady locations.
- Incorporate “corral” barriers on either side of the upper and lower landing to prevent trail users from bypassing the stairs; and
- Provide signs well in advance of the structure to inform users that may not be able to climb stairs.



Figure 22 | Photo of rolling grade dip method to mitigate longitudinal slope rutting. Buried log used to create drain break hump (Mount Nemo, Burlington).

Temiskaming Shores should consider realigning and/or modifications to select sections of trails to reduce negative impacts of drainage and decrease severity of slopes. The following figures illustrate approaches to slope management on recreational trails.

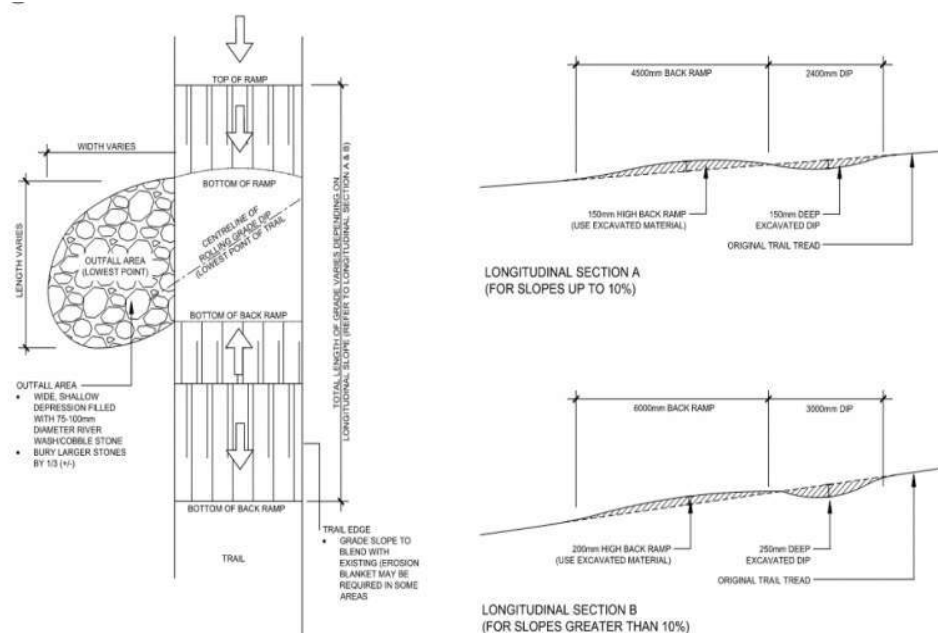


Figure 23 | Rolling Grade Dip Approach

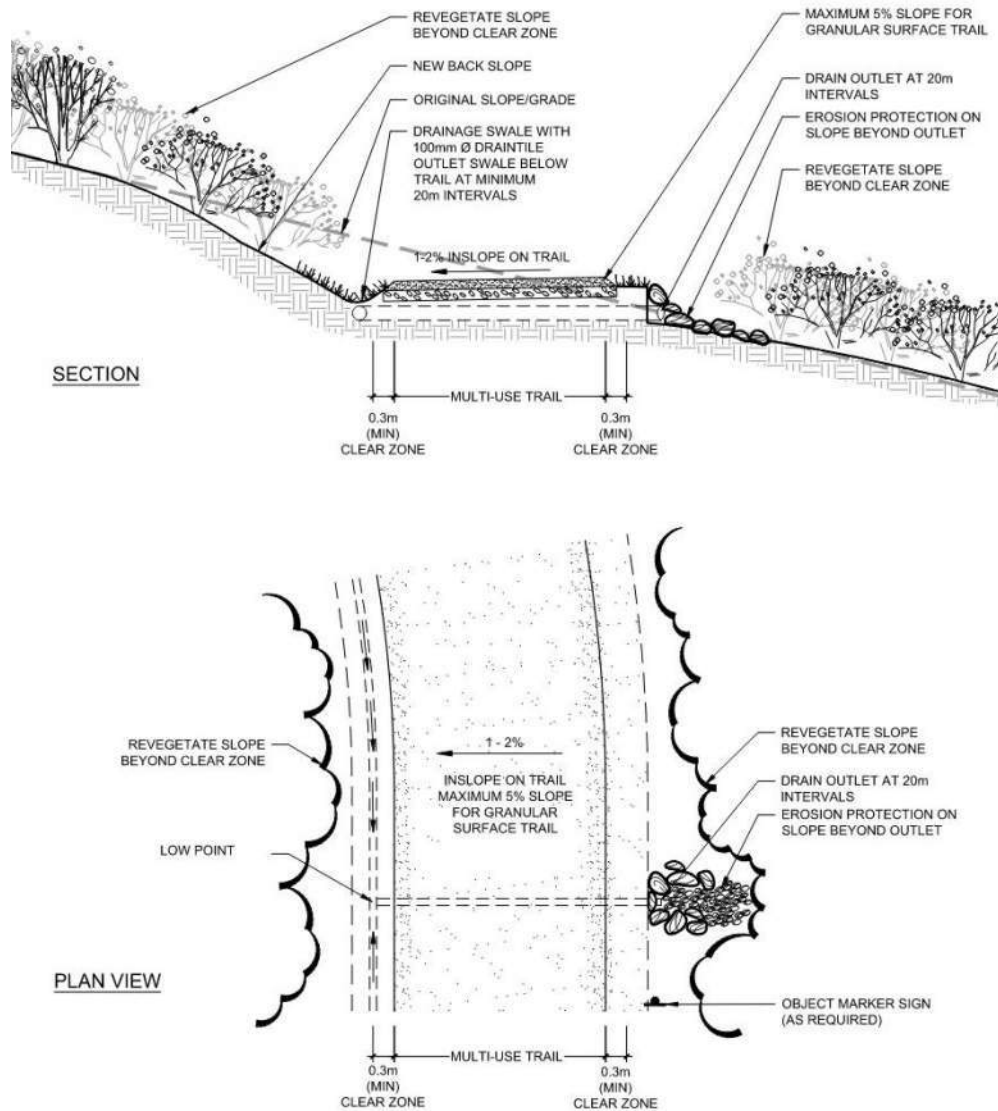


Figure 24 | Trail On Slope with Drainage Pipe

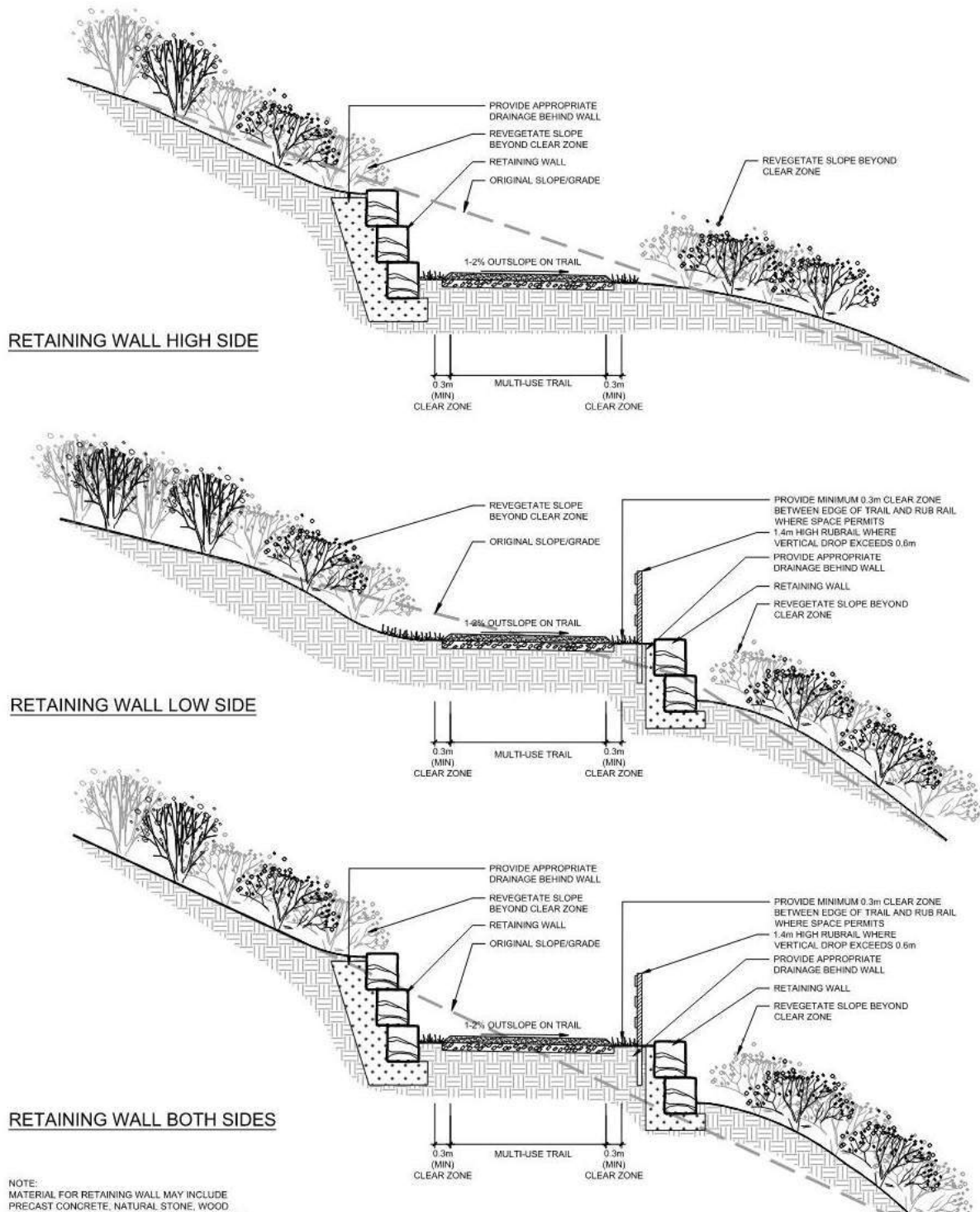


Figure 25 | Trail On Slope with Retaining Walls

STRATEGIES FOR REOCCURRING EROSION AND INSTABLE SURFACING

For trails that are frequently eroded or unusable due to seasonal flooding and unavoidable drainage patterns, geogrid systems will provide a more sustainable solution – reducing maintenance, increasing safety, extending seasonal use of a trail. These systems lock together and can be filled with soil, granular screenings or seeded for turf growth. Products such as Ecoraster shown, can support vehicular loads and provide traction on slopes. Typically these systems are installed with a granular base, however can be laid on existing compacted earthen surfaces. Reinforcing trail sections at Pete's Dam, would stabilize areas that struggle with flooding, erosion and hard to traverse slopes. Geogrids could also be selectively applied to rustic wilderness trails such as located at Devil's Rock where rocks and roots create difficult to traverse sections of trail. Note, geogrids



Figure 26 | Photos of Ecoraster (a product manufactured in southern Ontario. Grid structure can be filled with earth, granular or turf and can support maintenance vehicles.



Figure 27 | Photos of trail under water at Pete's Dam

should be considered for parking areas where increased surface stability is desired and/or demand for maintenance is high.

BRIDGE STRUCTURES & BOARDWALKS

Prefabricated pedestrian bridge structures, in particular those that utilized weathering steel and wood decking, are the most cost-effective structures provided by the market. A 'pony truss' or 'H-section' bridge style can span up to 55m and are the most economical design choice. For larger spans, a full 'box truss' is required and can span up to 80m. Alternately, custom bridges can offer more flexibility for architectural design features and are less limiting in maximum free span, however tend to cost exponentially more in design and installation costs.

When spanning greater distances, assess both the material costs and design/approval costs for structures. This can help determine whether it is best to add an in-water pier or design a more extensive structure for a single span. Typically, the use of piers and prefabricated structure is a more cost-effective solution over a costume large spanning structure, however there are several variables such as environmental sensitives and aesthetic/tourism considerations that can influence a decision.



Figure 28 | Photos of Pedestrian Bridges (Left: Etobicoke Creek Trail, 35+/-m) and (Right: Craig's Crossing in Galt, two sections 55m+/- long)

Where trails pass through sensitive environments such as marshes, swamps, or woodlands with many exposed roots, an elevated trail bed or boardwalk is usually required to minimize impacts on the natural feature. If these areas are left untreated, trail users tend to walk around obstacles such as wet spots, gradually creating wider or multiple meandering footpaths through the surrounding vegetation, resulting in vegetation trampling and damage.

On trail build sensitive natural areas, sections with challenging surface (rocks and roots) or erosion/flooding issues, a low-profile boardwalk may be appropriate and requires modest engineering to develop an appropriate design. For trails with more frequent usage, cyclist traffic, and maintenance vehicle access, a more sophisticated design and installation is necessary. This is likely to include engineered footings, abutments, structural elements and railings.

Helical piles are an alternative foundation methodology that is cost effective and a low impact installation compared to concrete footings. Piles are drilled into the ground with a small skid steer or mini excavator then left in place to serve as the foundation. Helical piles allow for a narrower disturbance area and reduced numbers of trips to haul in concrete and haul out fill generated by pier excavations. Where finished boardwalk surfaces are less than 60cm above the surrounding grade a curb along the edge of the boardwalk will prevent users from rolling off the edge. Where the difference in grade exceeds 60cm, a railing should be provided.

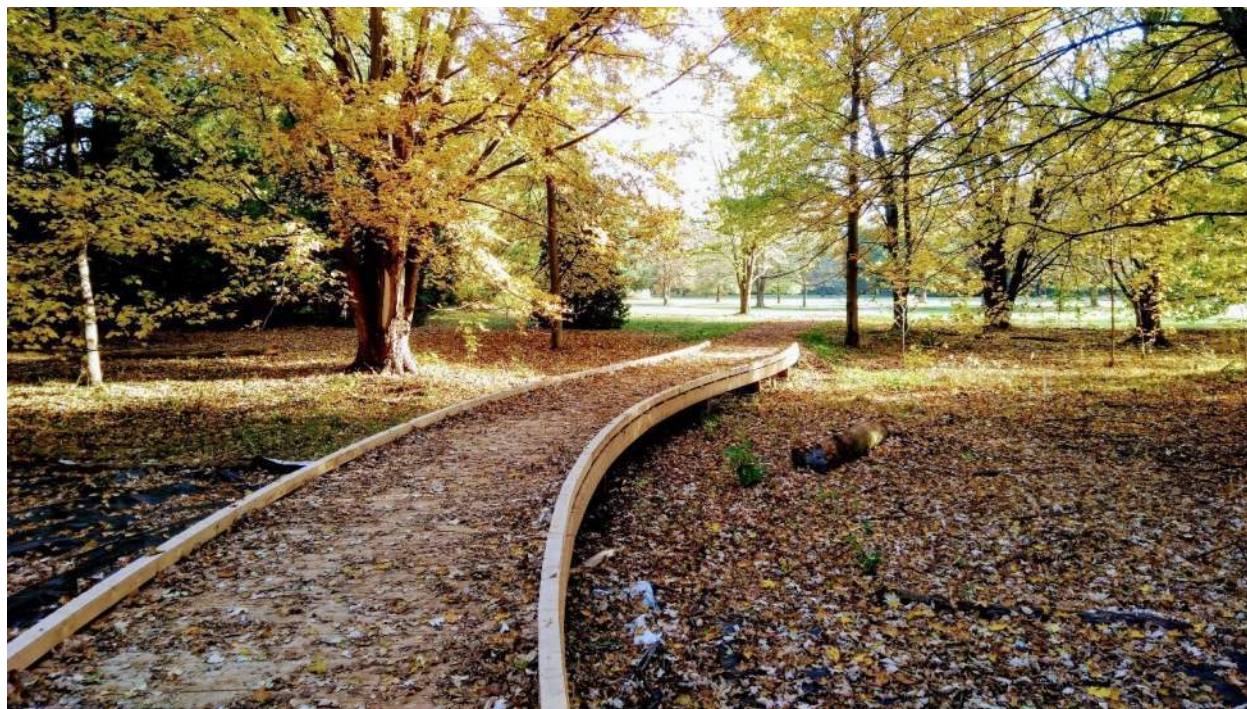


Figure 29 | Photo of Board Walk Trail (with helical piles) at the University of Guelph Arboretum.

Timiskaming Shores should consider prefabricated pedestrian bridge structures or boardwalks for highly problematic areas at Pete's Dam where flooding and bank erosion are not compatible with sustainable trail programming. Long term, the cost for investment will be returned through reduction in repair maintenance and liability risk mitigation, not to mention the user and natural heritage conservation benefits.

3.6.4 TRAILHEADS AND OTHER TRAIL AMENITIES

The implementation of trail amenities at key points along an off-road trail can remain an integral component of the City's commitment to design safe, comfortable active transportation and more accessible trail facilities. When addressing trail amenities, common examples include seating / rest areas, parking areas, signage, bicycle parking, loading or unloading areas, garbage receptacles, washroom and amenity buildings and gates / access barriers.

TRAILHEADS

As trailheads are an important aspect to improve a trail user's experience and function as a marketing agent for the greater trail system, it is critical that the appropriate maintenance protocols and procedures be adopted to maintain their state of well repair. Trailheads are often the busy hubs of most trail systems

making them more susceptible to wear and tear, waste accumulation, and vandalism accustomed with general use. Identifying and managing the level of maintenance required is influenced by the frequency of use, type of user, and size/complexity of trailhead programming. While dependent on the City's available resources, depicted in **Figure 16** below are some suggested guidelines to inform the proper maintenance of trail facilities:



Figure 30 | Image of a trailhead facility along Prince Edward County's Millennium Trail System [Source Prince Edward County CMP, 2021]

Table 7 | Benefits, Life Cycles, and Maintenance Considerations of Various Trail Amenities

Amenity	Benefits	Life Cycle	Maintenance Considerations
Parking, Drop off Areas & Loading zone	Improves access to trail facilities	5-10 years	Annual infill of potholes and ruts (gravel), repaving or power washing (asphalt).
Rest area	Provides greater accommodation and comfort to those with limited mobility	15-25 years	Annual inspection for defects, basic landscaping
Lighting	Enhances trail safety (CPTED) and reduces potential crime	10-15 years (bulbs) 35-45 years (poles)	Monitoring for bulb replacement and repairs due to vandalism
Signage	Improves facility wayfinding and reinforces facility's brand identity	5-25 years (depending on changes to posted information)	Monitoring for vandalism or expiration of posted information
Waste Management	Minimizes facility upkeep	10-25 years (depending on chosen model)	General inspections for waste pick-up or damages
Gates	Enables temporal access restrictions, including during periods of facility maintenance	15-25 years	General inspections for damages (i.e. weather degradation or salt erosion)

Shelter	Provides protection from inclement weather Provides greater accommodation and comfort to those with limited mobility	15-35 years (depending on chosen construction material)	General inspections for damages and potential touch-up painting
Potable Water	Improves comfort of trail experiences	N/A	Fall decommissioning to empty lines and spring reactivation and quality testing
Washroom	Improves comfort of trail experiences	30-40 years	Daily to weekly inspections and cleaning, nightly locking and daytime opening

SAFETY BARRIERS FOR SLOPES & CLIFFS

Barrier fencing is necessary to provide safety and mitigate risk. It can also play a design and placemaking role for destination vistas, offering a place to lean while viewing and mounting space for interpretive signage. Barriers along landscapes such as Devil's Rock are not mandated by the building code, however, should be a priority in locations frequented by trail users. Barriers do not need to detract from views or become a maintenance burden. There are several options for prefabricated products and custom designs that will permit views and accentuate vista nodes.



Figure 31 | Image of Devil's Rock lookout



Figure 32 | Image of wood barrier fence, British Columbia.



Figure 33 | Image of Barrier Fence [Source Jakob sire fencing solutions]

ACCESS & CONTROL

Access barriers are intended to allow free flowing passage by permitted user groups, and restrict access by users groups that are prohibited. Barriers typically require some mechanism to allow access by service and emergency vehicles. Depending on site conditions, it may also be necessary to provide additional treatments between the ends of the access barrier and edge of the multi-use trail right-of-way to prevent bypassing of the barrier altogether. Additional treatments may consist of plantings, boulders, fencing or extension of the barrier treatment depending on the location.

There are many design alternatives for trail access barriers and some have proven to be more successful than others. They can generally be grouped into three categories:

- Bollards;
- Offset Swing Gates; and
- Single Swing Gates.

Each access point throughout the Temiskaming Shores trails network should be evaluated to determine which type of barrier is the most appropriate and what additional treatment(s) may be required to discourage unauthorized users from bypassing the barrier.



Figure 34 | Image of trail bollard (left) and access gate (right)

3.6.5 LEVERAGING TECHNOLOGY (CHARGING STATIONS, WASTE SENSORS, WIFI)

There are several emerging technologies and innovations that can be incorporated into the design of new trails and improvements to existing trails that can enhance the user experience, promote use and widen inclusivity of the trails network. Technology is a tool to be leveraged to address a problem and implementation needs to result in specific outcome. Recognizing that technology-based applications can have high capital, staffing, and training investments costs, the benefits need to be tangible and in magnitude with the problem they are addressing. There is no denying technology is fun and the enthusiasm for technology-based solutions will garnish a high impact amongst current and future generations of young trail users. Consider how technology can expand the traditional parameters of a trail function and programming – reaching more people in meaningful ways, while reducing demands of maintenance and operational practices.

Below are examples of how technology can be incorporated into a trail system.

- Waste and parking management through sensors and dashboard systems to enable ‘as needed’ maintenance service with strategic deployment and better track frequency of use. Companies such as eleven-x in Waterloo Ontario offer wireless real-time data solutions that are adaptable to existing amenities/systems.
- Charging stations that offer USB ports (for phones, tablets), E-bike rapid charge ports. Stations can be solar or hardwire powered. Charge stations come in stand alone towers or can be found integrated with multi-function site furnishing.
- Wi-fi can draw users to a trail system and enable accessibility aid devices. Small cellular broadcast devices require little power and can be stand alone units or integrated with furnishings such as those made by Seedia which collect data from and output directed messaging to users.
- Digital mapping such as Google Street view for trails and 360-degree imagery will allow users to preview the challenges ahead and participate virtually in the beauty of Temiskaming trails when they are unable or for education purposes.
- User count displays, such those offered by Eco-Counter provide data that will inform operational management while promoting the success of the trail system.



Figure 35 | Image of ESL E-Mobility solar charger



Figure 36 | Image of Landscape Forms outdoor charging station.

3.6.6 MAINTENANCE MANAGEMENT

Guiding next steps in the management and maintenance of trails, Temiskaming Shores should consider adopting a trail maintenance log to document maintenance activities. The log should be updated when features are repaired, modified, replaced, removed, or when new features are added.

Accurate trail logs also become a useful resource for determining maintenance budgets for individual items and tasks, and in determining total maintenance costs for the entire trail. In addition, they are a useful source of information during the preparation of tender documents for trail contracts, and to show the location of structures and other features that require maintenance.

Leveraging technology to collect managing data is can be a powerful tool to finding efficiencies and more accurately budgeting for need. Digital dashboard style programs can be an effective interface for staff to organize inputs and action items. This type of technology can be linked to digital trail logging, user reporting systems, and on-site sensors (such as waste bin sensors) to create the ability for **on-demand service and strategic deployment of resources**. On demand service styles can replace regular maintenances practices and reduce overall demand on resources.

Reducing maintenance through strategic infrastructure investments, including trail realignment, surface treatment and use of structures should be considered for areas of reoccurring maintenance issues.

Using the maintenance strategies outline within the trail plan as well as any existing trail infrastructure maintenance practices should be a starting point from which a trail specific maintenance plan and budget be developed. In addition, annual maintenance budgets should be refined to accommodate the maintenance of trail facilities. As the proposed trail network is implemented the trail budget should increase to address the increasing number / length of trail facilities that have been implemented.

Table 8 | High-Level Overview of Trail Maintenance Tasks Over Time

FREQUENCY	MAINTENANCE TASK
IMMEDIATE (within 24 hours of becoming aware of the situation through a app reporting system, email or other notification or observation)	<ul style="list-style-type: none"> – As a minimum, mark, barricade and sign the subject area to warn trail users or close the trail completely until the problem can be corrected. – Remove vegetation and/or windfalls, downed branches etc., where traffic flow on the trail is being impaired or the obstruction is resulting in a sight line issue. Remove hazard trees that have been identified. – Repair or replace items that have been vandalized or stolen/removed. This is especially important for regulatory signs that provide important information about trail hazards such as road crossings, steep grades, and sharp curves. – Removal of trash in overflowing containers or material that has been illegally dumped. – Repair of obstructed drainage systems causing flooding that poses a hazard to trail users or that is resulting in deterioration that poses an immediate safety hazard. – Monitor trail areas and structures that are prone to erosion after severe summer storms and repair as required. – Repairs to structural elements on bridges such as beams, railings, access barriers and signs.

REGULARLY (weekly / biweekly / monthly)	<ul style="list-style-type: none"> – Trail patrols/inspections should review the trail conditions (as often as weekly in high-use areas), to assess conditions and prioritize maintenance tasks and monitor known problem areas. – Mow grass along edges of trails (in parks and open meadow settings only). Depending on trail location this may be done weekly, biweekly or monthly and the width can vary according to the location (typically 0.5 to 1.0m). This helps to keep the clear zone open and can slow the invasion of weeds into granular trail surfaces. Not all trails will have mown edges. In woodland and wetland areas, pruning and brushing is typically the only vegetation maintenance to be undertaken. – Regular garbage pickup (10-day cycle or more frequent for heavily used areas). – Repair within 30 days or less, partially obstructed drainage systems causing intermittent water backups that do not pose an immediate safety hazard, but that if left unchecked over time will adversely affect the integrity of the trail and/or any other trail infrastructure or the surrounding area.
ANNUALLY	<ul style="list-style-type: none"> – Conduct an annual safety audit. This task can be efficiently included with general annual safety audits for parks and other recreation facilities. – Evaluate support facilities/trailside amenities to determine repair and/or replacement needs. – Examine trail surface to determine the need for patching and grading. – Grading/grooming the surface of granular trails and topping up of wood chip trails. – Pruning/vegetation management for straight sections of trail and areas where branches may be encroaching into the clear zone. This task is more of a preventative maintenance procedure. Cuttings may be chipped on site and placed appropriately or used as mulch for new plantings. Remove branches from the site unless they can be used for habitat (i.e. brush piles in a woodlot setting) or used as part of the rehabilitation of closed trails. Where invasive species are being pruned and/or removed, branches and cuttings should be disposed of in an appropriate manner. – Inspect and secure all loose side rails, bridge supports, decking (ensure any structural repairs meet the original structural design criteria).
EVERY 3 TO 5 YEARS	<ul style="list-style-type: none"> – Cleaning and refurbishment of signs, benches and other trailside amenities.

EVERY 10 TO 20 YEARS	<ul style="list-style-type: none"> — Resurface asphalt trails (assume approximately every 15 years). — Major renovation or replacement of large items such as bridges, kiosks, gates, parking lots, benches etc.
COST EFFECTIVE	<ul style="list-style-type: none"> — Patching/minor regarding of trail surfaces and removal of loose rocks from the trail bed. — Culvert cleanout where required. — Top up granular trail surfaces at approaches to bridges. — Planting, landscape rehabilitation, pruning/beautification. — Installation/removal of seasonal signage.

3.7 SIGNAGE & WAYFINDING

The design and construction of the network should incorporate a hierarchy of signs each with a different purpose and message. This hierarchy is organized into a “family” of signs with unifying design and graphic elements, materials and construction techniques. The unified system is immediately recognizable by the user and can become a branding element. The details for specific types of signage are provided in the following pages.

WAYFINDING

Wayfinding design must be universally understood to truly be effective and inclusive for all visitors. Trails should be open and welcoming to people with varying levels of mobility, hearing, vision and language. In short, all levels of ability and understanding should be taken into consideration when designing wayfinding features such as signage and maps.

Some examples of wayfinding features that can be utilized to increase accessibility include:

- Non-visual cues such as audio signals or material change at intersections can improve safety for visually impaired people
- Clearly delineating between accessible routes and non-accessible routes can improve usability and safety for people with mobility restrictions
- Using universally understood symbols or icons on wayfinding features can make it easier for people who speak a different language to find their way around.

TRAILHEAD SIGNS

Typically located at key destination points and major network junctions. Trailhead signs provide orientation to the network through mapping, other appropriate network information as well as any rules and regulations. Where network nodes are visible from a distance, these can be a useful landmark and should include municipal “911” addressing for positive location identity. Trailhead signs can also be used as an opportunity to sell advertising space. This not only provides information about local services that may be of interest to trail users, but it may also help to offset the cost of signs and/or trail. At minimum, entrances should have clear signage that uses good colour contrast and a readable font, and details:

- Trail length
- Trail width

- Location of amenities
- Slope steepness
- Surface types
- Hazards
- Trail difficulty

Accessibility rating (i.e. accessible by wheelchair, walker, scooter, etc.)

DIRECTIONAL AND DISTANCE MARKER SIGNS

Directional signs should be used throughout the trail at regular intervals of uninterrupted segments and at pathway intersections. Directional signs provide users with reassurance that they are following the designated trail network. Coupled with directional signs, distance markers placed incrementally along a trail can enhance the user's experience if they are using the trail for exercise. Frequent and accurate markers can also help in the case of an emergency, especially if they are recorded with a GPS device and incorporated into a digital mapping format.

INTERPRETIVE OR INFORMATIONAL SIGNS

Interpretive or informational signs can be used in combination with directional signs or on their own to educate users of points of interest along the trail, such as natural and cultural heritage features. These signs provide specific educational information about points of ecological, historical and general interest, as well as current land uses along the corridor depending on the interpretive program and complexity of information to be communicated.

REGULATORY SIGNS

Regulatory signs are intended to restrict aspects of travel and use along the trail. Signage restricting or requiring specific behavior is not legally enforceable unless it is associated with a provincial law or municipal by-law, etc. Where applicable, it is recommended that authorities discreetly include the municipal by-law number on signs to reinforce their regulatory function. Standard regulatory signs are aluminum plate blanks of varying dimensional size with a painted or reflective sheeting surface. Regulatory signs call attention to a traffic regulation concerning a time or place on a route and are installed in an optimal location most visible to trail users. Generally, these signs are rectangular shape except for stop and yield signs. For most trail applications the size can be reduced from the specified size for signs used along roads (i.e. 50% smaller). Typically, they are individually mounted on a metal post or custom wood post; grouped on a metal post or custom wood post; or grouped on a custom sign board, so long as the sign message is clearly visible.

WARNING SIGNS

Warning or cautionary signage should be used throughout the trail system on an as-needed basis. Where traffic control signs are needed (stop, yield, curve ahead etc.), it is recommended that scaled-down versions of recognizable road traffic control signs be used.

These caution signs may be location or purpose specific and will need to be customized. For example, the trail system will provide access to destination features in parks including playgrounds. Children will be playing and not always paying attention to their surroundings while actively using playgrounds, and portions of trails surrounding playgrounds may also be promoted as tricycle / bicycle loops for very young riders. Caution signage should be placed at the approaches to these areas to alert faster moving trail

users such as cyclists they are approaching a playground area and remind them to slow to 10km/hr. and be aware of children playing and possibly crossing the trail.

Another example is the temporary closure sign. Some locations along the trail network will also be used by festivals and events that attract large numbers of users, some of whom use the trails to travel to the event which may result in congestion on the trails themselves. Additionally, within the event space some activities may overflow onto trails, and depending on the event and number of participants it may be appropriate to temporarily close the trail to through cycling traffic, and require cyclists to dismount and walk their bicycles through the event area.

INTERPRETIVE, COMMEMORATIVE & PLACEMAKING SIGNS

Interpretive, commemorative and placemaking signs are a key tool in telling the stories of your community, the land and the histories along the way. Such signs should be graphic in design, augmented with QR links to information on web platforms to provide additional detail. Temiskaming Shores is rich with such stories and the trail system offers an excellent opportunity to share with local residents and visitors. Material selection is important and should include anti-graffiti and UV protective coatings if using a standard sign board material. Etchings on granite and tempered glass are increasingly popular and very resistant to degradation/damage.

3.8 WABI RIVER BRIDGE

The recommended facility for the Wabi River crossing consists of a bi-directional cycle track in place of the easternmost northbound vehicle lane. The intention of a bi-directional cycle track along the eastern edge of the bridge is to encourage continued use of the STATO Trail along Sharpe Street and Elm Street, rather than having cyclists continue along Armstrong Street North where no cycling facilities currently exist. Isolating the cycling facility along one side of the bridge will allow for safer and more comfortable turns from Armstrong Street North to Sharpe Street on the south side and Elm Street on the north side. This facility proposal will effectively bridge the gap in the existing trail system along the 4-lane section of Armstrong Street crossing the Wabi River. However, it should be noted that this bi-directional intervention is only meant as a temporary measure until cycling facilities are installed on Armstrong Street North, south of the bridge. At that point, uni-directional cycle tracks should be installed on either side of the street to increase continuity throughout the cycling network.

Based on a review of the traffic volumes and roadway capacity on Armstrong Street, particularly the northbound traffic patterns leaving downtown New Liskeard, significant delays or queuing due to increased traffic are not expected. It is anticipated that the reduced excess space and capacity on the bridge will have a traffic calming effect, improving safety on this key corridor for all road users. An overview of complete streets transformations implemented by municipalities in Ontario and North America found that, on roads carrying under 20,000 vehicles a day, operational impacts for vehicular traffic were minimal, frequently resulting in improved operations along the corridors. User safety – for all road users – improved significantly. Complete streets conditions result in a lower level of serious collisions among people driving, in addition to enhanced safety and comfort for people cycling and people walking. By reallocating space on existing roadways to enhance mobility choice and improve safety, complete streets transformations are a proven countermeasure to reduce collisions and injuries, improve cycling safety and promoting road infrastructure being used in an efficient, cost-effective manner.

The figure below demonstrates an example of the proposed Complete Streets approach to the Wabi River Bridge with the cycling facility in place.

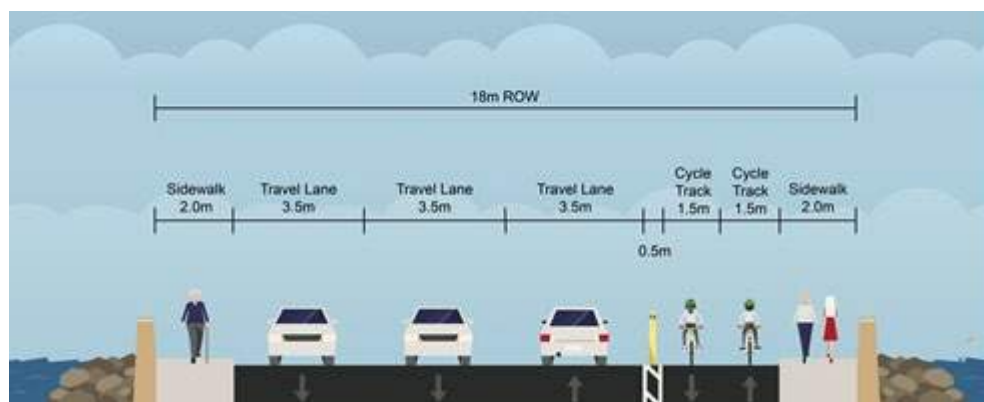


Figure 37 | Proposed road diet with bi-directional cycle tracks on the eastern portion of the bridge

Cycle tracks with a minimum width of 1.5 metres are recommended as per Book 18 of the Ontario Traffic Manual (OTM); a combined 3.0 metre lane with a 0.5 metre buffer is the desired width in Ontario for a two-way physically separated bicycle lane. A combined lane width of 2.7 metres with a 0.3 metre buffer is the suggested minimum where the desired width cannot be met.

Bollards mounted on pre-cast curbs or planters are recommended to provide physical separation between cyclists and vehicle traffic. Given that this bidirectional intervention is meant as a temporary measure until cycling facilities be implemented on Armstrong Street south of the bridge, planters or bollards are an appropriate intervention that are easy to install and uninstall that may also help increase the safety and comfort of cyclists. While flex bollards mounted on pre-cast curbs do not offer the highest level of protection from vehicles, they are easy to implement and relatively cost effective. Planters may offer more protection and beautify the roadway, however they may cost more than bollards and may not fit the proposed buffer width on the bridge. Both options are recommended on streets with speeds under 60 km/h.

INTERSECTION OF SHARPE STREET AND ARMSTRONG STREET NORTH

Sharpe Street currently does not have bi-directional or protected cycling infrastructure. While the STATO Trail is signed in this area, field investigations indicate that the trail is often obstructed by parked vehicles, and is not a consistent, comfortable facility for cycling. The preferred solution for this corridor would be the addition of a fully separated multi-use trail along the river (north of the existing parking lot and roadway) to connect to the remaining STATO Trail facilities to the south and east of the bridge. In the interim, however, directional sharrows should be installed on the north and south side of the street to direct eastbound and westbound traffic. In this interim configuration, a direct right turn for westbound riders to turn North on Armstrong and a two-stage turn box is recommended for cyclists turning onto Sharpe Street from Armstrong or wishing to continue south on Armstrong to travel towards Church Street. A two stage turn allows cyclists to continue straight through the intersection and turn on the far side in order to align with the sharrow on Sharpe, and provides them with a space to queue while waiting to cross Armstrong if they wish to continue southbound.

An in-boulevard two-stage queue box is recommended on the far side of the intersection. This provides space for cyclists to queue if pedestrians are crossing at the same time. The desired dimensions for the queue box is 3m in width and 3m in length to provide comfortable queuing space for two to three cyclists. Green paint is recommended to highlight the queue box to surround vehicle traffic. Bollards on the south side of the queue box are recommended so as to provide additional protection from vehicle traffic and to increase visibility.

A pedestrian crossing is also recommended on Armstrong Street for those crossing Sharpe Street. For cyclists turning right from Sharpe Street onto the bridge, yield line markings, also known as “shark’s teeth,” should be placed in front of the proposed pedestrian crossing. These markings help to visually reinforce a requirement to yield. When implemented on a cycling facility to indicate a requirement for cyclists to yield to pedestrians, the markings typically have a base of 300mm and a height of 450mm.

The figure below demonstrates the interventions recommended for this intersection.



Figure 38 | Proposed left turn intervention at the intersection south of the bridge. (Yellow dots represent bollards, preferably mounted on pre-cast concrete curbs)

INTERSECTION OF ELM STREET AND ARMSTRONG STREET NORTH

At the intersection of Elm Street and Armstrong Street North, just north of the Wabi River crossing, a two-stage queue box is recommended to help guide cyclists turning left from Elm onto the proposed cycle track on the bridge. OTM Book 18 (2021) recommends a direct left turn at intersections of low-volume and low-speed streets where cyclists are operating in a shared environment. Given the location of this intersection, and the volume of motor vehicle traffic on Elm Street, it is anticipated that a direct left turn onto the cycle track will be possible in many circumstances. But for riders who are less confident, when they arrive at Elm and Armstrong from the east, they may desire to wait for through traffic on Elm to come to a stop before proceeding. A queue box provides the option for cyclists to make a two-stage turn, proceeding on the green signal phase on Armstrong Street to connect into the cycle track heading south.

Queue boxes provide a designated queuing space between the pedestrian crosswalk and the vehicle traffic stop bar at a signalized intersection. This enables cyclists to wait outside the path of through

vehicles on the green phase on Elm, providing them with a signalized movement southbound along Armstrong. This designated area significantly increases the visibility of people riding bikes and reduces their exposure to through traffic while trying to make a left turn onto Armstrong. More confident cyclists can still make a direct left turn onto the cycle track, but this configuration provides additional options for less confident riders. It is recommended that the queue box be protected with bollards to prevent vehicle encroachment, and that a right turn on red restriction with a bicycle exemption be implemented at this intersection so as to limit any conflicting turns between vehicles and cyclists.

Queue boxes should be typically 2 to 3m in depth. Green paint is recommended to minimize encroachment from motor vehicles. The following figure demonstrates the proposed intervention for the Elm Street intersection.



Figure 39 | Proposed left turn intervention at the intersection north of the bridge

The crossing of the Wabi River has historically been one of the most challenging areas for active travel in Temiskaming Shores. With limited options to traverse this significant barrier, it is important to provide people walking and cycling with a safe option to better connect the City of Temiskaming Shores' current and future active transportation infrastructure.

4 RECOMMENDATIONS

Developing a network of active transportation facilities is vital to the development of a stronger culture of active transportation for Temiskaming Shores. In order to create a network of comfortable, accessible on and off-road facilities for walking, cycling and wheeling, the City should adopt the following recommendations.

1. Incorporate the proposed active transportation network illustrated in Maps 3a, 3b, 3c, 4a and 4b as a Schedule in the City's Official Plan when next updated.
2. Reference should be made to OTM Book 18: Cycling Facilities (2021) to inform and guide the design and implementation of cycling and in-boulevard facilities.
3. Reference should be made to OTM Book 15: Pedestrian Crossings to inform and guide the design and implementation of pedestrian crossing treatments.
4. The City should continue to identify opportunities to implement active transportation routes / facilities in conjunction with capital infrastructure projects to achieve economies of scale and cost savings.
5. As part of the annual capital budget review process, City staff should use the ATP to inform prioritization and implementation of active transportation infrastructure.
6. As part of scheduled roadway projects and Capital budget forecasting, the City should allocate funding to construct the Short-Term Active Transportation Network (See Maps 5b and 5c) by the end of the 2027 construction season.
7. When capital reconstruction projects are scheduled for the downtown areas of Haileybury and New Liskeard, priority should be given to expanding spaces for walking, cycling and amenities by narrowing vehicle lanes and parking facilities.
8. The City should implement a 2-way protected cycle track over the Wabi River Bridge as a pilot project to close a key gap in the existing STATO Trail
9. The City should continue to explore external funding sources and partnerships to help fund implementation of the ATP.
10. The City should adopt the Trails design and amenities standards presented in this plan to improve access to the trails at Devil's Rock and Pete's Dam Parks

Active Transportation and Trails Master Plan

Discussion Paper #3
Engagement Summary



City of Temiskaming Shores
Draft November 2021



City of Temiskaming Shores
Draft November 2021

wsp

Table of Contents

ROUND 1 ENGAGEMENT	3
1.1 Introduction	3
1.2 What Was Said	6
1.3 What Was Heard.....	17
1.4 What We Did.....	18
1.5 Conclusion and Next Steps	19

ROUND 1 ENGAGEMENT

1.1 BACKGROUND

The City of Temiskaming Shores is developing an Active Transportation Plan to expand access to walking, cycling and wheeling for residents of all ages and abilities. This plan builds on the City's existing network of physical infrastructure, which is centred on the STATO Trail as well as its network of social infrastructure to support active transportation, supported by partners such as the Timiskaming Health Unit, Downtown BIA, Bicycle Friendly Communities Committee and more. Engaging with the existing community in Temiskaming Shores is a vital part of the development of the ATP, and the results of the first round of engagement are the focus of this Discussion Paper.

1.2 ENGAGEMENT OBJECTIVES

This plan has been developed in accordance with the International Association of Public Participation (IAP2) process and practices, as illustrated in **Figure 1** below. The IAP2 Process outlines the preparation, management, and evolution of engagement tactics based on a spectrum of involvement tailored to the wants and needs of the anticipated or desired audiences. There are five levels of commitment, which are known as the IAP2 Spectrum of Public Participation.

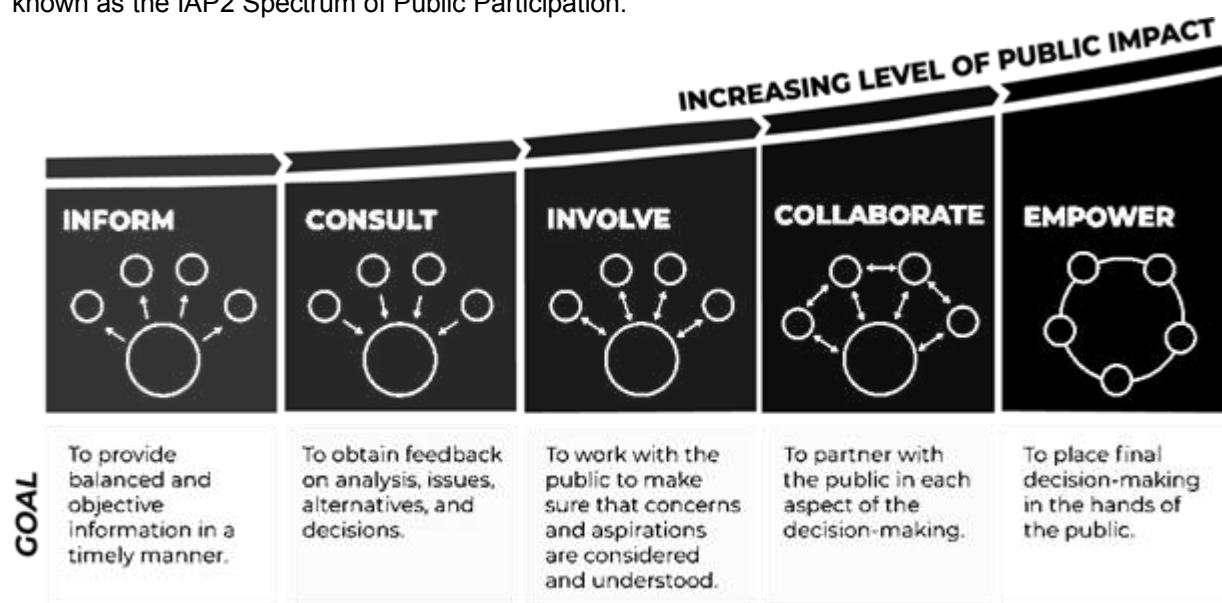


Figure 1. IAP2 Spectrum of Audience Involvement

The amount of information sharing, gathering and integration increases as you “move up” the spectrum. The intent is to recognize that not all stakeholders will have the same level of involvement in the project or need the same amount of information to inform their involvement. The IAP2 approach emphasizes the importance of a consultation plan which is tailored to the understanding, commitment and contribution of each of the unique groups. By identifying the stakeholders early in the study process the project team will be able to anticipate, identify, plan for and communicate the expectations based on the intended audience.

For the Temiskaming Shores ATP, the project team identified four distinct audiences, and established their projected level of commitment to the project. That audience analysis is presented below in Table 1.

Table 1. Overview and Analysis of Stakeholder Groups

STAKEHOLDER	DESCRIPTION & MEMBERSHIP	LEVEL OF INTEREST	OBJECTIVES	IAP2 LEVEL OF INVOLVEMENT
Core Project Team	City staff members who will be coordinating the implementation, monitoring and maintenance of the ATP. Their strong knowledge of the City, existing conditions and municipal processes will be vital to the success of the project.	High	<ul style="list-style-type: none"> To provide the group with key background information on the project and updates on project status. To gather input to inform key project milestones and on project deliverables. To generate buy-in and confirmation from the committee on project deliverables and public facing information. 	Inform, Consult, Involve & Collaborate
Stakeholders / Stakeholder Working Group	Representatives from groups who have interest in active transportation or who would have a role in supporting the City in future promotion and outreach initiatives. They have access to significant historical knowledge and local resources within the community and typically have a higher level of interest from a community perspective.	Medium to High	<ul style="list-style-type: none"> To provide background information on the project and to demonstrate how input provided has been integrated into project outcomes. To identify “Quick Wins” that can be submitted for funding under the Canada Healthy Communities Initiative funding stream. To review and help confirm the overall vision and objectives for the ATP. To identify future opportunities for collaboration as well as capacity to support education and outreach tactics for long-term culture change. 	Inform, Consult, Involve & Collaborate

Members of the Public	Residents include the people who live, work and play in Temiskaming Shores.	Low to High	<ul style="list-style-type: none"> • To provide background information on the project and to demonstrate how input provided has been integrated into project outcomes. • To gather input on interests, needs and preferences within the community including opportunities, challenges and existing / potential routes. 	Inform & Consult
City Council	Councillors represent the opinions and interests of their constituents and typically have a greater appreciation for and understanding of the key issues of the City.	Medium to High	<ul style="list-style-type: none"> • To provide the group with key background information on the project and updates on project status. • To ensure that the project is in-line with overall objectives and strategic opinions of decision makers. • To generate buy-in and confirmation on project deliverables and public facing information. 	Inform, Consult, & Empower

By identifying audiences early in the process and ensuring that engagement activities are held regularly and meet the needs of each audience, the community engagement approach is helping to ensure that the actions identified in the final ATP are appropriate, ambitious and community-supported, leading to a plan that is more likely to be implemented in a meaningful way as the City continues to develop its walking, cycling and wheeling networks.

ENGAGEMENT APPROACH

Engagement is a major component of the City of Temiskaming Shores Active Transportation Plan (ATP) project and has been divided into two rounds. Throughout the first half of 2021, the project team worked closely with the City of Temiskaming Shores to facilitate a number of engagement activities with key stakeholders and members of the public for the first round of engagement. These activities were completed to gain input on existing conditions; strengths and gaps in the current active transportation network and the City's efforts to support active transportation; and potential improvements and priorities for active transportation going forward. The following sections summarize the Round 1 engagement activities, the input that was received, common themes that emerged, and how the Project Team will use this information to guide the development of the ATP.

STAKEHOLDER WORKING GROUP WORKSHOP #1

The Project Team hosted a Stakeholder Workshop on May 27, 2021 with stakeholders from the Stakeholder Working Group, including representatives from various committees, organizations, agencies, and Town departments. The Workshop was held to help develop a "Quick Wins Strategy" which identified projects that could be implemented immediately, potentially through an application to the newly launched Canada Healthy Communities Initiative. The Workshop also provided an opportunity for stakeholders to provide input about strengths, weaknesses, opportunities, and threats to future successes, building upon the Project Team's initial assessment of Temiskaming Shores' existing active transportation system.

STAKEHOLDER INTERVIEWS

The Consultant Project Team hosted interviews with key stakeholders in April and May 2021 to gain a better understanding of existing conditions and opportunities for improving active transportation in Temiskaming Shores. Similar to the Stakeholder Workshop, the stakeholders were asked questions that provided input about strengths, weaknesses, opportunities, and threats to future successes. Key stakeholders included representatives from local committees and organizations that will be impacted by the ATP.

PUBLIC SURVEY

A public survey was posted online to provide members of the public an opportunity to provide feedback regarding active transportation in Temiskaming Shores. The survey focused on existing travel patterns and travel choices, potential enhancements to the City's existing active transportation network, and priority gaps and challenges regarding current conditions.

COUNCIL SURVEY

In addition to the public survey, the Project Team developed a Council survey. This survey was used to help identify potential challenges and inform and involve Councillors in the process.

1.3 WHAT WAS SAID

The following sections summarize the input that was received during the first Round of engagement.

STAKEHOLDER WORKING GROUP WORKSHOP #1

The Project Team held a Workshop with stakeholders from the Stakeholder Working Group including City staff, City Councillors, local committee members, Health Unit staff, and other key representatives. During the Workshop, the Project Team used an online whiteboard tool, Miro, to facilitate various activities and allow stakeholders to provide input and contribute to discussions surrounding the future of active transportation in Temiskaming Shores. The activities included:

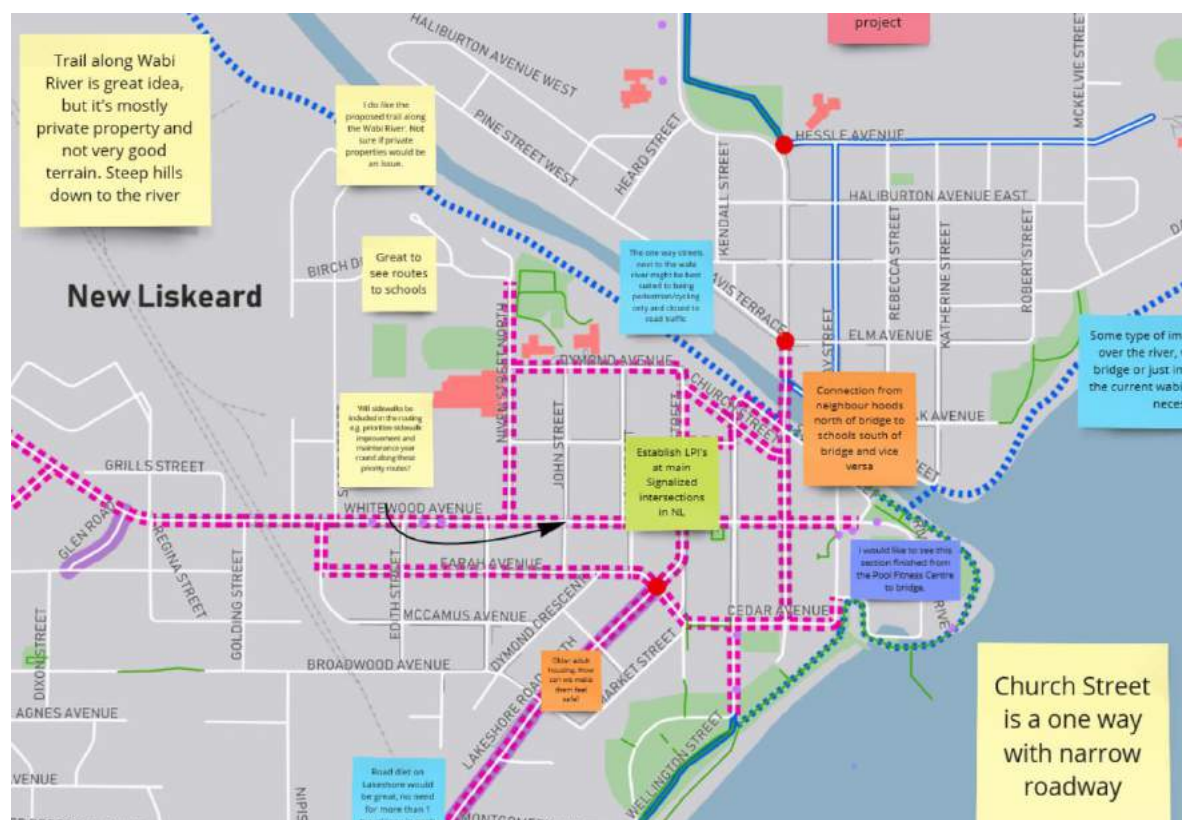
- 1 **Candidate Active Transportation Routes and Potential Improvements** – the Project Team presented maps of the candidate routes and proposed improvements to the active transportation system. The stakeholders were asked to identify any additional:
 - Candidate routes;
 - Locations/crossings for enhancement; and
 - Routes/projects that should be prioritized in the short term.

During the Candidate network Review, feedback received largely confirmed much of what had been identified for implementation by the project team leading up to the workshop. Key items identified for improvement included:

- Intersection improvements within the downtown areas of Haileybury and New Liskeard should be implemented to create safer access for people walking and cycling
- Safety enhancements on the STATO Trail should be considered, particularly on Lakeshore Road, by reducing vehicle speeds and adding additional physical separation where possible
- Connections to schools and areas with a high density of destinations should be enhanced to connect the STATO Trail to the places people want to go in the City
- Concerns with the proposed routing for the trail extension to Pete's Dam – including property ownership and difficult terrain
- A desire to see enhanced connectivity over the Wabi River, either through improvements to the existing bridge or through the construction of a new pedestrian and cycling bridge at the foot of Katherine Street
- Enhancing connections on the STATO Trail into North Cobalt to connect those residents to Haileybury and beyond
- The importance of effective wayfinding to highlight the connections between the STATO Trail and the proposed routes to connect with community destinations

An example of the types of feedback provided during the Workshop can be seen in Figure 1 below.

Figure 1: A Section of the Candidate Routes and Potential Improvements Map with Post-It Notes from Stakeholders



2 Quick Wins Project Builder – The Project Team identified a potential opportunity for the City to receive funding from the Government of Canada through the Healthy Communities Initiative fund to improve public spaces as a response to the COVID-19 pandemic. The Project Team presented the Healthy Community Initiatives goals, shown in Figure 2, and asked stakeholders to identify potential “quick wins” projects that would meet these goals and qualify for funding.

Figure 2: Healthy Community Initiatives Goals



**Create safe
and vibrant
places**



**Improve
mobility
options**



**Provide
innovative design
solutions**

The stakeholders listed a variety of potential quick wins projects, such as:

- Implementing wayfinding to support new riders and walkers;
- Increasing connections to schools and other public facilities (i.e., grocery stores, hospital, etc.);
- Adding traffic calming tools in designated residential and downtown areas to improve safety for people crossing the road;

- Implementing bicycle parking in the downtown cores;
- Introducing a bike hub with bike rentals and repairs;
- Improving cycling and pedestrian facilities along the Wabi Bridge; and
- Enhancing street beatification (i.e., murals, etc.).

3 Action Planning Worksheet – After reviewing the input regarding potential quick wins projects, the stakeholders were asked to identify one project that the City could apply for funding to implement. The stakeholders collectively identified the following project:

- Downtown beatification and expansion of public space in downtown New Liskeard and Haileybury, including:
 - Enhancing pop-up patios/public seating areas; and
 - Adding bike racks, benches, crosswalk, painted murals, etc.

The stakeholders determined that this project would help build a sense of community and draw tourists to Temiskaming Shores. These improvements would also provide all community members with a place to walk, bike, and stay in touch in the downtown areas, while reducing and calming vehicle traffic. The stakeholders identified some key elements that should be included as part of the project, such as:

- Bike racks and more bicycle parking in lieu of car parking in key destinations;
- Stop signs and safe crossings in Haileybury;
- Clear signage and pavement markings;
- Greenery and trees; and
- Mid-block crossings and bump-outs at former Giant Tiger and between existing crossings in New Liskeard and Haileybury (this was identified as a “nice-to-have” element rather than a “must-have” element).

STAKEHOLDER INTERVIEWS

The Project Team held interviews with 8 key stakeholders including representatives from the City, local committees (i.e., Bicycle Friendly Communities Committee, Age Friendly Committee, and Active Travel Committee), the Health Unit, and the Business Improvement Area. The stakeholders were asked to answer the following questions to provide input about strengths, weaknesses, threats, and opportunities regarding active transportation in Temiskaming Shores:

1. What is your vision for active transportation in the City?
2. What are the top 3 network priorities for an active transportation network?
3. Who is the network serving and who is it not?
4. What are some successes in the City?
5. What are some of the challenges?
6. What are some programs and who are the partners?
7. What are some programs you think the City should explore?
8. Who should lead program development and who should support?
9. Of the programs identified, are there any priorities?
10. Is there anything else you would like to add?

Some notable comments that emerged during the stakeholder interviews are listed below:

- “The [STATO] Trail is well designed and well used. Seniors, kids, parents families, racers, - they're all on the STATO Trail”;
- “I'd like to see us expand upon what we've done already – we already have this great linear route in the STATO Trail, so we should complete those missing links and then lay out a plan to connect

the trail to other areas. [We should focus on] connecting and finishing the trail and then expanding”;

- “More signage and wayfinding would be great. More green paint on the roads too to help delineate the cycling facilities. [Bicycle] parking downtown – a couple in New Liskeard and one uptown by the stores, and maybe one in Haileybury”;
- “I think adults more than kids are being served well [by our existing infrastructure] in terms of comfort, especially downtown. Commuters are well served generally. Leisure riders who aren't afraid of riding outside of the trail – experienced riders are pretty well served. I've heard from other people who would ride more, but they don't feel comfortable riding in traffic, so they are being left behind. Students are really being left behind too because we only have one school that we can get to from the trail. The majority of our schools have nothing to connect them, so students are on their own”;
- “[We should have more] shaded seating areas downtown. I'd like to see a lot more green. We live in a beautiful area surrounded by trees and our downtown doesn't reflect that at all. So if we could see more planters, more flowers, more of those natural elements – it really provides so much benefit. We have nice buildings downtown, but we need more natural streetscaping”;
- “If you want to encourage people to cycle, you need to have a place for them to store their bikes! We should also have employee change rooms and showers so that people can change”; and
- “We have a good transit system but the connection between transit and cycling is lacking. We need to build that connection better. Not all the busses that we have available are equipped with racks”.

Table 1 provides an overview of some of the common themes that emerged during the Stakeholder Interviews.

Table 1: Stakeholder Interview SWOT Analysis Summary

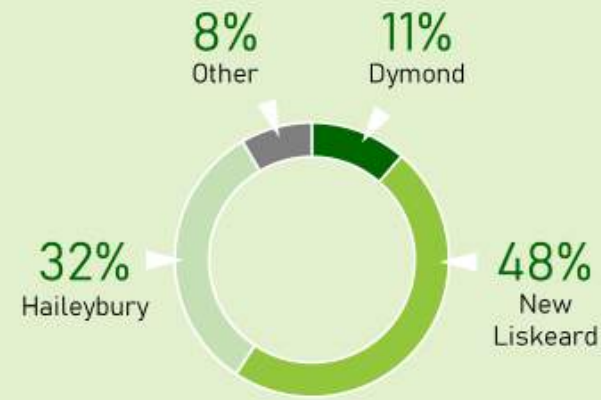
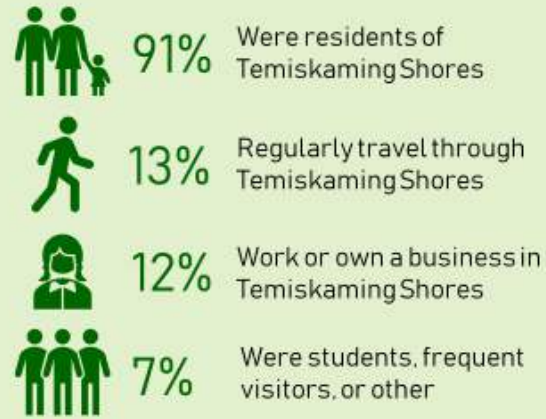
	Common Themes
Strengths	<ul style="list-style-type: none"> • Existing STATO Trail • Strong history of local fundraising and funding applications • Encouragement and education efforts • Radio, Newspaper, Social Media, Bike Festival, etc. • Supportive staff and local stakeholders • Local parks provide good access to nature and trails • Strong transit ridership • Winter maintenance of sidewalks • Existing work done by the Committees
Weaknesses	<ul style="list-style-type: none"> • Speeds on connecting corridors • Rorke, Lakeshore, Whitewood, Armstrong • Few All Ages and Abilities (AAA) routes for walking and cycling • Lack of seating, shade and bike parking in downtown areas • Crossing Lakeshore in Haileybury • Wabi Bridge • School connectivity to existing trails • Lack of safe access to downtowns

Opportunities	<ul style="list-style-type: none"> • Bike parking and beautification in downtown areas • Multi-modal integration: more walk / bike / transit trips • Expand bike exchange into bike hub / bike rental • Broaden BFCC mandate to focus on active transportation • Traffic calming and speed limit reductions • Introduce wayfinding and signage to encourage new ridership • Trail apps and updated info online
Threats	<ul style="list-style-type: none"> • Road widths may limit options, particularly on rural and older roads • Low revenue and financial capacity means improvements are often reliant on grants and other funding streams • Many programs rely on volunteers – staff support may need to expand

PUBLIC SURVEY

The online survey was available on the project website from May to June, 2021 and received 283 responses in total. The following section uses infographics to summarize the main input that was received through the survey.

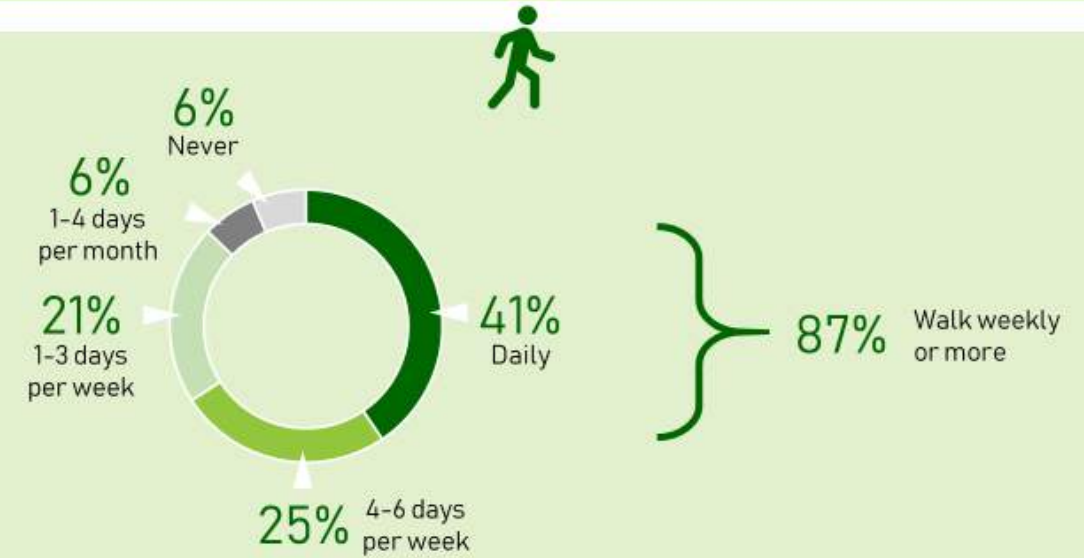
Who participated in the survey?



Temiskaming Shores Active Transportation Master Plan – Survey Results

1

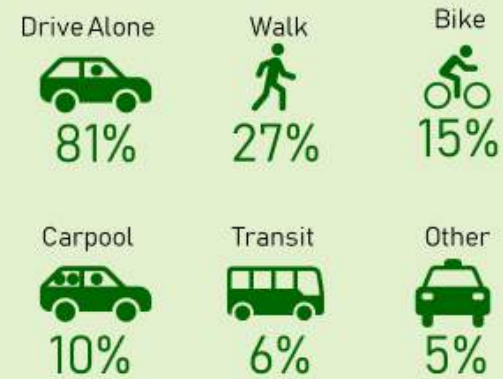
How often are people walking?



Temiskaming Shores Active Transportation Master Plan – Survey Results

3

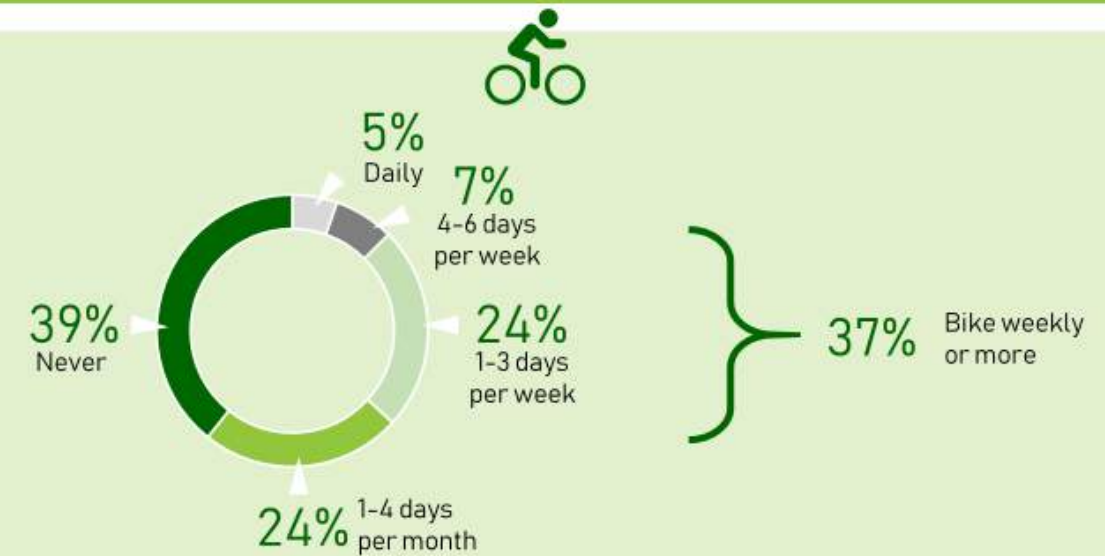
How are people commuting in Temiskaming Shores?



Temiskaming Shores Active Transportation Master Plan – Survey Results

2

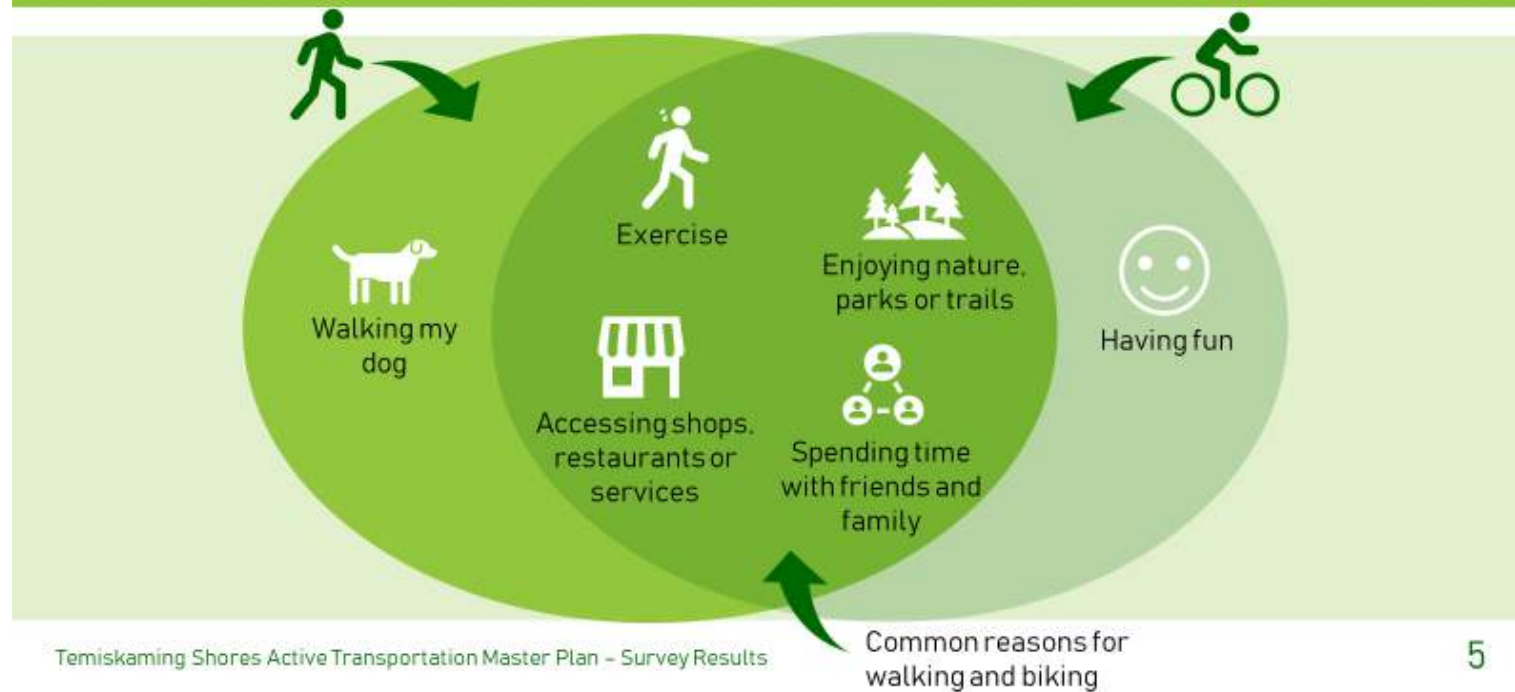
How often are people biking?



Temiskaming Shores Active Transportation Master Plan – Survey Results

4

Why are people walking and biking?



5

How far are people willing to travel?

	Walking	Biking
Work or School	9 minutes	10 minutes
Shops & Services	8 minutes	11 minutes
Local parks or trails	11 minutes	14 minutes
Entertainment or leisure	10 minutes	12 minutes
Transit	5 minutes	6 minutes

Temiskaming Shores Active Transportation Master Plan – Survey Results

7

What are the main barriers?

Top 3 Barriers:

- Lack of sidewalks or trails
- Condition of sidewalks or trails
- Speed and noise of motor traffic

Additional Barriers:

- Weather
- Poor lighting
- Time constraints

Top 3 Barriers:

- Lack of dedicated on-street cycling facilities
- Speed and noise of motor traffic
- Intersection safety

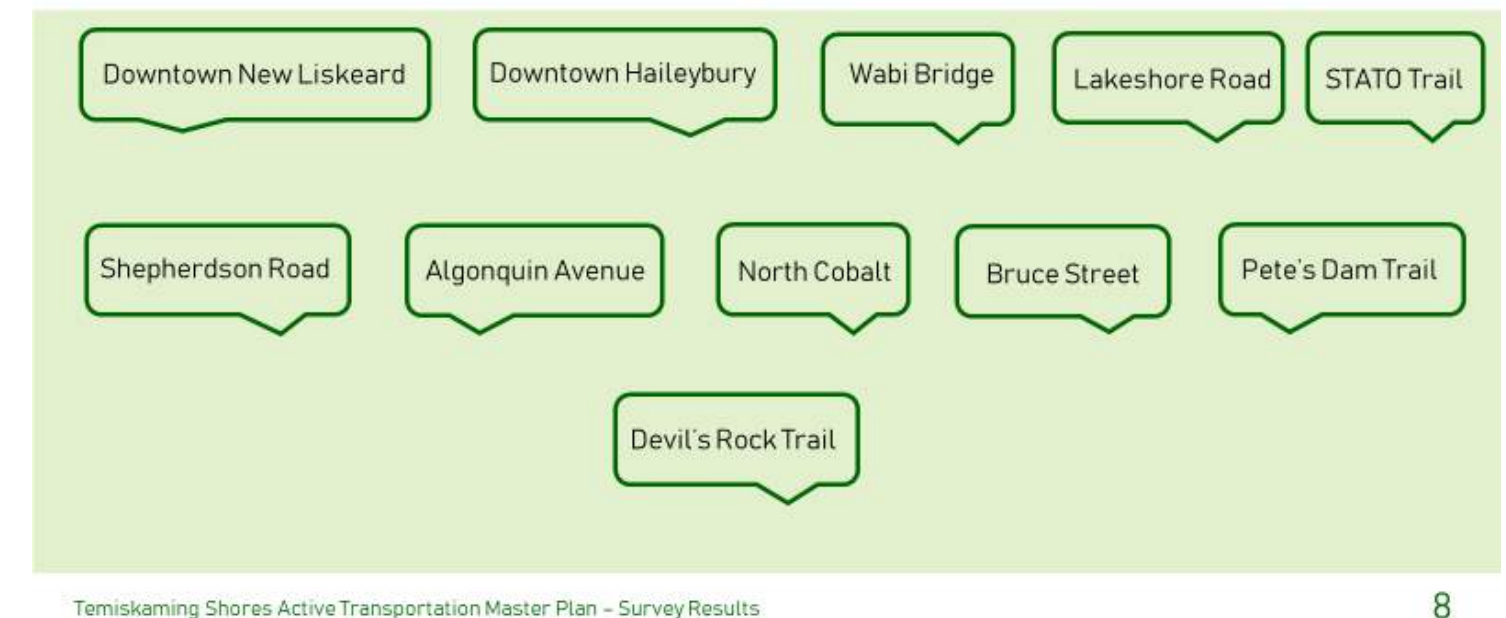
Additional Barriers:

- Gaps in the network
- Trails and routes don't go where people need to go
- Other

Temiskaming Shores Active Transportation Master Plan – Survey Results

6

What locations would people like to see improved?



8

What actions would people target for investment?

Top 3 Priorities:



Improve maintenance on existing sidewalks, multi-use paths, cycling facilities, etc.

Additional Priorities:

- Intersection upgrades, including improved crossings, signals, and lighting
- Build more sidewalks
- Provide more amenities along active transportation routes (benches, water, fountains, bike racks, etc.)
- Expand off-street cycling network (more mountain biking trails, etc.)

Temiskaming Shores Active Transportation Master Plan – Survey Results

9

How do people describe active transportation in Temiskaming Shores now?

- ✓ Quite good for the size of the Town, but room for improvement
- ✓ STATO Trail is amazing
- ✓ Too much focus on cycling over other modes (roller blading, skate boarding, scootering, walking, etc.)
- ✓ Need to make areas more walkable (i.e., improve, maintain, and add more sidewalks)
- ✓ Need to focus more on safety, especially on busy streets
- ✓ More education is needed on how to share the road with cyclists
- ✓ Active transportation network is very limited to New Liskeard – need to provide connections to other communities

Temiskaming Shores Active Transportation Master Plan – Survey Results

10

What should be the priority for the Temiskaming Shores Active Transportation Plan?

- ✓ Safety (i.e., crossing the street, on-street cycling facilities, etc.)
- ✓ Maintenance (i.e., improve and maintain existing sidewalks, trails, and roads)
- ✓ Accessibility
- ✓ Connectivity
- ✓ Community education and awareness
- ✓ Traffic calming

Temiskaming Shores Active Transportation Master Plan – Survey Results

11

Some notable comments that emerged through the public survey are listed below:

- “I am impressed with what we have for such a small community, especially the STATO Trail”;
- “Active Transportation in Temiskaming is quite good along quiet roads/parks, but requires serious attention/changes along busy routes”;
- There aren't enough dedicated paths connecting all ends of the community to promote biking. [...] More sidewalks (or paths) need to be added to increase walking as well”;
- “Active transportation in the City of Temiskaming Shores has come a long way but we tend to forget that more people walk than cycle - pay as much attention to the making it walkable as you do cyclable. Maybe we need a Temiskaming Shores Walking Committee to get our sidewalks fixed”;
- “Upgrade current infrastructure, start to build multi use trails, and [increase] maintenance of the existing ones”;
- “Slow the traffic down”;
- “[The] priority should be to make it a safe and convenient way to get around, from all areas of the city”;
- “Speed limit reductions and traffic calming in multiple areas - downtown, around schools/residential areas, Lakeshore, Rorke”;
- “Ensure that walking/bicycling paths are safe from vehicular traffic - in terms of speed, proximity, and exhaust fumes”;
- “More signage advising walkers and cyclists where to walk or cycle” and
- “Improve existing trails for nature fans, offer more safe biking lanes for cyclists, and enforce/educate the driving public as to cyclists' rights to the roads”.

COUNCIL SURVEY

To gain a stronger understanding of what the priorities for the Municipal Council was for this project, a City Council-specific survey was developed and distributed to all members of Temiskaming Shores' City Council. Responses were anonymous, with responses being received from five of the seven current members of Council. The questions posed, and the responses received, are detailed below.

When you think of the current state of active transportation (walking, cycling and wheeling) within the City of Temiskaming Shores, what are some of the first words that come to mind?

- Good but a few improvements could make it great.
- Much better than it was 10 years ago. Many areas are accessible by walking or cycling
- Safety
- Improving, more education to the public that don't use the trail or a bicycle etc.
- A work in progress. Small but important steps being taken. Old infrastructure hinders much of the progress.

When you think of the future of active transportation in the City of Temiskaming Shores, what do you think is important to consider and reflect?

- Pedestrian safety, more bike/active travel routes to main areas of the community.
- Make sure that people can enjoy our great outdoors.
- Connectivity
- Keep an open mind and don't try to make too many changes at once.
- We have a population that, regardless of age, want to become or remain active. Important consideration for any future planning.

In a few sentences, what are the primary outcomes you would like to see emerge from the Active Transportation Plan?

- I would like to get an outline of what routes would be best and find out where we are lacking as far as active travel.
- Provide a safe community for people of all ages to move about our city.
- I would like to see a safe trail connecting the various parts of the City with a resulting mutual sharing of safety and respect between trail and highway users.
- There MUST be more use of the STATO Trail before we spend more dollars or obtain grants as the majority of taxpayers have to buy into it.
- Become recognized as a destination for an active population.

What concerns do you have about the development of the Active Transportation Plan?

- No real concerns I just want people to be able to travel safely throughout the city.
- People must still abide and learn the rules of the road. Signally, sharing the road.
- Mutual safety of all
- Any attempt to change the speed limits between New and Haileybury again must include public meetings and even consider adding a question on a ballot to all voters on the upcoming election in June 2022.
- Our older infrastructure means we must take small cautious steps rather than large bold steps. Current infrastructure is not built for active transportation.

We have been doing extensive community stakeholder outreach but are always looking for additional contacts to expand the level of access for engagement related to this plan. Are there any community groups or key stakeholders that we should contact as we develop this plan?

- Bicycle friendly community, age friendly, get active group.
- Have OPP been involved
- People that travel on the roads for work purposes, bus drivers, taxi operators and general public.
- Cyclists, seniors, people that walk. Sightseeing groups, tourism reliant business.

Do you have anything else you would like to share with us?

- Changes need to be slowly incorporated into future developments in housing and transportation

- Adding more stop signs throughout the City must be done carefully with public input as well as adding cross walks they must be put in the most dangerous parts of the city if it's going to work.

1.4 WHAT WAS HEARD

The Round 1 Public Engagement activities provided the Project Team with an excellent sense of existing conditions and potential opportunities for improving active transportation in Temiskaming Shores. Several key ideas and common themes emerged from these activities which be used to guide the development of the ATP and set priorities for the City. Some of the key ideas and themes that emerged are summarized below.

KEY IDEAS

- Temiskaming Shores is a fairly multi-modal City. Although driving is still the main mode of transportation, many community members stated that they walk and/or bike weekly or more, indicating that the Community has already started to build a strong culture of active transportation;
- The main barriers to walking and cycling that were identified through the public survey were all infrastructure-related, as opposed to being related to environmental factors (distances, topography, weather). This can be seen as a significant opportunity for the City to improve the condition of active transportation infrastructure to enhance safety, comfort, and accessibility;
- Community members emphasized a clear desire for the City to prioritize walkability by improving and maintaining sidewalk infrastructure and improving safety at key intersections; and
- Based on the amount of time people are willing to spend travelling, most destinations in Temiskaming Shores could be easily reached by walking or cycling if the appropriate infrastructure were in place.

COMMON THEMES

- The existing STATO Trail is excellent and serves a lot of people quite well. With that said, there are still many opportunities to improve the Trail by addressing gaps and providing connections to other trails and key destinations;
- An overall lack of infrastructure that feels safe and inviting is limiting the number of active transportation users in Temiskaming Shores. There is a need for better crossings and on-street cycling facilities to enhance safety and comfort. Traffic calming tools should be considered for busy streets to help reduce traffic speeds and make roadways more comfortable for pedestrians and cyclists;
- There is a need to improve connectivity to key destinations and between communities in Temiskaming Shores;
- There is a lack of all ages and abilities cycling and walking routes. The City needs to focus on making active transportation more accessible to a wider range of people; and
- Public spaces could be improved by increasing bicycle parking, seating, wayfinding signage and shaded areas, especially in the downtown cores. These changes would also help to encourage more people to use active transportation.

1.5 WHAT WE DID

An important aspect of any project is the collection of feedback from key stakeholders to inform both the broad directions of the project and the specific elements of its implementation that will improve user experience. In the case of the Temiskaming Shores Active Transportation Plan, the collection of stakeholder and public input was used to inform several key aspects of the final plan. The feedback received so far has helped to:

- Guide the development of the proposed Active Transportation Network for Temiskaming Shores, including the addition of proposed sidewalk extensions and enhancements.
 - Sidewalk expansions within the community of Dymond emerged as a priority, and were included on the final map of proposed sidewalk locations
 - East-west routes through New Liskeard were refined to include Whitewood based on a desire to enhance streetscaping in the Downtown and reconsider how overall parking utilization in the downtown area is evaluated
 - Routes connecting Haileybury to North Cobalt were added to enhance connections to the City's existing transit services
- Develop a network of cycling facilities that would result in a complete, connected network throughout the communities of Temiskaming Shores, with priority projects identified to achieve short-term connectivity
 - Capital forecasts helped to determine which projects should be completed in 2021 and 2022 based on the City's upcoming works schedule
 - Key gaps were identified and prioritized, including areas along Lakeshore Road, Rorke Avenue and Albert Street
 - Additional design work was completed for the Wabi River Bridge to provide an interim connection to link the STATO Trail
- Refine proposed trail alignments for additional STATO Trail extensions, including alterations to the route heading north from New Liskeard to Dymond and the route connecting New Liskeard to Pete's Dam
 - The proposed route for the STATO Trail from New Liskeard to Dymond east of the existing alignment was removed, as the cost for this project were deemed to outweigh the benefits
 - The proposed route along the Wabi River to connect to Pete's Dam was removed due to challenging terrain and land ownership challenges
- Develop and submit a memo outlining the potential improvements that could be achieved through a submission to the Healthy Communities Initiative
 - Through collaboration with stakeholders, a project to enhance the livability of the City's Downtown areas through expansion of public spaces was submitted to the HCI
- Identify key locations where crossing improvements are necessary to improve safety for people walking and cycling

- Locations such as Main St and Ferguson in Haileybury, Crossings of Highway 65 and crossings on Hessle Avenue were added based on feedback from stakeholders and the public.

Based on the conversations with City Staff and key stakeholder and public input from the online survey, the ATP is being developed to meet the needs of the growing community of people in Temiskaming Shores who want to walk, bike and wheel more often. Public support for these measures will be key to ensuring that they move forward in a timely and effective manner, and that they are sustainable in the long term.

1.6 EVALUATION AND LESSONS LEARNED

Feedback for the consultations has generally been positive, including the use of tools like SurveyMonkey for the public survey and Miro for the Stakeholder Workshops. Miro provided most attendees with the opportunity to participate in an interactive setting without requiring in-person participation in compliance with COVID-19 public health measures.

Attendees of the Workshop were asked about how the workshop was delivered, and feedback was universally positive. In the future, The City may wish to allocate time for two separate workshop sessions – one during working hours to accommodate those who can include attendance as part of their daily responsibilities (eg. Agency partners and those who work on active transportation issues as part of their paid roles) as well as one in the evening to accommodate those who want to support the ATP from a volunteer standpoint.

The public outreach for this project has been very strong, with a significant number of responses gathered, and a general consensus that the survey met the needs of the community with regards to gathering input about priorities for the City's ATP. As the City continues to grow its community engagement practices, it may be prudent to consider an all-in-one engagement platform for future projects that can include ideation boards, mapping tools and budgeting tools to help assist in gathering feedback from the community.

1.7 CONCLUSIONS AND NEXT STEPS

Community Engagement for the Temiskaming Shores Active Transportation Plan is a vital component of the success of the Plan as it moves into the implementation phase. Based on the strong response rate and the support from both internal and external stakeholders for the types of projects and programs being recommended as part of this Plan, it is clear that the community has a strong interest in seeing this project succeed. As the project moves towards completion, Phase 2 Consultations will provide stakeholders and members of the public with the opportunity to comment on the priorities for the City's active transportation network, will further develop strategies to make education and encouragement efforts more widely accessible and will begin assigning roles and responsibilities to bring those projects to fruition.

Active

Transportation Plan

Discussion Paper #4

Education & Encouragement



City of Temiskaming Shores
Draft November 2021





Temiskaming Shores Active Transportation Plan
Prepared by:

wsp

Table of Contents

1	OVERVIEW	2
1.1	Education and Encouragement Approach	3
1.2	PLAN FOUNDATIONS	4
1.3	Partners.....	0
1.4	Programming recommendations	2
2	IMPLEMENTATION SUMMARY	3

1 OVERVIEW

The City of Temiskaming Shores' Active Transportation Plan is a visioning document intended to provide a blueprint for municipal decision making as it relates to infrastructure, policy and programs to support active transportation. This plan will allow City staff to strategically implement and manage the direction of active transportation in Temiskaming Shores over the next 10+ years, creating a stronger culture of activity within the City through incremental, strategic improvements.

The previous sections of this Plan have focused on the **physical infrastructure** related to active transportation. Developing a complete network of comfortable, convenient active transportation facilities is vital to improving conditions for people to walk or bike, but it must be paired with the parallel development of a system of **social infrastructure** to support active transportation as well if a City like Temiskaming Shores is to realize the full benefits of its investments in active transportation. The physical and social infrastructure that have been developed since the 1950s have focused all attention on automobile transportation. The results of this paradigm can be seen everywhere in North America – streets that are unwelcoming for people who walk or bike, communities designed at a scale that does not make walking or cycling possible to access daily needs and a set of social norms that sees any form of transportation other than a private automobile as “alternative transportation”.

Shifting from an auto-centric paradigm to a multi-modal one is no simple task, but there are a variety of actions that can be taken in support of this cultural shift. While it will not be possible for all trips made by Temiskaming Shores residents to be made through active modes, the density of both population and destinations in the City's urban areas – Dymond, Haileybury and New Liskeard, make walking and cycling a viable mode of transportation for many routine trips in the community. With the existing STATO trail infrastructure connecting the communities of Temiskaming Shores, and with a regularly scheduled transit service reaching all areas of the community, Temiskaming Shores is well situated to establish non-automotive transportation as a viable alternative for many residents, provided the City and its partners can facilitate a shift in attitude and culture within the community.

To help guide this cultural shift, a suite of active transportation programs informed by best practices from around North America is being proposed to supplement the City's investments in physical infrastructure to support walking, cycling and wheeling. The recommendations contained in this chapter are based on the successes and lessons learned from comparable municipalities in Ontario and beyond. Recognizing that one size does not fit all, these programs target a wide range of audiences, including students, women, seniors, Indigenous People, tourists, Franco-Ontarians, and other groups with unique perspectives and needs. While the programs described in this Chapter provide an effective starting point for the City, additional consideration should be given to expanding support for priority groups to create programs that address the barriers faced by some groups to participate in active transportation. Future considerations for programming could help to address barriers related to finances, systemic discrimination, language differences, cognitive ability and risk tolerance.

The programs presented here have been shaped by local expertise – they are designed to support existing initiatives, build on the City's successes and leverage the relationships that already exist within the community to create more support for, and excitement about, active transportation. The recommendations are based on best practices but are filtered through the local context and the knowledge of key stakeholders within the City, producing a truly made-in-Temiskaming Shores option to boost the culture of active transportation.

1.1 EDUCATION AND ENCOURAGEMENT APPROACH

Developing a suite of programs that help to change attitudes and behaviours regarding active transportation can be a complicated process. There are a wide variety of programs that can be adopted and implemented to support a community's goal of becoming a better place to walk, bike or wheel but many of the most effective interventions fall into one of two categories: Education and Encouragement (**Figure 1**).

Education measures empower people with knowledge – these programs can help to break down misconceptions, provide residents with new skills or provide a new way of looking at a problem. Common goals of education programs relating to active transportation include teaching safe and effective bike handling skills, educating people driving about the rights and responsibilities of people walking and cycling or providing information about the potential time and cost savings that could be generated by switching to active travel. Specific examples can include bike rodeos in schools to teach safe bicycle handling skills or programs that emphasize the benefits of active travel.

Encouragement measures enhance the appeal of certain forms of behaviour, both at the individual level and more broadly within the community. This can include initiatives that raise the profile of active transportation by offering interested users an opportunity to try something new with a low (or no) barrier to entry. Specific examples include guided community walks or “Slow Rolls”, pop-up demonstrations at local festivals where residents can try out an E-Bike free of charge or friendly competitions between schools or workplaces to see who can log the most kilometers of active travel in a month. Encouragement initiatives can also include incentives that make it easier to consider travel by active transportation, either through giveaways of important materials like bike lights, reflectors or water bottles, or through benefits like a rewards or discount program for customers who arrive on foot or by bike.

When supported by investments in physical infrastructure to enhance the safety and comfort of active travel, programs that help educate and encourage residents to use active travel more often have been proven to increase support for, and use of, active transportation. These programs are often orders of magnitude cheaper than investments in physical infrastructure, but they pay dividends in shifting the culture of a community and creating an environment where active transportation is more socially accepted and supported.

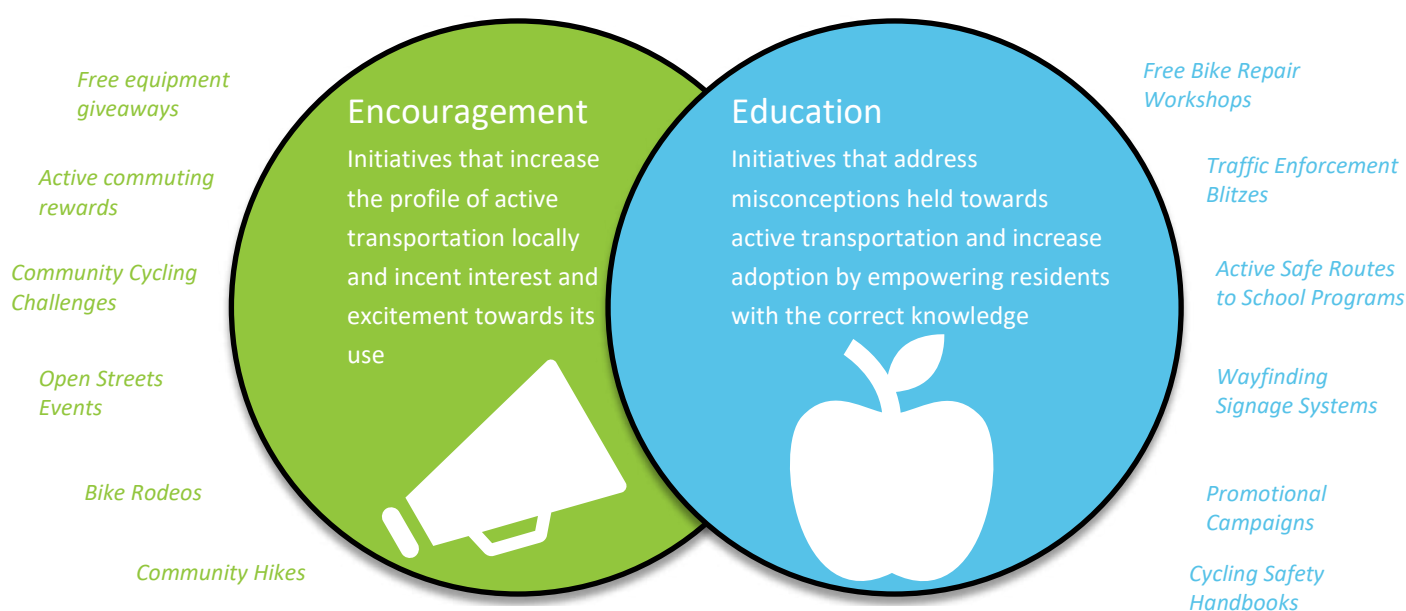


Figure 1: Diagram listing suggested active transportation programming initiatives, categorized within the encouragement and education approaches

1.2 PLAN FOUNDATIONS

The development of a suite of programming recommendations relied on a thorough understanding of both best practices with regards to active transportation education and encouragement and the local context within the City of Temiskaming Shores. To develop a set of programming guidelines that meet the needs of the community, a best practices review of plans from comparable municipalities was combined with a policy review and extensive stakeholder consultation, helping to produce a suite of programs designed to support the social infrastructure of active transportation within Temiskaming Shores.

1.2.1 BEST PRACTICES REVIEW

To ensure all active transportation programming recommendations reflected leading technical guidance, an extensive background review was completed among a series of comparable municipalities. This exercise was useful in identifying the range of programming ideas that could be applied within Temiskaming Shores as well as relevant lessons and trends on which ones feature the greatest likelihood of success. Recognizing that the success of any active transportation program is dependent on the local context, results of this research served only to develop a list of recommended programming initiatives, which were reviewed and confirmed by local stakeholders. The results of the best practices review are shown below in **Figure 2**.

WW	Whitewater Region Active Transportation Plan Relevant Programming Ideas <ul style="list-style-type: none"> • Community based bike share program • Wayfinding & Signage Plan • Inventory and purchase of bike racks • Bike and trail equipment giveaways
UXB	Uxbridge Active Trails Strategy Relevant Programming Ideas <ul style="list-style-type: none"> • xFamily Bike Days • Data Collection • Bike Valet Program • Downtown Bike Corrals
PET	Penetanguishene Cycling Strategy Relevant Programming Ideas <ul style="list-style-type: none"> • Cycling Instructor Training Fund • Town facilities enhanced as 'bike hubs' • Open Streets events • 1 metre safe passing law campaign
WH	Prince Edward County Cycling Master Plan Relevant Programming Ideas <ul style="list-style-type: none"> • Wayfinding Signage • Staging and Rest Areas • Annual bike summit • Active School Travel Program • Routine community bike rides.

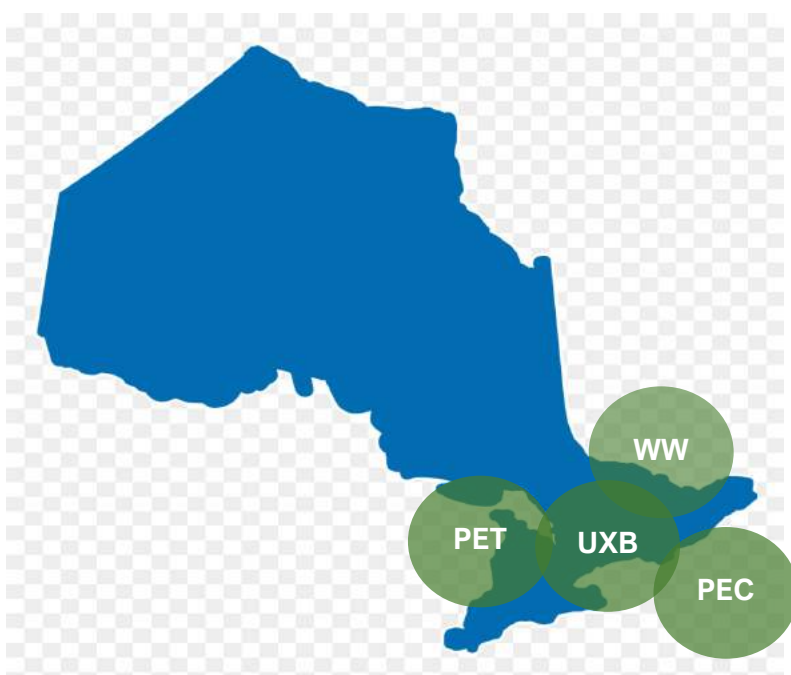


Figure 2: Map depicting the location of municipal case studies examined as part of the programming best practices review

1.2.2 POLICY SCAN

Key to understanding the local context as it relates to active transportation programming was an extensive review of relevant policies already adopted by the City. Documents most essential to this review included the City's Cultural Plan (2013), Recreational Master Plan (2020) and Age Friendly Community Plan (2016). Key insights and details from each document are presented below, where the relevant sections from each planning document are connected to the overall goal of developing a suite of programming recommendations that compliment the goals of the Active Transportation Plan. As the elements of the programming chapter are implemented, they will help to connect to the City's broader goals of creating a more active, engaged and connected community, aligning with the City's previously approved strategic priorities. A more detailed overview of these documents is provided within the Vision and Policy Discussion Paper in **Table 1**.

Table 1 List of Policy Documents reviewed as part of the development of the ATP programming recommendations.

Municipal Plan	Document Description	Relevant Insights
	<p>Outlines recommendations to strengthen the City's cultural sector by leveraging existing assets and identifying strategic investment opportunities that align with local community objectives and goals</p>	<ul style="list-style-type: none"> Recognizes the city's sports and recreational sector as key pillars of its cultural sector; Acknowledges investments that support place-making and improved livability as equally beneficial to the City's cultural sector (attraction and retention of creative class workers and industries); and Identifies existing annual events as tourism draws with potential for expansion
	<p>Identifies demand for recreational services and facilities within the City and proposes a community led, strategic approach to addressing those needs within the next 10 years</p>	<ul style="list-style-type: none"> Recommends that the city leverage its strong scenic and natural landscapes to encourage greater social and recreational activity; Suggests partnering with local sports groups and agencies for assistance in the delivery and administration of new and improved recreational programming; and Support recreational programming within key local and regional travel destinations, such as Haileybury Beach, Downtown New Liskeard and Devil's Rock
	<p>Seeks to make the community accessible to all age groups through the adoption of new standards, practices and programs that promote inclusivity among all residents.</p>	<ul style="list-style-type: none"> Recommends the adoption of a more coordinated communications protocol that reduces barriers to access local community services and programs; Urges new building standards and investments into pedestrian friendly amenities such as more public seating and community maps within key shop areas and along local trails; and Recommends improved access to recreation and social programming which better support and accommodate the needs of older adults.

1.2.3 PUBLIC CONSULTATION

While policy documents and best practices provide the basic outline for a suite of new programs to support active transportation, community engagement is necessary to ensure that the programs that are recommended are supported by, and resonate with, the community. In order to better understand the capacity of stakeholders and the attitudes of residents, several different community engagement activities were delivered as part of the development of this Plan. These included a series of workshops and interviews with key stakeholders, an online survey hosted on the City's project webpage and a virtual public information center hosted on November 4th, 2021. At each stage of the process, engagement centred on identifying programs that have already worked in Temiskaming Shores, building upon those successes and connecting partners who are already working to deliver new programs with one another to support their ongoing efforts. While a complete engagement summary is featured in the Engagement Discussion Paper, provided below are some key insights related to programming.

Stakeholder Working Group Workshop #1 [May 27th, 2021]

Event Description

Held to develop a "Quick Wins Strategy" which identified projects that could be implemented immediately, and have stakeholders share their strengths, weaknesses, opportunities as it relates to the City's active transportation system.

Relevant Findings

- Important to develop an effective wayfinding system which highlights connections between the STATO Trail and key travel destinations;
- Utilize funding from the Federal Government's Healthy Community Initiatives fund to implement bicycle parking in the downtown cores and introduce bike hubs with bike rentals and repair services; and
- Sponsor new active transportation amenities within local downtowns to support beautification and AT convenience.

Stakeholder Interviews [May 27th, 2021]

Event Description

Interviews among 8 different stakeholders from key local agencies, including City staff, the local public health unit and Active Travel Committee. The goal of each interview was to enrich understandings of the local active transportation context, with 4 questions posed specifically about programming:

1. What are some programs and who are the partners?
2. What are some programs you think the City should explore?
3. Who should lead program development and who should support?
4. Which programs should be prioritized?

Relevant Findings

- Provide more greenery and shading elements within the local downtowns;
- Leverage the city's strong history of local fundraising and funding applications to support active transportation investments;
- Provide more bike parking near key travel destinations and encourage more cycling supportive amenities (i.e. showers and lockers) among local businesses;
- Broaden the mandate of the BFCC to include investments into active transportation
- Develop an app or use the city's website to provide real time updates on trail conditions; and
- Expand the existing bike exchange program into an all-year round bike hub / bike rental service.

Online Survey [May – June 2021]

Event Description

To provide the public with an opportunity to share their priorities for the ATMP an online survey was hosted on the City's website for roughly a month. The survey generated 283 responses in total, including feedback items directly related to supportive programming.

Relevant Findings

- Survey respondents identified an improved maintenance scheme to better maintain the active transportation network as a key priority;
- Survey respondents listed the provision of additional amenities along active transportation routes (i.e. benches, fountains, bike racks) as an important priority; and
- Survey respondents encourage the City to provide additional education on how roads are to be properly shared with cyclists.

Council Survey [May – June 2021]

Event Description

To better understand the priorities of the City's elected council as it relates to active transportation, an anonymous survey was distributed among sitting members. Questions included on the survey pertained to their understanding of existing facilities and conditions, aspirations for the ATMP and suggestions of notable agencies to partner with.

Relevant Findings

- Important the plan improve awareness of local active transportation facilities among residents;
- Strived to promote active transportation use among all age demographics, particularly older cohorts; and
- Suggested that the OPP, tourism-based businesses and sightseeing groups be included within project consultations.

Stakeholder Working Group Workshop #2 [September 28th, 2021]

To confirm preliminary ATMP recommendations, the project’s stakeholder working group was convened for a second workshop. The event was held remotely and facilitated through a presentation which informed participants of project progress made to date. Using the interactive Miro board tool, the event also invited attendees to comment on the appropriateness and prioritization of 17 different suggested programming ideas, identified through best practices research. This involved having participants assign programming ideas within one of three degrees of prioritization: primary, secondary and tertiary (**Figure 3**). Additionally, participants could add their own ideas to the existing list, for others to comment on and assign among the three prioritization categories.

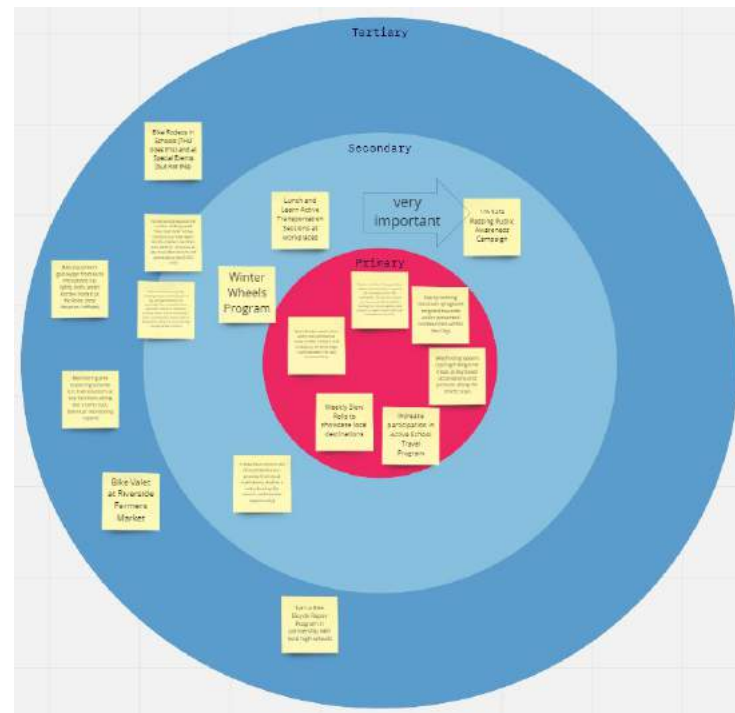


Figure 3: Screenshot of the diagram used to collaboratively assign implementation horizons to the ATMP's programming recommendations

Primary

- Weekly Slow Rolls to showcase local destinations;
- Open Streets events (host within the commercial cores of New Liskeard and Haileybury, to encourage travel between the two communities);
- Increase participation in Active School Travel Program;
- Wayfinding system (cycling/hiking time maps at key travel destinations and juncture along the STATO trail);
- Equity seeking initiatives (programs targeted towards underrepresented communities within the City); and
- Create an Active Transportation Advisory Committee to expand the mandate of the BFC Committee. Be sure to include an increase in available funding for new projects as well as oversight over sidewalk construction.

Secondary

- 1m Safe Passing Public Awareness Campaign;
- Lunch and Learn Active Transportation Sessions at workplaces;
- Winter Wheels Program;
- E-bike loan service out of local service (i.e. provide from local institutions, dual as entry level cyclist service and tourism opportunity);
- Host a community cycling challenge that incents people log cycling kilometers in exchange for a potential prize (possible involve a complete touring STATO trail system – have small festival events held at key points along the route during the day contest); and
- Formalize and expand the number of designed “bike / trail hubs” at key locations (i.e. bike repair stands, shelters, benches, bike parking – prioritize at key travel destinations and points along the STATO trail).

Tertiary

- Bike Rodeos in Schools and at Special Events;
- Bike equipment giveaways from local institutions (i.e. lights, bells, water bottles from trail facilities, local libraries / office);
- Monitoring and reporting scheme (i.e. trail counters at key locations along the STATO trail, biannual monitoring report);
- Bike Valet at Riverside Farmers Market and other community events; and
- Earn a Bicycle Repair program in partnership with local high schools.

Based on the feedback from the Stakeholder Working Group and discussions with City Staff, a “tiered” approach to active transportation programming was developed for the City of Temiskaming Shores. This structure is designed to help the City to prioritize its investments in education and encouragement programming as it begins to form a stronger relationship with the partners already working on active transportation within Temiskaming Shores, and to guide the City as it moves towards a more multi-modal future.

1.3 PARTNERS

To create a culture of cycling and active transportation in Temiskaming Shores, the City will need to build strong, stable and effective partnerships with stakeholders at the local, regional and provincial level. **Table 2** outlines potential partners for the Township and the elements of the Programming Plan that each stakeholder could be responsible for.

Table 2 Suggested Local partners to support the ATMP's programming recommendations

Partners	Roles
Bike Temiskaming Shores / BFC Committee / Proposed Active Transportation Committee	One of the recommendations contained in this plan is to expand the mandate of the BFC Committee to encompass all areas of Active Transportation. Regardless of whether or not this recommendation is followed, the existing Committee will serve as a delivery agent for new programs and projects within the City. The Committee has shown itself to be capable of planning and delivering events in the past, and there are opportunities to empower the committee to do even more not only to advise the City on implementation of new infrastructure, but also to organize and deliver events to build a stronger culture of active transportation. Committee members possess a strong understanding of the local context and will be key to marshalling resources to support the implementation of this Plan. For the purposes of the remainder of this section, we will assume that the BFC Committee would be transitioned over to become an AT Committee, so that is how the remainder of this section will refer to this group with regards to assigning responsibilities.
Temiskaming Accessibility Advisory Committee	The Accessibility Advisory Committee can provide input as the Plan moves forward to ensure that Temiskaming Shores' plans build accessibility into every level of decision-making within the City.
STATO Trail Group	The STATO Trail Group has led the development and ongoing maintenance and operations of the STATO trail system which is and will remain a key component of the City's active transportation system.
Ontario Provincial Police (OPP)	The OPP is an important partner in promoting safe road use for all users. Police officers can deliver educational and public awareness messaging, can help with Bike Rodeos and cycling education at schools, and can play a role in sharing information about collisions and citations with City staff in order to better inform infrastructure decisions.

Partners	Roles
Temiskaming Road Safety Coalition	Volunteer led group of residents advocating for improved traffic safety across Temiskaming Shores. As a trusted community voice, the group remains a vital partner in developing context sensitive design solutions and programs.
Temiskaming Shores and Area Chamber of Commerce	A formal body representing and advocating on behalf of the interests of the business community within the City of Temiskaming Shores. The Chamber of Commerce is a key partner in developing context-sensitive solutions that support the vitality of key commercial areas within Temiskaming Shores and aligning active transportation initiatives with existing tourism efforts.
New Liskeard BIA	Downtown New Liskeard is an important destination within the City, and the businesses that make up the BIA will be important partners in delivering new programs to encourage people to walk, bike or wheel to the area.
Local Businesses	Businesses that are not represented by the BIA, including those in Haileybury and Dymond still have an interest in promoting active transportation, especially to their employees.
Temiskaming Shores Planning and Works Staff	It will be important for City staff to coordinate active transportation initiatives with the scheduled implementation of new supportive infrastructure to best advance objectives of the ATP. The City already has existing AT-related programming, including Active School Travel Programs and an Age Friendly Community Coordinator
Timiskaming Health Unit	The Timiskaming Health Unit has been an active, trusted supporter of active transportation in Temiskaming Shores for many years. A trusted partner who advises the Bicycle Friendly Community Committee, Road Safety Coalition, Age Friendly Community Coordinator and Active School Travel Committee, the Health Unit will continue to play a central role in promoting and supporting active transportation in the City of Temiskaming Shores.

1.4 PROGRAMMING RECOMMENDATIONS

The approach taken by this Plan is to provide the City with a list of initiatives that can be undertaken over the next several years, with new programs being added into the City’s “toolbox” to support active transportation as the City and its partners expand their reach and capacity around active transportation. The recommendations are organized into three “tiers”, which provide some guidance for the City with regards to prioritizing their investments. Based on existing capacity, an understanding of the desires of the community and research about best practices relating to active transportation programming, this Plan outlines an implementation plan that scales up the level of effort and investment as the active transportation community continues to grow in Temiskaming Shores, providing programs that will reach new audiences and grow active transportation for years to come. The three “tiers” of programming are:

- **Phase 1: Foundations**

Programming initiatives likely to generate the greatest participation that ought to be adopted first to establish a foundation upon which further involvement within active transportation can grow.

- **Phase 2: Basic Programming**

Programming initiatives that maintain the momentum of increasing active transportation involvement and begin the process of facilitating a deeper cultural shift in support of active transportation.

- **Phase 3: Advanced Programming**

Programming initiatives that tailor to a wider range of potential active transportation audiences and help to establish a more mature culture of active transportation.

While there is no single route to becoming more bicycle friendly, it is recommended that the City focus on fully implementing the recommendations in each category before rolling out initiatives in the subsequent categories. For example, when determining how to spend programming dollars, the preference should be given to funding the programs in the “Foundations” category before moving on to programs in the “Basic” category, and programs in the “Basic” category should be fully implemented before initiating programs in the “Advanced” category. The delineation between these programs is based on extensive research and experience with Community-Based Social Marketing (CBSM) and is designed to facilitate both cultural and individual shifts in belief, behaviour and attitude towards active transportation in Temiskaming Shores. With that said, however, it is important to acknowledge that circumstances may change, so these assumptions and recommendations should be revisited regularly to ensure that they remain relevant. All of the programs outlined in this section will have a positive impact on the City’s active transportation culture, so should funding become available to pursue a program that is beyond the tier that the City is actively working on, the City and its partners should still pursue that funding.

The tiers as presented here provide a cost-effective way to deepen the City’s connections with its partners and its residents as it relates to active transportation. By investing strategically, seeking funding support from higher levels of government and building on the existing partnerships within the City, Temiskaming Shores could well achieve all of the goals set out in this Chapter within 5-6 years, firmly positioning the City as one of Ontario’s leading communities in promoting a cultural shift towards active transportation.

1.4.1 PHASE 1: FOUNDATIONS

The first phase of programs includes initiatives with broad appeal that are likely to generate the greatest involvement and establish a stronger culture of active transportation within Temiskaming Shores. These programs

build upon existing initiatives already underway within the City and focus largely on learning lessons from comparable municipalities in Ontario and beyond. While the City and its partners have proven that there is the capacity to run programs to support active transportation through leveraging existing staff resources or relying on volunteers, the programs presented here would represent a significant increase in the level of effort required to deliver them. As the number of new programs and the number of new partnerships begins to grow, it will be difficult to maintain that growth when work and responsibilities are dispersed across multiple departments and committees. For that reason, it is **strongly recommended that the City Establish and Active Transportation Coordinator position** to serve as a centralized resource for all things related to active transportation. This plan has been developed in a manner that allows for the AT Coordinator position to be “scaled up” over time – starting out as a Summer Student contract position, potentially funded by the Canada Summer Jobs program, and eventually scaling up to a full-time, or nearly full-time, position once the active transportation portfolio is at a more mature stage in the City. The recommendations below also assume that both the Active Transportation Committee and the AT Coordinator will be the primary delivery agents for new programs in the City. The partners listed under each program will serve to either support or co-lead each initiative, but the presence of the Committee and Coordinator as the lead for each program should be assumed.

The remainder of the suggestions in the “Foundations” section will operate on the assumption that this resource is in place. If the staff person is not hired, these programs are less likely to be as successful, although they could still come to fruition with the support of the City’s numerous partners, advisory committees and volunteer groups.

PROGRAM #1: ROUTINE COMMUNITY SLOW ROLL EVENTS

A simple yet effective program to encourage greater active transportation use is through hosting regular community walks or bike rides. Sometimes referred to as slow rolls (when the event is a bike ride), these events provide residents with the opportunity to engage in an enjoyable, social activity while also exposing them to the possibilities that exist for getting around the local area actively. Given its cultural relevance and design as a protected all ages and abilities facility, events should be arranged along key sections of the STATO trail or within the City’s urban centers where travel destinations remain within more bikeable / walkable distances. Key components of a successful community ride or walk program include:

- **Regularity:** walks or rides should be held on a regular basis, to provide predictability and allow for casually drop ins and outs;
- **Visibility:** walks or rides should be distinctively branded, to improve their awareness within the community;
- **Accessibility:** walks or rides should be done at a pace that is accessible to inexperienced participants and allows for socialization; and
- **Socialization:** walks or rides should encourage community building, allowing participants to become acquainted with each other and the sites and business that make up the local area.

To assist with event organization and sponsor insurance for ride and walk leaders as necessary, the city and BFC committee should remain lead organizers

Recommended partners:	<div>– Age Friendly Community Coordinator</div> <div>– Temiskaming Road Safety Coalition</div> <div>– Temiskaming Shores Chamber of Commerce</div> <div>– Service clubs</div> <div>– Local businesses</div>
Estimated Costs:	<div>– \$2,500 per year for insurance and promotional costs</div>
Inspiration:	<div>– Windsor-Tecumseh Slow Ride(here)</div>



PROGRAM #2: INCREASED ENROLLEMENT WITHIN THE ACTIVE SCHOOL TRAVEL PROGRAM

The Timiskaming Health Unit is aiming to expand the Walk N’Roll Timiskaming (previously known as Timiskaming Active School Travel) program to all schools within Temiskaming Shores, but that outreach largely depends on both the Health Unit’s internal resources and their ability to connect with the schools within the City. To accelerate implementation, the City could provide in-kind support by including Walk N’Roll messaging in their communications to their residents, both through the City’s Social Media Channels and through their partnerships with local newspaper and radio stations. As the Health Unit leads the development of new School Travel Plans, The City can incentivize school participation and support the existing participants by investing in physical infrastructure, such as crosswalks, signs, lighting or traffic calming elements as those items are recommended by the Travel Plans. As School Travel Planning advances in Temiskaming Shores, the City could also consider providing support for School Streets programs around schools within the City to provide an even higher level of safety and comfort for students to get to school using active transportation.

Recommended partners:	<div>– Timiskaming Health Unit</div> <div>– Age Friendly Community Coordinator</div> <div>– Active School Travel Committee</div>
Estimated Costs:	<div>– Approximately \$10,000 per year for outreach materials, advertising and infrastructure improvements</div>
Inspiration	<div>– Town of Ajax – Active and Safe Routes to School (here)</div> <div>– School Streets programs in Ontario (here)</div>



PROGRAM #3: OPEN STREETS EVENTS

A growing tradition practiced among municipalities around the world, Open Streets Events feature the temporary closure of a major roadway to cars to create additional space for active travel and recreational programming. Often designed as a large street fair, the event should be held within highly travelled areas, such as commercial main streets, to dual as an opportunity to support local commerce. Within Temiskaming Shores, it is suggested that an Open Streets event be held within the downtown areas of New Liskeard and Haileybury, to promote travel between the two urban centers. Coordinating the street closure required for the Open Streets event should be highly feasible, with similar arrangements required for several existing festivals, including Noel Village, Summerfest and Bikers Reunion. The City should also consider arranging a bike valet service and a community bike ride between the two downtowns along the STATO trail to encourage active commuting to the event.

Recommended partners	<div>– Village Noel, Annual Biker’s Ride Gathering Organizers</div> <div>– Temiskaming Shores Chamber of Commerce</div> <div>– Rotary club and local organizations</div> <div>– Recreation, Programming, Culture and Tourism staff</div> <div>– STATO Trail Group</div>
Estimated Costs	<div>– \$5,000 for organization and event related expenses</div>
Inspiration	<div>– Town of Kingsville – Open Streets (here)</div> <div>– Peterborough Pulse – Open Streets (here)</div>



PROGRAM #4: AT DISTANCE WAYFINDING MAPS AND SIGNS

Despite the City’s broad geography, most travel destinations within Temiskaming Shores remain concentrated within the urban centers of New Liskeard, Haileybury and Dymond. Many trips made within these communities could be easily replaced by active modes with most destinations situated within a 15 minute bike ride or a 20 minute walk within the City’s population centres. Even the distances between the communities are relatively short, with a trip from Haileybury to New Liskeard taking about 35-40 minutes on a bike, with the potential to make that trip in under 20 minutes when using an EBike. One of the challenges with promoting active transportation is that residents often assume that walking or cycling to a destination will take much longer than it actually does¹. That knowledge gap can be fixed, however, by promoting the large area of town that lies within a 5-, 10- and 15-minute bike ride of popular destinations. Research has shown that wayfinding, when deployed in a way that highlights safe, attractive routes and the relatively short time that it can take to move between destinations, can significantly improve how residents perceive walking and cycling². A detailed wayfinding strategy will help the City to determine the proper placement of signs and identify of key destinations. The development of a consistent design and style will help to develop and reinforce a distinctive Temiskaming Shores AT brand, boosting visibility and awareness of walking, cycling and wheeling in the City.

Recommended partners:	<ul style="list-style-type: none">– Temiskaming Shores and Area Chamber of Commerce– Temiskaming Road Safety Coalition
Estimated Costs:	<ul style="list-style-type: none">– \$20,000 for initial development of AT wayfinding strategy, purchase and placement of all signage and materials and \$10,000 for additional signage to complete the network
Inspiration	<ul style="list-style-type: none">– City of Peterborough AT Wayfinding system (here)



PROGRAM #5: ACTIVE TRANSPORTATION ADVISORY COMMITTEE

The City’s Bicycle Friendly Community Committee has been highly effective at developing new programs and projects to support cycling within Temiskaming Shores, but a similar measure of support has not been extended to pedestrian infrastructure and programs in the City. The City should consider expanding the mandate of the BFC Committee to serve as an Active Transportation Advisory Committee, providing the committee with the ability to advise City Staff and Council on investment priorities, organize and deliver programs and identify funding streams that the City could pursue. It is suggested that the City create a discretionary fund for the committee, to allow them to make small investments or purchases that can support the committees goals. This funding could be used for purchasing ad space, providing honoraria for speakers or cycling instructors or even investing in amenities like bike parking or seating. Like with the existing BFC Committee, local volunteers, advocates and subject matter experts should be prioritized when selecting new members on the expanded committee.

Recommended partners:	<ul style="list-style-type: none">– Timiskaming Health Unit– City Staff
Estimated Costs:	<ul style="list-style-type: none">– \$2,500 annually for committee discretionary funding to support active transportation initiatives
Inspiration	<ul style="list-style-type: none">– County of Essex “County-wide Active Transportation System” (CWATS) Committee (here)



PROGRAM #6 SUPPORT FOR MARGINALIZED COMMUNITIES

The City’s support for the Bike Exchange program is admirable, with the program distributing hundreds of bikes in recent years to residents of Temiskaming Shores and the surrounding communities. The City and its partners should consider how the existing Bike Exchange format could be supplemented with a more deliberate focus on equity to ensure that those residents who need bikes the most receive them first. Within Temiskaming Shores, women, Franco Ontarians, lower-income residents and Indigenous people are frequently identified as relatively underserved groups who could be supported by the bike exchange. To supplement the one-day bike exchange event, it is suggested that the bike exchange also create a database, in partnership with local service delivery agencies, of people who need a bike – not simply for recreational purposes, but for transportation around their community as well. By connecting with partners with a pre-existing relationship with marginalized communities, the City and its partners can also begin to create additional avenues for those residents to get involved as the City’s ATP is implemented. As more people get involved, consider adding bike maintenance skills training to the program offerings to help more residents keep their bikes on the road without relying on paying for repairs that they could perform themselves.

Recommended partners:	<ul style="list-style-type: none">– Accessibility Advisory Committee– Recreation Program, Culture and Tourism staff– Public Library Board– ACFO-Temiskaming– Keepers of the Circle
Estimated Costs:	<ul style="list-style-type: none">– \$5,000 per year for materials and support, plus in-kind support to organize the exchange event
Inspiration	<ul style="list-style-type: none">– Government of Canada Cycle Indigena Winnipeg Initiative (here)



1.4.2 PHASE 2: BASIC PROGRAMMING

Following the implementation of all Phase 1 (Foundations) programming, the City should proceed with adopting initiatives categorized with Phase 2: Basic Programming. These programs seek to build upon the foundational of cultural support and capacity for active travel built during Phase 1 by reaching out to a broader audience of residents. This phase includes educational campaigns, transportation demand management initiatives, promotional events and investments into supportive amenities which begin to solidify active transportation’s presence within the community. These programs are meant to supplement the broader initiatives introduced during Phase 1 and give individuals the extra push needed to make a behaviour change.

PROGRAM #1: WINTER WHEELS PROGRAM

Winter Cycling is growing in popularity in many communities across Canada from Calgary to Montreal and beyond. As a community that experiences all four seasons, it is important for Temiskaming Shores to consider how it can support active transportation all year round to reduce dependence on automobiles within the community. A program that has proven effective throughout Ontario is the Winter Wheels Program, first developed in the City of Peterborough. Winter Wheels programs invite residents to apply for support for Winter Cycling – it provides them with a studded front tire, a winterizing bike tune-up and other equipment like fenders, pannier bags and gloves, that are necessary for a comfortable winter riding experience. For selected participants, they are asked simply to try cycling through the winter, and to share their experiences with their families, friends and in promotional materials for the program. The program can help to start the process of normalizing winter cycling in Temiskaming Shores, creating an environment where more residents would consider trying it even if they are not part of the Winter Wheels cohort for that year.

Recommended partners:	<ul style="list-style-type: none">STATO Trail GroupMTOTransportation / Traffic DepartmentTimiskaming Health Unit
Estimated Costs:	<ul style="list-style-type: none">\$5,000 per year for equipment, education and promotional materials
Inspiration	<ul style="list-style-type: none">Windsor Essex Winter Wheels: Cycle Smart in Winter (here)Banff, Alberta’s Winter Cycling Supports (here)Ottawa EnviroCentre Winter Cycling Online Resource (here)



PROGRAM #2: 1M SAFE PASSING PUBLIC AWARENESS CAMPAIGN

In 2015, Ontario’s Highway Traffic Act was updated to require motorists to pass cyclists on roadways with at least 1 meter of space between them. Despite these legal changes, many motorists remain unaware of the law and its implications, creating safety risks for cyclists. To address this, the City should host an awareness campaign remind all traffic users of this legal requirement using its various communication channels. This includes online platforms, such as the city’s website and social media channels, as well as physical assets such as ads in the local newspaper and posted billboards. As the agents responsible for enforcing such regulations, the City should also partner with law enforcement, including the OPP, by organizing an accompanying education and enforcement blitz.

Be sure to make use of existing resources to promote the campaign – developing new materials can be costly and time-consuming!

Recommended partners:	<ul style="list-style-type: none">OPPMTOTimiskaming Health Unit
Estimated Costs	<ul style="list-style-type: none">\$2500 annually for printing informational materials and running social media ads with existing campaigns
Inspiration	<ul style="list-style-type: none">Peterborough County – A Metre Matters campaign (here)Ottawa Police Service – Sonar electronic device (here)



PROGRAM #3: LUNCH AND LEARN WORKPLACE ACTIVE TRANSPORTATION WORKSHOPS

As the community level conversation about active transportation begins to shift, it is important to begin offering more targeted interventions that reach more targeted groups of residents and engage them directly. An example of this type of program would be hosting educational workshops with local workplaces which teach employees about key aspects of active transportation. Suggested instructional modules can range from: Bicycle-Friendly Driver training, Basic Bike Maintenance and Cycle Commuting 101 to workshops that help employees build up their cycling skills or pair them with a co-worker who can serve as their active commuting “buddy” to provide mutual support to develop more sustainable commuting habits. These programs should be designed to take approximately one hour, and should offer a mix of practical, hands-on lessons and classroom-based lessons. Consider offering incentives to employees who take the courses, including gift certificates for local businesses or a catered lunch during the session, to improve participation and attendance.

Recommended partners:	<ul style="list-style-type: none">Timiskaming Shores and Area Chamber of CommerceRecreation Program, Culture and Tourism staff
Estimated Costs:	<ul style="list-style-type: none">None, costs would be covered by employers and other participating groups (staffed by city active transportation coordinator)
Inspiration	<ul style="list-style-type: none">Cycle Toronto’s Street Smarts Workshops (here)Bike Windsor Essex’s Learn to Ride Classes (here)



PROGRAM #4: E-BIKE LOAN SERVICE

Getting more residents to consider cycling not only requires a proper education of its benefits and how to do so safely, but a series of experiences that spark joy and excitement. Although cycling can be exhilarating, it can also feel intimidating for people who haven’t cycled in a long time, whose physical ability may be limited or who are worried about hills, wind and other challenging riding conditions. In Temiskaming Shores, where some steep hills, strong prevailing winds and relatively long distances may discourage people from giving cycling a try, the use of an electric assist bike can significantly reduce these concerns. Electric assist bikes, which feature a small electric motor that provides assistance while the rider is pedalling, make cycling easier and more accessible to everyone, but these bikes do come with a price tag that can be prohibitive to some users, especially if they have never tried them before. Given that financial barrier, it is suggested that the City purchase a select number of E-Bikes for residents to rent out. The service can be provided out of a local institution, such as a recreational facility, community library, or any other location that is easily accessed by residents. This would open up opportunities for people to see what is possible with an EBike in Temiskaming Shores, and would also provide a unique experience to offer to tourists and visitors to the City as well.

Recommended partners:	<ul style="list-style-type: none">STATO Trail GroupAccessibility Advisory CommitteeRecreation Program, Culture and Tourism staff
Estimated Costs	<ul style="list-style-type: none">\$10,000 for purchase of an initial fleet of E-Bikes
Inspiration	<ul style="list-style-type: none">Burlington Vermont E-bike / Cargo-bike rental service (here)



PROGRAM #5: COMMUNITY CYCLING CHALLENGE

An annual community cycling challenge, where residents are encouraged to cycle in contribution of a community wide goal, can provide the residents of the City with an opportunity to come together around walking and cycling in pursuit of a common goal. This goal can be a certain cumulative travel distance as a community, a collective fundraising goal or even a friendly competition between residents of each of the three communities to see who can log the most trips per capita over the course of a month. Hosting a community cycling challenge provides an opportunity to spotlight cycling within the community as well as offers a common, constructive cause that can motivate people to consider the activity themselves. Today, there are an increasing number of free apps available that allow residents to input either their kilometers ridden, or money fundraised in contribution of the cycling challenge’s set goal. These crowd sourcing programs make the organization and tracking of a community cycling challenge both simple and cost effective. As the challenge grows and evolves, consider encouraging workplaces, schools and other institutions to challenge their peers to see who can be the most active workplace or school in Temiskaming Shores!

Potential partners	<ul style="list-style-type: none">STATO Trail GroupTimiskaming Shores and Area Chamber of CommerceRotary club and local organizationsSurrounding municipalitiesOntario Active School Coordinator
Estimated Costs	<ul style="list-style-type: none">\$5,000 for promotion, website set up costs and a donation to local relevant cause
Inspiration	<ul style="list-style-type: none">Town of Halton Hills – Community Cycling Challenge (here)



PROGRAM #6: IMPLEMENT DESIGNATED AMENITY HUBS

Designing for comfortable and convenient active travel requires that all stages of a trip be considered – especially the end of a trip. Similar to how vehicle parking is provided when new developments are constructed, the City should be considering how cycling and walking are accommodated at popular destinations within the community. Features should be prioritized at key destinations and at important landmarks along popular routes and should reflect a complete and comprehensive understanding of an active traveller’s needs and concerns. When appropriate, existing amenities such as libraries, community centers, parks and other publicly owned land should be leveraged, to minimize the need for new easements. Common features which should be incorporated within these designated amenity hubs include:

- Bicycle parking units:** short-term and long-term units as well as seasonal “corrals” within highly trafficked areas;
- Shelters and rest areas:** comfortable seating options with enough coverage to protect users from the natural elements;
- Lighting:** adequate lighting to ensure user safety and minimize potential hazards due to obscured visibility;
- Water refill stations:** fountains or water bottle refill machines that allow active travellers to remain hydrated;
- Signage and wayfinding maps:** to address navigational needs; and
- Bike repair stands:** optional feature, fixture with a series of tools attached with allow travellers to preform basic maintenance on their bicycles for free.

Potential partners	<ul style="list-style-type: none">Town staffLocal businessesTimiskaming Health Unit
Estimated Costs	<ul style="list-style-type: none">\$3,000 - \$15,000 per “Rest Area” depending on the amenities provided. Budget \$5,000 annually.
Inspiration	<ul style="list-style-type: none">City of Toronto, Scarborough Bike Hub (here)



1.4.3 PHASE 3: ADVANCED PROGRAMMING

The third and final category of programming recommendations includes measures appropriate to implement once a strong active transportation culture has been established. These programs serve to both leverage the momentum of past initiatives as well as tailor the growing diversity of audiences now consider active transportation as either a mode of travel or recreational activity. Often requiring a higher degree of financial and human resources, programs should rely on either existing partnerships or establish new ones among local institutions and services, for support with planning, funding, and coordination. These types of programs should be undertaken once all the items in the “Foundations” and “Basics” are underway but could be expedited if an opportunity for an injection of resources from external funding sources arose.

PROGRAM #1: EARN A BICYCLE REPAIR PROGRAM

The experience with the Bike Exchange locally has shown that there is both a supply of, and a demand for, used bicycles of all shapes and sizes in Temiskaming Shores. The City can expand the value of this demand by partnering with local youth services agencies and High Schools to fund and administer an active “Earn a Bicycle” program. Consider working with High Schools to offer an Earn-A-Bike program where students participate in bike repair and bike shop maintenance while also building a custom bike for themselves. This helps to provide The Bike Exchange with the volunteer power it needs to refurbish more bikes, puts more bikes into the community and helps to provide residents (primarily youth) with transferable, applicable skills that can be carried forward in the future. The workshop would create an important community space for participants to bond over their shared interest in cycling and hopefully inspire lifelong participation in the activity.

Recommended partners:	<div><div>– Local Schools</div><div>– Age Friendly Coordinator</div><div>– Ontario Active School Coordinator</div><div>– Rotary club and local organizations</div></div>
Estimated Costs:	<div><div>– None, staff time only.</div></div>
Inspiration:	<div><div>– Earn-a-Bike Program –B!ke Community Bike Shop, City of Peterborough (here)</div></div>



PROGRAM #2: BIKE VALET AT COMMUNITY EVENTS

Bike Valet is a highly visible, effective way of showing a Community’s commitment to making cycling easier, safer and more convenient. Temiskaming Shores should host Bike Valet at the Riverside Farmers’ Market while it is in season, offer the service at regular festivals and events downtown - potentially staffing it with the active transportation coordinator and members of the AT Committee. This would provide a benefit to the community – providing people on bikes with a safe place to lock their bike while at community events and providing an opportunity for Municipal representatives to talk with riders about cycling in Temiskaming Shores. The City could also consider integrating bike valet into the special events permitting process to ensure that all special events in Temiskaming Shores include provisions for Bike Valet. This could be accompanied by a small fee for event organizers to pay for staffing at the bike valet, and could help the community make bike valet a more reliable element of special events in Temiskaming Shores.

Recommended partners:	<div><div>– Recreation Program, Culture and Tourism staff</div></div>
Estimated Costs:	<div><div>– \$5,000 to purchase Bike Valet materials (tents, fencing, bike racks, tags, tables and promotional materials)</div></div>
Inspiration:	<div><div>– Town of Saugeen Shore – Bike Valet (here)</div></div>



PROGRAM #3: COMPREHENSIVE MONITORING & EVALUATION SCHEME

One common challenge faced by smaller communities like Temiskaming Shores relates to the lack of data on active transportation to inform meaningful planning decisions. Failing to understand who is cycling and walking, where they are doing so, prevents the City from understanding where investments should be made and whether past decisions were effective. While there are many data collection methods available, a common approach involves installing trail counter devices to identify a baseline figure of the number of people using the trails every day. Within Temiskaming Shores, counters would be particularly essential along key segments of the STATO trail, a key component of the City’s active transportation network. In addition to trail counters, consider an annual in-person count program, potentially by partnering with a high school to offer volunteer hours for students who participate in observational counting. The in-person counting can be used to supplement and verify the data collected by the automated trail counters. Using this data, the City is advised to monitor ridership trends on an annual basis, as one indicator of the efficacy of past active transportation investments. Additional guidance on monitoring the success of this Plan and reporting on its impacts are found in the Implementation Discussion Paper.

Recommended partners:	<div><div>– STATO Trail Group</div><div>– Local Schools</div></div>
Estimated Costs:	<div><div>– \$2,500-12,000 for counting and data collection devices.</div></div>
Inspiration:	<div><div>– Trail User Counters – City of Owen Sound (here)</div></div>



PROGRAM #4: BIKE EQUIPMENT GIVEAWAYS

In addition to empowering cyclists with a proper education of road and traffic safety, the City should also assist them with procuring vital safety equipment. A common concern among all road and trail users is the lack of visibility of people walking and cycling, especially at night and during periods of poor visibility. Despite being required under the Highway Traffic Act, many cyclists lack a working light or bell on their bike to safely travel. To address this, the City should work with community partners to inform and distribute such basic, yet required, safety equipment. This can be achieved through a series of “pop-up” giveaways at local festivals or key points in the active transportation network (i.e. STATO trail, downtown Haileybury and New Liskeard), where cyclists are intercepted and given such materials for free. To support local active transportation branding efforts, it is also suggested that such materials be custom-designed and procured to feature the City’s logo. Suggested items that ought to be distributed include:

- Small, easy attachable bike lights;
- Bicycle bells;
- Adhesive light reflective bands; and
- Water bottles.

Potential partners	<ul style="list-style-type: none">— Timiskaming Health Unit— Local Bike Shops
Estimated Costs	<ul style="list-style-type: none">— \$1,000 annually for lights, bells, educational and marketing material
Inspiration	<ul style="list-style-type: none">— City of Ottawa - Lights on Bikes (here)— City of Thunder Bay – Light the Night (here)

PROGRAM #5: BIKE RODEOS

One of the most effective ways to create a stronger culture of cycling is to start with the youth in the community. With a small number of elementary schools, Temiskaming Shores can feasibly ensure that all local students receive cycling education through Bike Rodeos for a relatively small investment. Led by the active transportation coordinator, the City should strive to have all grade 5 students participate in a Bike Rodeo every school year. This will give all local students proper instruction in basic bike handling, helping to encourage safer cycling practices later in life, and healthier active lifestyles. To minimize costs and provide students with an opportunity to apply skills learned from the Bike Rodeos, the initiative should be coordinated with the Active School Travel Program (see Phase 1 Foundations Programming Recommendation# 1).

Recommended partners:	<ul style="list-style-type: none">— Local Schools— Ontario Active School Coordinator— OPP— Timiskaming Health Unit
Estimated Costs:	<ul style="list-style-type: none">— \$1,000 annually for insurance and materials. Courses delivered as part of AT Coordinator’s duties.
Inspiration:	<ul style="list-style-type: none">— Cycling into the Future – Waterloo Region (here)



2 IMPLEMENTATION SUMMARY

The programs and suggested prioritization outlined in Part 1 detail a strategic approach that the City can take to support a cultural shift in support of active transportation in Temiskaming Shores. To support these initiatives, additional staffing capacity will be required within the City, which is why the foundational recommendation from this section is to create an Active Transportation Coordinator position as soon as possible. The gradual scaling up of program offerings outlined here allows the City to slowly expand the role, starting off with a summer student position and eventually scaling up to a full-time position where the coordinator can support both the programming and the development of new infrastructure within the City. With this additional staffing support, the City will be well equipped to achieve the desired goals and objectives of the Temiskaming Shores Active Transportation Plan. A summary of the anticipated staffing resources, proposed programs and estimated costs for Phase 1, Phase 2 and Phase 3 proposed programs / initiatives, is presented within **Table 3**, **Table 4** and **Table 5**, respectively.

Table 3 - Summary of Programs for Phase 1: Foundations

Phase 1 Programs	Estimated Costs	Cost Frequency
<i>Routine Community Slow Roll Events</i>	\$2,500	Annual
<i>Increased Enrollment within the Active Safe Routes to School Program</i>	\$10,000	Annual
<i>Open Streets Events</i>	\$5,000	Annual
<i>AT Distance Wayfinding Maps & Signs</i>	\$20,000 (one-time) \$10,000 (one-time)	One-time cost Annual
<i>Active Transportation Advisory Committee</i>	\$2,500	Annual
<i>Support for Marginalized Communities</i>	\$5,000	Annual
Total Costs:	\$25,000 plus \$30,000	Annual Wayfinding Strategy and signage

Staffing resources required: 0.25 FTE

Table 4 - Summary of Programs for Phase 2: Basic Programming

Phase 2 Programs	Estimated Costs	Cost Frequency
<i>Winter Wheels Program</i>	\$5,000	Annual
<i>1m Safe Passing Public Awareness Campaign</i>	\$2500	Annual
<i>Lunch and Learn Workplace Active Transportation Workshop</i>	\$0	One-Time

<i>E-Bike Loan Service</i>	\$10,000	One time
<i>Community Cycling Challenge</i>	\$5,000	Annual
<i>Implement Designated Amenity Hubs</i>	\$5,000	Annual
<i>Total Costs:</i>	\$17,500 \$10,000	Annual One-time cost

Staffing resources required: 0.25 - 0.4 FTE

Table 5 - Summary of Programs for Phase 3: Advanced Programming

Phase 3	Estimated Costs	Cost Frequency
<i>Earn-A-Bike Repair Program</i>	\$0	Annual
<i>Bike Valet at Community Events</i>	\$5,000	One-time
<i>Comprehensive Monitoring & Evaluation Scheme</i>	\$5,000	Annual
<i>Bike Equipment Giveaways</i>	\$1,000	Annual
<i>Bike Rodeos</i>	\$1,000	Annual
<i>Total Costs:</i>	\$7,000 \$5,000	Annual One-time costs

Staffing resources required: 0.5 – 1.0 FTE

Active Transportation Plan

Discussion Paper #5:
Implementing the Active Transportation Network



City of Temiskaming Shores
Draft November 2021



Temiskaming Shores Active Transportation Plan
Prepared by:

wsp

Table of Contents

1	IMPLEMENTING THE NETWORK.....	2
2	PHASING.....	3
2.1	Key Takeaways for Phasing	9
2.2	Priorities in the network.....	10
3	COSTING ESTIMATES	13
3.1	Sidewalk Funding.....	14
4	PARTNERSHIPS	15
5	FUNDING OPTIONS.....	17
6	SUPPORTING IMPLEMENTATION.....	19
6.1	Policy Considerations.....	19
7	OPERATIONS AND MAINTENANCE.....	21
7.1	Winter Maintenance	23
8	MONITORING AND REPORTING	24
8.1	Monitoring of active transportation assets	24
8.2	Undertake Survey of Residents	24
8.3	Provision of Permanent Data Collection Tool	24
8.4	Report on Implementation and Progress	25
9	NEXT STEPS AND RECOMMENDATIONS	26

1 IMPLEMENTING THE NETWORK

The Active Transportation Plan is intended to serve as a flexible guideline for City Staff to create a culture of active and sustainable travel within Temiskaming Shores through the expansion of new routes, enhancement of existing routes and development other supportive infrastructure and programs. In order to achieve the vision of a safe and accessible network for people of all ages and abilities, financial investment and supportive resources will be needed to begin implementation in the short term.

The recommendations and information contained within this plan are intended to inform day-to-day decisions that not only propel the City forwards in the short-term, but also build momentum and encourage long-term efforts.

Implementation of the plan will require on-going collaboration between the City and its partners to ensure that the recommendations outlined within this document are publicly supported and realistic for Temiskaming Shores. Meaningful partnerships between different stakeholders and organizations will be required to achieve the desired outcomes. Collaborative efforts include the planning and implementing physical infrastructure, educating users on how to properly use the facilities, and promoting the City's existing assets to fully realize the economic potential of active transportation in Temiskaming Shores.

The following chapter provides the City with an achievable implementation strategy that will inform future decision making, policy and planning processes. Information is provided on a suggested phasing strategy, cost estimates, partnerships, funding options and additional considerations to help guide next steps.

2 PHASING

Developing an appropriate phasing strategy is a critical component of an active transportation master plan to make progress towards the City's overall vision. The Temiskaming Shores proposed phasing is categorized into two phases: 0 to 5 years and beyond 5 years. The proposed phasing for the City's active transportation network was prioritized based on several factors that reflect the current processes and plans, as well as input from the City Staff, technical and interested stakeholders and residents. Each of the routes and crossing enhancements in the active transportation network are identified under a phase based on the following considerations:

Short Term: 0 to 5 years

- Low investment projects (most signed bike routes) to achieve quick wins.
- Coordination with projects identified in the City's current Capital Budget.
- Major routes that form the spine of the network.
- Crossing enhancements that require repainting.
- Future studies to assess the feasibility and design of active transportation routes.

Long Term: 5+ Years

- Projects that will require major investment in rural areas.
- High profile routes and crossing enhancements that will require future studies to confirm feasibility / design.
- Corridors that have been recently reconstructed and not scheduled for upgrades in the short term.
- Sidewalk connections across the City.
- Projects that require additional discussions with the Ministry of Transportation before they can proceed.

The proposed phasing is illustrated in **Maps 1a, 1b and 1c** and also summarized below in **Table 1**.

Table 1 - Phasing Overview for the Active Transportation Network

Facility Type	Short Term 0 – 5 years	Long Term 5+ years	Total KM
Off-Road Multi-Use Trail	0.1	5.5	5.5
In-Boulevard Multi-Use Path	0.0	1.6	1.6
Buffered Bike Lane	3.3	0.4	3.7
Buffered Bike Lane or two-way on-road	1.4	0.0	1.4
Bike Lane	0.4	0.0	0.4
Buffered Paved Shoulders	3.9	2.7	6.6
Paved Shoulder	2.0	10.3	12.3
Sharrows Markings	1.1	0.0	1.1
Signed Route	3.1	4.8	8.0
Candidate Locations for Pilot Projects	0.2	0.0	0.2
Candidate Locations for Traffic Calming Measures	3.6	0.0	3.6
Pedestrian Bridge	0.0	0.1	0.1
Sidewalks	0.0	14.4	14.4
Total	19.1	39.8	58.9



Map 1a.

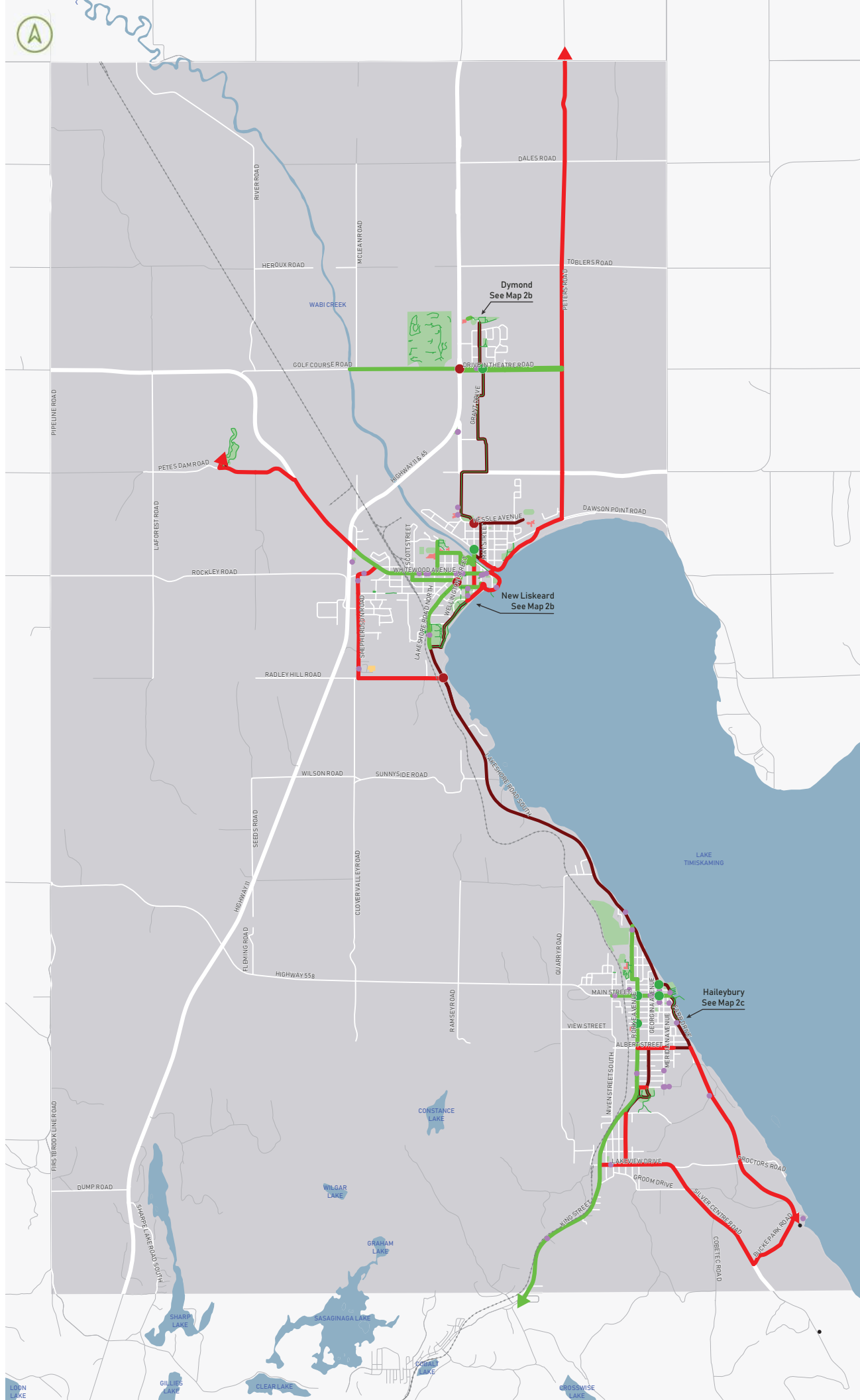
Proposed Active Transportation Phasing

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Proposed Phasing**
- Short Term (0 to 5 years)
 - Long Term (5+ years)
- Crossing Enhancements**
- Short Term Crossing Enhancement (0 to 5 years)
 - Long Term Crossing Enhancement (5+ years)
- Community Destination**
- Community Destination
- Other Features**
- Trailhead
 - Existing trail
 - STATO Trail (existing)
 - Existing sharrow
 - MTO Highway
 - Local Road
 - MNRF Road
 - Railway
 - Hospital
 - School
 - Recreation Area / Park
 - Watercourse
 - City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only,
and not for navigation.

All rights reserved. Date Published: Draft Oct 2021





Map 1b.

Proposed Active Transportation Phasing

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Proposed Phasing**
- Short Term (0 to 5 years)
 - Long Term (5+ years)
- Other Features**
- Short Term Crossing Enhancement (0 to 5 years)
 - Long Term Crossing Enhancement (5+ years)
 - Community Destination
 - Trailhead
 - Existing trail
 - STATO Trail (existing)
 - Existing sharrow
 - MTQ Highway
 - Local Road
 - MNR Road
 - Railway
 - Hospital
 - School
 - Recreation Area / Park
 - Watercourse
 - City Boundary

Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.

This map is intended for information only.
and not for navigation.

All rights reserved. Date Published: Draft Oct 2021





Map 1c.

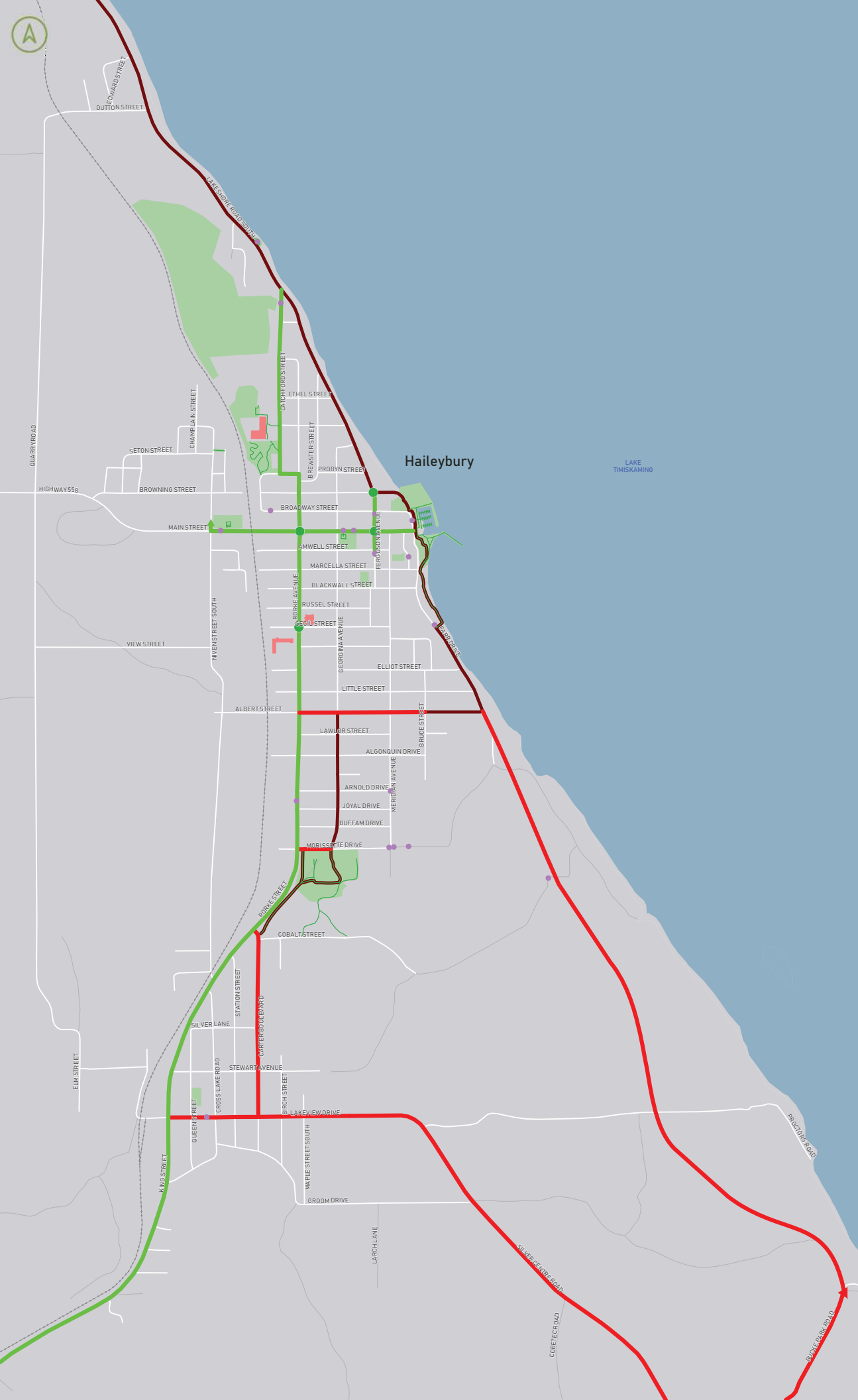
Proposed Active Transportation Phasing

CITY OF TEMISKAMING SHORES
ACTIVE TRANSPORTATION PLAN

Legend

- Proposed Phasing**
- Short Term (0 to 5 years)
 - Long Term (5+ years)
- Crossing Enhancements**
- Short Term Crossing Enhancement (0 to 5 years)
 - Long Term Crossing Enhancement (5+ years)
- Community Destination**
- Community Destination
- Other Features**
- Trailhead
 - Existing trail
 - STATO Trail (existing)
 - Existing sharrow
 - MTQ Highway
 - Local Road
 - MNR Road
 - Railway
 - Hospital
 - School
 - Recreation Area / Park
 - Watercourse
 - City Boundary

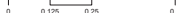
Note:
1. Route alignment for the proposed extension of the STATO Trail is based on information contained in the City's Recreation Master Plan (2020).



Produced in association with the
City of Temiskaming Shores.





This map is intended for information only.
and not for navigation.

All rights reserved. Date Published: Draft Oct 2021




In addition to the proposed phasing of the linear active transportation routes, there are 10 proposed crossing enhancements. Where possible, the proposed implementation of these enhancements is intended to be consistent with planned projects identified in the Town's capital plan and the proposed phasing of the ATP routes to capture input received from Town staff, stakeholders and the public. **Table 2** provides an overview of the suggested implementation horizons for each location where a crossing enhancement is proposed.

Table 2 - Summary of Proposed Crossing Enhancements

Location		Proposed Enhancement	Proposed Phase
1		Ferguson Avenue / Main Street Add stop signs and pavement markings	Short
2		Rorke Avenue / Main Street Closing channelized intersection and normalizing it as a standard 4 legged stop controlled intersection	Short
3		Cecil Street / Rorke Avenue Move school crossing for École Saint Croix School to the Cecil Street / Rorke Avenue intersection to align with existing sidewalks on Cecil. Alternatively, enhance the crossing at View and Rorke to a Pedestrian Crossover	Short
4		Browning Street / Ferguson Avenue Add stop signs and pavement markings, install curb extensions / bump outs	Short

Location		Proposed Enhancement	Proposed Phase	
5		STATO Trail / Hesse Avenue	Monitor current configuration of the raised crosswalk at the school and recommend a future detail design study in this intersection to improve safety and reduce conflicts	Long
6		Armstrong Street / Elm Avenue	Add bollards to provide a designated space for cyclists approaching the intersection per the direction in the Wabi River Bridge Design Appendix.	Short
7		Lakeshore Road North / Farah Avenue	Monitor for future traffic control (consider relocating stop lights from Broadwood to Farah)	Long
8		Highway 11 / Drive In Theatre Road	Recommend for active transportation consideration in future reconstruction of the road for improved safety for all users – likely a signalized crossing in partnership with MTO.	Long
9		Drive In Theatre / Grant Drive	Add stop signs and pavement markings	Short

	Location	Proposed Enhancement	Proposed Phase
10		Radley Hill Road / STATO Trail	Signalized, potential to add cycling facility with improvements
			Long

As the City moves forward with implementing the proposed active transportation network, it is recommended that staff review and confirm the proposed facility or enhancement at each location. The phasing plan should be updated annually to reflect available budgets, newly planned capital projects or changes in existing conditions, such as volume or pavement conditions.

2.1 KEY TAKEAWAYS FOR PHASING

Short Term Projects (0-5 years)

- Approximately **32%** of the network is proposed in the short term. These investments represent some of the most significant connections to close gaps in the existing transportation network in Temiskaming Shores, and will provide a high quality network of active transportation facilities connecting most of the City's major destinations within its population centres.
- Short term projects account for **7%** of the total estimated cost for the proposed network. This is largely due to the phasing of most signed bike routes and sharrows within the first five years as they are considered low investment and quick wins. These investments help to establish network connectivity on streets with lower speeds and volumes. In addition, sidewalk improvements are not included in the Short-Term phasing horizon. Sidewalks represent the single largest source of investment for the City of Temiskaming Shores emerging from this plan, largely owing to a historical backlog of sidewalk construction within the City.
- Other short-term projects include candidate locations for pilot projects and traffic calming measures for locations that require additional monitoring or studies and have been noted by City Staff, key stakeholders and residents as challenging locations. The Wabi River crossing on Armstrong Street is a notable example where a proposed two-stage left turn box is recommended as a pilot project.
- **Appendix A** includes a detailed breakdown of all routes that form part of the active transportation network for Temiskaming Shores.
- Municipal planning documents are typically updated every five to ten years, consistent with the Municipal Planning Act. As such, the ATP focus for implementation are short term projects (within the first five years). Longer term projects should be reviewed in 2027 to determine their relevance and feasibility through an ATP update process.

Long Term Projects (5+ years)

- The long-term projects for the ATP represent 93% of the estimated costs of the network and 68% of the total length of new facilities. Sidewalks account for a significant portion of this budget.
- Sidewalk improvements, additions and replacements should be captured in annual budgeting processes beginning as early as possible. Priority gaps in the sidewalk network should be closed each year.
- Routes identified in the long-term horizon should be reviewed when the plan is next updated, and at that time, staff should determine the appropriate phasing for routes based on available budgets, resources and opportunities.

2.2 PRIORITIES IN THE NETWORK

For the purposes of the Temiskaming Shores ATP, the Short-Term Active Transportation Network represents the key priorities for implementation. Developed to:

- Take advantage of planned capital works, such as the resurfacing of Rorke Ave / King Street in 2022
- Provide a complete and connected network of cycling facilities within the urban areas of Temiskaming Shores by the end of 2027 and;
- Connect the existing STATO Trail to key destinations like commercial areas, schools, transit services and employment areas;

The Short-Term Network prioritizes low-cost, high impact elements of the Active Transportation Network to help to build a stronger culture of active transportation within Temiskaming Shores. A summary of these priorities is included below in **Table 3**.

Table 3 - Summary of Priority Projects

Corridor	Proposed Facility Type and notes
Golf Course Road / Drive in Theatre Road	Traffic calming measures on Golf Course Road to reduce vehicle speeds, multipurpose paved shoulders of Drive In Theatre Road
Connection to St. Michel School at north end of Laurette Drive	Improved trail (asphalt, 3m wide)
Armstrong Street Bridge (Sharpe to Elm)	Bidirectional separated bike lanes on east side of the bridge
Niven Street North	Signed route
Dymond Avenue	Sharrows and traffic calming
Church Street	Sharrows and traffic calming

Corridor	Proposed Facility Type and notes
Sharpe Street from Armstrong Street to Wellington Street N	Sharrows and traffic calming
Paget Street N from Dymond Avenue to Spruce Avenue	Sharrows and traffic calming
Spruce Avenue from Paget Street N to Wellington Street N	Sharrows and traffic calming
Whitewood Avenue from Bedard Drive to Riverside Drive	Buffered / parking protected bike lanes
Rokeby Street from Whitewood Avenue to Farah Avenue	Signed route
Farah Avenue from Rokeby Street to Paget Street S	Signed Route
Cedar Avenue from Paget Street S to May Street S	Signed route
Wellington Street S from Cedar Avenue to Waterfront Boardwalk Trail	Signed route
Lakeshore Road N from Beach Boulevard to Whitewood Avenue	Buffered bike lanes or bidirectional separated facility on east side of the road
King Street / Rorke Street / Rorke Avenue corridor from southern City limits to Probyn Street	<p>Convert entire corridor to single lane conditions with turning lanes where necessary – reallocate additional space for paved shoulders.</p> <p>Buffered paved shoulders where width permits, paved shoulders where right of way is more constrained and buffered bike lanes from Morissette Drive to Main – signed route north of Main.</p>
Probyn Street from Rorke Avenue to Latchford Street	Signed Route
Latchford Street from Probyn Street to Lakeshore Road	Signed route

Corridor	Proposed Facility Type and notes
Main Street from Niven Street South to the Waterfront	Bike lanes from Niven to Rorke, Buffered / parking protected bike lanes from Main to Ferguson, traffic calming and signed route from Ferguson to waterfront
Ferguson Avenue from Amwell Street to Browning Street	Signed route with traffic calming measures

3 COSTING ESTIMATES

Implementing the proposed active transportation network will require funds and resources from the City and its partners. Annual funding for construction, maintenance, operation and programming should be identified in the annual budgeting process to strategically implement the active transportation network over time. The City should seek additional funding sources, such as from the Provincial or Federal government, to maximize budget efficiencies and coordination with other major projects.

High-level costing has been prepared for the proposed active transportation network. This costing is based on a set of unit prices (included as **Appendix A**) that are average rates that reflect best practices from comparable municipalities. It is recognized that the level of effort will vary on a project-by-project basis and that the price of materials will vary over time. Certain projects could require additional work and further studies as they are considered for implementation. As part of the ATP, a 15% contingency and 10% design and approvals cost have been assumed for budgeting purposes.

Table 4 presents the estimated cost to implement the active transportation network, organized by facility type and by phase. For the focus of short-term priorities, the estimated cost to implement is approximately \$1.2 million over the next five years.

Table 4 - Summary of Estimated Costs by Facility Type

Facility Type	Short-Term		Long-Term		Total	
	Length (KM)	Estimated Cost	Length (KM)	Estimated Cost	Length (KM)	Estimated Cost
Off-Road Multi-Use Trail	0.1	\$23,595	5.5	\$2,505,503	5.6	\$2,529,098
In-Boulevard Multi-Use Path	0.0	\$ -	1.6	\$739,214	1.6	\$739,214
Buffered Bike Lane	3.3	\$149,292	0.4	\$32,794	3.7	\$182,086
Buffered Bike Lane or Two-Way On-Road	1.4	\$110,038	0.0	\$ -	1.4	\$110,038
Bike Lane	0.4	\$14,574	0.0	\$ -	0.4	\$14,574
Buffered Paved Shoulders	3.9	\$227,912	2.7	\$995,516	6.6	\$1,223,428
Paved Shoulder	2.0	\$416,305	10.3	\$2,764,183	12.3	\$3,180,488
Sharrows Markings	1.1	\$15,813	0.0	\$ -	1.1	\$15,813
Signed Route	3.1	\$4,711	4.8	\$7,222	7.9	\$11,933
Candidate Locations for Pilot Projects	0.2	\$45,016	0.0	\$ -	0.2	\$45,016
Candidate Locations for Traffic Calming Measures	3.6	\$51,796	0.0	\$ -	3.6	\$51,796
Pedestrian Bridge	0.0	\$ -	0.1	\$1,950,000	0.1	\$1,950,000
Sidewalks	0.0	\$ -	14.4	\$5,389,125	14.4	\$5,389,125
Crossing Enhancement	-	\$123,000	-	\$230,000	-	\$353,000
Total	19.1	\$1,182,052	39.8	\$14,613,557	58.9	\$15,795,609

Detailed costing information is contained in **Appendix A**. It is recommended that this appendix be used as a tool by City Staff to track the progress of implementation of the network and to inform future budgeting and decision making. The intent of these estimated costs are to guide decision making, such as capital planning. The phasing and costing are not intended to be prescriptive. As part of annual budgeting processes and to supplement active transportation infrastructure in Temiskaming Shores, it is recommended that the City also consider allocating funding to support the delivery of outreach initiatives proposed in the programming chapter of the ATP.

3.1 SIDEWALK FUNDING

As identified above, the construction of new sidewalks to complete Temiskaming Shores' network of pedestrian facilities is the single largest expense identified within the ATP. The gaps in the City's sidewalk network reduce accessibility and constrain the mobility of some of the City's most vulnerable road users, including children, seniors and people with disabilities. It is imperative that the City take steps to provide a comprehensive network of well-maintained sidewalks throughout the community to make walking and wheeling easier, safer and more convenient. It is recommended that the City create an annual capital budget allocation to complete the sidewalk network over time. The City's sidewalk deficit is the result of many years of capital budget prioritization and is not likely to be solved in the short term. By allocating a consistent budget to sidewalk improvements each year, the City will incrementally improve its connectivity, slowly resulting in a network that connects all residents to their destinations.

4 PARTNERSHIPS

Implementation of the ATP will require various partnerships from several groups. Successful implementation will rely on City staff working with other levels of government and stakeholders to build, maintain and market active transportation assets to achieve the Plan's vision.

The City has a number of partners that it can rely on to support implementing the plan. With a strong active transportation community and many engaged stakeholders, the City is well positioned to use this plan to create new partnerships to build a stronger culture of active transportation. As the City's culture of active transportation grows, the City and its partners should focus efforts on marketing the City as an active transportation hub within Northern Ontario. The unique balance between access to natural landscapes and access to urban amenities is a significant competitive advantage for Temiskaming Shores, and highlighting the City's investments in active transportation can highlight its focus on providing a high quality of life to residents, and a great visitor experience to tourists. By leveraging these unique assets, the City is well positioned to be an active tourism leader in Ontario.

The City is also uniquely positioned in that Temiskaming Transit provides a well-utilized transportation service that can serve as the foundation for a more multi-modal future for the City. Temiskaming Transit has the opportunity to enhance the overall active transportation network by providing bicycle parking and benches at bus stop locations, serving the needs of pedestrians and cyclists and creating more multi-modal travel. By expanding access and enhancing comfort for users who walk or bike to connect to transit, the service also expands its own potential customer base, helping to shift the transportation paradigm within Temiskaming Shores. These partnerships would not only help to implement the ATP, but also support first-mile, last-mile travel.

A comprehensive table of proposed partners and their anticipated role is presented in **Table 5**. This list is not exhaustive and there could be new partnerships that present themselves in the future. The City should leverage any future opportunities for additional partners to support implementation of the ATP.

Table 5 - Proposed Partners and Roles

Potential Partners	Anticipated Roles							
	Planning	Design	Policies	Construction	Maintenance	Enforcement	Education	Promotion
City of Temiskaming Shores Staff (Recreation, Public Works, Transit, Planning)	●	●	●	●	●		●	●
Temiskaming Shores Active Transportation Advisory Committee	●	●			●		●	●
Temiskaming Shores Accessibility Advisory Committee	●	●			●		●	●
New Liskeard BIA and Local Businesses								●
Temiskaming Shores and Area Chamber of Commerce								●
Local organizations and advocacy groups							●	●
Ontario Provincial Police (OPP)						●	●	
Timiskaming Health Unit			●				●	●
Provincial Stakeholders	●	●	●				●	●

5 FUNDING OPTIONS

A review of internal and external funding options was conducted to identify different options available. The City is encouraged to monitor available funding opportunities within and external to the City, and to utilize the information contained within this plan to support funding applications. The following is a list of potential external funding sources that could be explored; however, they are subject to change and should be reviewed again prior to applications. It is important for the City to seek a diverse range of funding sources for the various initiatives and programs highlighted in this plan and external sources are an effective way to reduce the City's costs while being an opportunity to develop new partnerships.

Table 6 - Potential Funding Opportunities

Funding opportunities	Additional details
Federal Active Transportation Fund	For additional details regarding the Active Transportation Fund refer to: https://www.infrastructure.gc.ca/trans/active-actif-eng.html
Canada Community-Building Fund / Provincial Gas Tax	For the federal Canada Community-Building Fund program please refer to: https://www.infrastructure.gc.ca/plan/gtf-fte-eng.html For the provincial program refer to: http://www.mto.gov.on.ca/english/service-commitment/gas-tax-program.shtml
Federation of Canadian Municipalities Green Municipal Fund	For additional details regarding the Green Municipal Fund and potential funding alternatives refer to: https://fcm.ca/home/programs/green-municipal-fund.htm
Federal and Provincial Infrastructure / Stimulus Programs	For Federal Government infrastructure stimulus fund details refer to: https://www.canada.ca/en/office-infrastructure.html For Provincial Government infrastructure stimulus fund details refer to: https://www.ontario.ca/page/ministry-infrastructure
Ontario Trillium Foundation	For details regarding potential funding alternatives refer to: https://otf.ca/
Ontario Rural Economic Development Program	For details refer to: http://www.grants.gov.on.ca/GrantsPortal/en/OntarioGrants/GrantOpportunities/PRDR006918
Ontario Sport and Recreation Communities Fund	As part of the Ontario Sport and Recreation Communities Fund: https://www.ontario.ca/page/rural-economic-development-program
Tourism Economic Development and Recovery Fund	For additional details regarding the Tourism Development fund refer to: https://www.ontario.ca/page/available-funding-opportunities-ontario-government#section-26
Service Club Support	Lions, Rotary and Optimist clubs who often assist with highly visible projects at the community level.

Funding opportunities	Additional details
Corporate Environmental Funds (e.g. Shell, TD, MEC, etc.)	For example refer to: https://www.shell.ca/en_ca/sustainability/communities/funding-guidelines-process.html for Shell Canada's Social Investment Program or https://www.td.com/corporate-responsibility/fef-grant.jsp for TD's Friends of the Environment Foundation Grant
Private Citizen Donation / Bequeaths	Can also include tax receipts for donors where appropriate.

6 SUPPORTING IMPLEMENTATION

Beyond phasing and costing, there are several factors which can shape how active transportation gets rolled out from the planning stages through to implementation and operations.

6.1 POLICY CONSIDERATIONS

Policies are the framework to create top-down change in a municipality. The following are a set of policy considerations which can help facilitate change towards supportive active transportation planning and design in Temiskaming Shores.

6.1.1 PAVED SHOULDERS ON RURAL ROADS

The preferred active transportation network includes proposed signed routes on rural roads where there is existing demand for cycling, but the current road conditions (gravel surface) cannot accommodate the implementation of paved shoulders. Peters Road is the primary location where this situation occurs. Due to the current conditions, the road needs to be resurfaced to asphalt before it can be marked as a signed route. As a result, the phase for this route is long term. In other locations, most notably Radley Hill Road and Stephenson Road, paved shoulders are recommended for implementation with capital construction.

Application of signed bike routes on these routes is considered appropriate based on the current traffic volumes and speed thresholds outlined in the updated OTM Book 18. To improve safety for all road users and accommodate for additional traffic volumes in the future, however, it is recommended that when these roads are next scheduled in the City's Capital Budget for reconstruction / rehabilitation, the roadway platform should be widened, allowing the implementation of paved shoulders on both sides of the road (with a desired width of 1.5 metres) to support and provide a designated cycling facility. This would provide greater comfort and encourage more active transportation usage in rural areas. Paved shoulders can also benefit pedestrians in rural areas – as per the Highway Traffic Act, people are permitted to walk in a roadway shoulder facing the direction of oncoming traffic. The installation of paved shoulders has benefits to safety for all users, while also reducing maintenance costs and improving the lifespan of the roadways. In many cases, the long-term costs associated with implementing paved shoulders are offset by these asset management savings, making paved shoulders an investment that improves safety, demonstrates a commitment to active transportation and saves the community money in the long run.

From a municipal risk management perspective, implementing the green Bicycle Route Marker sign (on roads considered appropriate for such application) or the yellow Share the Road warning sign on roads where paved shoulders have not yet been implemented can also demonstrate the City's awareness that people are already biking on the road.

6.1.2 SPEED LIMIT EVALUATION AND REDUCTIONS

Speed differentials between people driving and people using active transportation are a key factor in determining how comfortable an active transportation facility is perceived by users to be. On corridors where active transportation facilities are being proposed, the City should consider speed limit reductions (and reductions in the design speed of those corridors) to improve safety for all users along those routes.

While Lakeshore Road is the highest profile corridor that should be considered for a reduction in speed limit (recommended for 50-60km/h to prioritize active transportation and encourage people driving to use

Highway 11), other corridors where shared facilities are being recommended such as Niven Street, Dymond Avenue, Farah Avenue, Cedar Avenue and Latchford Street could also be considered for speed limit reductions to improve conditions for active transportation.

6.1.3 NEW DEVELOPMENT AREAS

New development areas should be reviewed to identify opportunities to connect the future community to the active transportation network, particularly off-road trails within the City. This will require identifying conceptual trail linkages to the development community and ensuring their implementation at the time of development.

It is imperative that the City work with the development community to ensure that active transportation facilities and amenities are incorporated in new developments proactively and that the communities are designed in a manner that encourages safe and accessible active travel. The City should consider requiring sidewalks on one side of all new residential streets and should require sidewalks on both sides of new and reconstructed collector and arterial roads to improve the pedestrian environment within the City.

6.1.4 ZONING BY-LAW

The City is recommended to strengthen language supporting active transportation in the current zoning by-law. This can be done when a new zoning by-law is developed, or as part of a municipally initiated zoning by-law amendment(s). An amendment should focus on enhancing active transportation amenities in private developments, such as increasing the number of bicycle parking spaces as part of residential, commercial, and institutional developments, as well as building forms that accommodate the awnings and other covered-walkway structures that protect pedestrians from the elements. Modifications to the zoning by-law, like the two examples noted above, have the ability to incorporate design elements into new developments over time and create a public realm that encourages and supports active travel.

6.1.5 NEW MOBILITY IMPLICATIONS

The City's existing by-laws can be enhanced to clarify cycling operations and specifically define and provide direction on the use of electric bikes, electric scooters and power assisted bicycles. In 2020, MTO launched a five-year e-scooter pilot program allowing municipalities to pass by-laws to determine where e-scooters can operate. As part of this initiative, MTO has addressed legal definitions and operational concerns that should be reviewed prior to establishing or amending a by-law. The City could review existing by-laws and amend where appropriate to provide more clear provisions regarding permitted and prohibited uses for electric bikes, electric scooters and power assisted bicycles. Consideration could also be given to installing publicly accessible charging outlets for the charging of e-bikes and e-scooters within the City.

7 OPERATIONS AND MAINTENANCE

A key consideration when implementing the ATP is the operations and maintenance of active transportation routes and the asset management of infrastructure. Regular and appropriate maintenance of active transportation facilities can help protect the City's capital investments by maintaining the lifespan of infrastructure.

As the active transportation network expands and best practices emerge, consideration should be given to adapting maintenance practices and the level of service to address new facilities and standards such as the Province's Minimum Maintenance Standards (MMS) for Municipal Highways (O.Reg. 239/02). The MMS outlines various elements of road maintenance and operations including the frequency of road inspections, weather monitoring, ice formation on roadways, snow accumulation and sidewalk trip ledges. The MMS are non-mandatory guidelines but should be applied unless a municipality has established their own Council-approved level of service maintenance standards. If a municipality develops their own standards, it is still recommended to align with the current MMS.

Maintenance practices for active transportation facilities can include:

- Sweeping;
- Surface repairs;
- Pavement markings and signage;
- Vegetation management;
- Snow clearance / ice control; and
- Drainage improvements and drainage grates.

Clear guidance on asset management is provided in the City's Assessment Management Plan. The plan outlines level of services standards, asset management strategies and actions for trails, sidewalks and roads. It is recommended that as the City builds out their active transportation network, that the strategies outlined in the Asset Management Plan and related studies such as the Roads Condition Study and Sidewalk Condition Study, be applied.

Table 7 outlines asset management assumptions and typical service life for various elements of an active transportation network. This information is based on best practices outlined in OTM Book 18; however, it is recommended that City review this information and consider the various strategies to manage their active transportation network.

Table 7 - Asset Management Strategies
Source - OTM Book 18 Update

Type	Useful Life	Asset Management Strategies
Asphalt bikeway	25 years	<ul style="list-style-type: none"> – Minor repairs – Resurfacing – Rehabilitation – Full-depth replacement
Concrete bikeway	50 years	<ul style="list-style-type: none"> – Minor repairs – Replace deteriorating segments – Full replacement
Bridge (active transportation or motor vehicle)	25–75 years	<ul style="list-style-type: none"> – Bridge repairs – Minor rehabilitation – Full replacement
Culvert	25–50 years	<ul style="list-style-type: none"> – Culvert repair – Minor rehabilitation – Full replacement
Painted Line Markings and Symbols	1–2 years	<ul style="list-style-type: none"> – Refresh annually or depending on wear
Durable Line Markings, Symbols and Green Surface Treatments	3–7 years	<ul style="list-style-type: none"> – Depends on type, weather conditions, amount of wear, preparation of surface during application
Signage	20 years	<ul style="list-style-type: none"> – Replace damaged or faded signs
Physical separation (bollards, curbs, planters, etc.)	Until damaged	<ul style="list-style-type: none"> – Repair or replace damaged or missing bollards and other separators

7.1 WINTER MAINTENANCE

Currently, the City of Temiskaming Shores provides snow clearing on its sidewalks but does not provide any maintenance on its cycling facilities. Segments of the STATO Trail, particularly those along Lakeshore Road, are removed during the winter to provide for easier winter maintenance of the adjacent roadway surface.

As the City moves forward with additional investments in active transportation, it is recommended that winter maintenance policies be adopted to ensure that priority cycling facilities remain open and accessible all year round. A growing number of communities in Ontario have identified **priority winter cycling networks** which receive enhanced snow clearing to ensure that those routes are clear and passable, mostly aiming to achieve a comparable level of service to that which is provided on arterial roadways for automobiles. A Priority Winter Cycling Network provides a more predictable, safer route for people on bikes, providing them with the sense of confidence that their route will be clear and passable. By clearly identifying the priority routes – which should be comprised of a connected grid of high-comfort facilities that connect to the City's key destinations – The City helps to set clear expectations among people on bikes. The Priority Winter Cycling Network should start off small, potentially as a 2-year pilot project, to see what types of additional staffing resources and additional snow clearing equipment may be required. The pilot will also give the community the opportunity to experience winter maintained cycling routes and, when coupled with some of the programming recommendations contained in Chapter 4, may help to grow the City's winter cycling culture. As the pilot continues, the City can evaluate ridership and monitor the growth of winter cycling, helping to determine whether the Priority Winter Cycling Network should be expanded, maintained or discontinued in the future.

8 MONITORING AND REPORTING

A monitoring plan is an important component post-implementation to evaluate the success of a route, and to inform smarter investments through data-driven measures. Research indicates that meaningful performance measures can help to prioritize future projects and appropriately allocate resources. The following approaches are recommended to be explored by City Staff in further detail, for inclusion into the on-going workplans of monitoring for maintenance and operations staff.

8.1 MONITORING OF ACTIVE TRANSPORTATION ASSETS

As part of the successful implementation of this plan, it is recommended that supplementary monitoring efforts be undertaken by City staff to gain a better understanding of the active transportation network and how it's being used. Similar to how City staff monitor the road network for deficiencies such as potholes and broken streetlights in need of repair, bike lanes and trails also require monitoring to ensure issues are promptly addressed. Doing so ensures that active transportation facilities remain in a state of good repair and can continue to accommodate the needs of people using it.

Beyond the scope of this ATP, but raised by multiple stakeholders and members of the public during consultation, is the need for the City to develop a comprehensive inventory of the City's existing sidewalks. The poor condition of the City's sidewalks were identified as one of the key deficiencies in the City's existing efforts to promote and support active transportation, and should be remedied as new infrastructure investments are contemplated. Consider developing a sidewalk assessment to identify priority areas for improvement. An example sidewalk assessment from a comparable municipality to Temiskaming Shores can be found here: [Microsoft Word - SCA Report - Innisfail.docx \(civicweb.net\)](#)

8.2 UNDERTAKE SURVEY OF RESIDENTS

Another approach to monitoring the overall active transportation network is to conduct a survey of Temiskaming Shores residents on a regular basis. Such surveys could be carried out on an annual or bi-annual basis and ask residents about what they like and dislike about the network. The results can then be used to inform short-term actionable items that respond to the immediate needs and requests of residents, contingent on the scale and scope of the project. Surveying of residents ensures regular dialogue between City Staff and the users of the network themselves.

8.3 PROVISION OF PERMANENT DATA COLLECTION TOOL

Permanent automated data collection tools can allow City Staff to effectively monitor the active transportation network in real time and collect a significant amount of data with which to inform decision making. For the purpose of this plan, the two forms of permanent data collection include automated trail counters and intersection cameras that monitor the movement of all modes of transportation.

Automated trail counters are pieces of monitoring infrastructure that count the number of pedestrians and cyclists on an off-road trail. City staff would be able to retrieve data from the automatic trail counter to review pedestrian and cyclist data over the long-term and assess a facility's use. Alternatively, LTE and Wi-Fi enabled traffic cameras at select intersections within the City can monitor the number of pedestrians and cyclists using on-road infrastructure in real time. Both pieces of monitoring equipment will allow for better informed decision making through real-time data.

8.4 REPORT ON IMPLEMENTATION AND PROGRESS

Given the short timelines for implementation of a significant portion of the City's ATP, it is recommended that Temiskaming Shores issue annual reports detailing their progress towards achieving the goals and objectives of this Plan for the first five years of its implementation. These annual reports can highlight the new infrastructure investments that have been brought online, the ways that new programs and partnerships are reaching more residents in the community and the overall trends in transportation behaviour as the City's network of active transportation infrastructure becomes more robust. These reports would also be a good place to highlight the results of pilot projects such as the winter maintenance pilot and the pilot project protected bike lanes across the Wabi River Bridge, as well as highlighting any improvements that the City is making to its network of sidewalks.

This report can provide a powerful accountability tool for the City – it helps to build trust and awareness about how the ATP is being implemented, and what the results of the associated investments are. The report will provide an annual snapshot of the state of active transportation in Temiskaming Shores, helping to create community excitement as the culture of active transportation grows, and serving as a marketing tool to highlight how the City is playing a leadership role in becoming an active transportation leader in Northern Ontario.

9 NEXT STEPS AND RECOMMENDATIONS

The Active Transportation Plan provides the City of Temiskaming Shores with a roadmap to become one of Ontario's leading municipalities with regards to active transportation. It provides the City with a short-term, achievable path towards a complete network of walking and cycling facilities in its urban areas, all while building upon the strong partnerships that already exist to support the culture of active transportation in the City. This plan builds upon the existing momentum within the City – the investments in the STATO trail, the partnerships that deliver new programs every year and the community members who are increasingly taking to walking, cycling, and wheeling around their City. It charts a path for the City to reimagine its relationship with its public spaces, turning streets into places where increased levels of active transportation contribute to the City's vibrancy and vitality as it emerges from the COVID-19 pandemic. To help move this plan from a vision to reality, a series of recommendations have been developed to guide City leadership in moving forward with implementing this plan, in partnership with internal and external stakeholders. These recommendations include implementing the various policies, programs, and procedures that support both the implementation of physical infrastructure and the development of social infrastructure to support active transportation in Temiskaming Shores.

At its core, this Plan is a guide for the City to realize many of its broader policy goals through increased support for active transportation. Whether being done in support of economic development, quality of life, attracting tourism dollars, building a more equitable community, or ensuring that the City is a leader in environmental stewardship, investments in active transportation pay off along multiple axes that are priorities for the City's future. The fact that this Plan has been developed to align with those goals and has been guided by strong partnerships with the City's existing stakeholders helps to ensure that this Plan will be one where collaborative support will move it from vision to reality in the near future.

Moving forward, the City is encouraged to work in close partnership with key stakeholders to both implement new programs, policies, and infrastructure, as well as to promote all that Temiskaming Shores has to offer, well beyond its borders. The following table provides a summary of 21 core recommendations that City staff are encouraged to pursue as part of the broader implementation of this plan.

Recommendations
1. Incorporate the proposed active transportation network illustrated in Maps 3a, 3b, 3c, 4a and 4b as a Schedule in the City's Official Plan when next updated.
2. Reference should be made to OTM Book 18: Cycling Facilities (2021) to inform and guide the design and implementation of cycling and in-boulevard facilities.
3. Reference should be made to OTM Book 15: Pedestrian Crossings to inform and guide the design and implementation of pedestrian crossing treatments.
4. The City should continue to identify opportunities to implement active transportation routes / facilities in conjunction with capital infrastructure projects to achieve economies of scale and cost savings.

Recommendations

5. As part of the annual capital budget review process, City staff should use the ATP to inform prioritization and implementation of active transportation infrastructure.
6. As part of scheduled roadway projects and Capital budget forecasting, the City should allocate funding to construct the Short-Term Active Transportation Network (See Maps 5b and 5c) by the end of the 2027 construction season.
7. When capital reconstruction projects are scheduled for the downtown areas of Haileybury and New Liskeard, priority should be given to expanding spaces for walking, cycling and amenities by narrowing vehicle lanes and parking facilities.
8. The City should implement a 2-way protected cycle track over the Wabi River Bridge as a pilot project to close a key gap in the existing STATO Trail
9. The City should continue to explore external funding sources and partnerships to help fund implementation of the ATP.
10. The City should adopt the Trails design and amenities standards presented in this plan to improve access to the trails at Devil's Rock and Pete's Dam Parks
11. Speed limit reductions and traffic calming design measures should be implemented on roads proposed for signed bike route in the urban / built-up areas of Temiskaming Shores as well as some of the roads adjacent to the STATO Trail, especially Lakeshore Road.
12. The City should expand the mandate of the existing BFC Committee to serve as an Active Transportation Advisory Committee, considering elements of the pedestrian experience as well as the cycling experience in Temiskaming Shores
13. The City should undertake a sidewalk conditions analysis and should establish a consistent annual capital budget for the replacement and repair of existing sidewalks as well as the installation of new sidewalks in priority locations (see maps 4a and 4b)
14. The City should establish an Active Transportation Coordinator to deliver and champion the recommended outreach initiatives identified in Chapter 4.
15. The City should allocate the necessary funding to deliver the programs listed in Chapter 4 on an ongoing basis to help build a stronger culture of active transportation in Temiskaming Shores.
16. As part of scheduled roadway projects in the City's Capital Budget, consideration should be given to widening the roadway platform (where possible / feasible) and implementing paved shoulders on both sides of the road to support and provide a designated cycling facility.
17. The City should review and revise its policy regime to require sidewalks and cycling facilities in all new residential developments and to require bike parking and other end of trip facilities within the City's Zoning bylaw.
18. The City should undertake a Winter Maintenance Pilot Project to evaluate the costs and efficacy of providing winter maintenance to select cycling routes, particularly those that connect to popular destinations within the community.
19. As part of the annual review process, ensure an adequate operational / maintenance budget is provided to account for new active transportation facilities, including their maintenance and lifecycle replacement costs. The City should also review and update maintenance and

Recommendations

operations practices / level of service standards to consider the expansion of the active transportation network.

20. Acquire automated counting technology to provide City staff with real time data along active transportation corridors on pedestrian and cyclists volumes.

21. Collect data and report regularly on the implementation of the ATP, changes in transportation habits and other impacts on the community of these new investments.

Active Transportation Plan

Appendix A: Detailed Costing Breakdown



City of Temiskaming Shores
Draft November 2021



Table 1 - Active Transportation Unit Costs

This table provides an overview of the estimated unit costs for active transportation and cycling facilities, structures and crossings and other elements of an active transportation / cycling network. All unit prices exclude tax, contingency, design and approvals costs.

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	PRICE USED	COMMENTS/ASSUMPTIONS
1.0 GENERAL ACTIVE TRANSPORTATION FACILITIES					
Shared Lanes / Paved Shoulders					
1.1	Signed Bike Route in Urban or Rural Area	linear KM	\$1,000 to \$1,200	\$1,200	Price for both sides of the road, assumes one sign a minimum of every 500 metres in the direction of travel. Price assumes that signs will be mounted on an existing post. Price includes: - \$300 per sign x 4 signs (2 signs on each side of the road)
1.3	Signed Bike Route with Sharrow Lane Markings <i>Intended to supplement a signed bike route in specific locations. Not intended to be a stand-alone facility type.</i>	linear KM	\$11,600	\$11,600	Price for both sides of the road, includes route signs every 500 metres and sharrow stencils every 75 metres as per OTM Book 18 guidelines. Price includes: - \$300 per sign x 4 signs (2 signs on each side of the road) - \$400 per stencil marking x 26 (13 stencils on each side of the road)
1.4	Signed Route with Edgeline	linear KM	\$12,200	\$12,200	Price for both sides of the road, includes signs and painted edgeline (100mm solid white line). Price includes: - \$300 per sign x 4 signs (2 signs on each side of the road) - \$5.5 per metre for painted solid white line
1.5	Signed Bike Route with Paved Shoulder in conjunction with existing road reconstruction / resurfacing	linear KM	\$115,000 to \$215,000	\$215,000	1.5 metre paved shoulder on both sides of the road. Assumes cycling project pays for additional granular base, asphalt and painted line. Price may vary from \$115,000 to \$215,000 depending on work needed to improve platform. Price includes: - \$300 per sign x 4 signs (2 signs on each side of the road) - \$5.5 per metre for painted solid white line (both sides of the road)
1.6	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	linear KM	\$275,000 to \$340,000	\$300,000	1.5 metre paved shoulder + 0.5-1.0 metre paved buffer on both sides of the road. Assumes cycling project pays for additional granular base, asphalt, painted edge lines and signs (buffer zone framed by white edgelines). Price may vary from \$275,000 to \$340,000. Price includes: - \$300 per sign x 4 signs (2 signs on each side of the road) - \$5.5 per metre for painted solid white line (both sides of the road)
1.7	Addition of Rumble Strip to Existing Buffered Paved Shoulder (rural)	linear KM	\$12,000		Price for both sides. Buffer \$6 / m.
1.8	Granular Shoulder Sealing	linear KM	\$18,000		Both sides spray emulsion applied to harden the granular shoulder. This will reduce gravel on the paved portion of the shoulder and significantly reduce shoulder maintenance. Use \$9 / m.
1.9	Upgrade Granular Surface Back Road to Chip Seal Surface	linear KM	\$56,000		Price includes pulverizing existing surface with double treatment (\$6 / m ²) or tar and chip (\$2 / m ²) at 7m wide.
Conventional and Separated Bike Lanes					
1.10	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	linear KM	\$29,000	\$29,000	Price for both sides of the road, includes signs, stencils and edge line. The price assumes: - \$11,000 for painted lane line (\$5.5 per metre multiply 2 for both sides of the road) - \$10,400 for painted bike symbols (assumes \$250 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - \$2,500 for bike lane signs (assumes \$350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - \$3,900 for 'No Parking' signs (assumes \$150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used.

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	PRICE USED	COMMENTS/ASSUMPTIONS
Conventional and Separated Bike Lanes - CONT'D					
1.11	Conventional 1.5m-1.8m Bicycle Lanes through Lane Conversion from 4 lanes to 3 lanes	linear KM	\$53,000		Price for both sides. Includes grinding of existing pavement, markings, signs, painted markings. Assumes road is not be surfacing. The price assumes: - \$11,000 for painted lane line (\$5.5 per metre multiply 2 for both sides of the road) - \$10,400 for painted bike symbols (assumes \$400 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - \$2,500 for bike lane signs (assumes \$350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - \$3,900 for 'No Parking' signs (assumes \$150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used. - \$6 to \$8 per linear metre for lane line removal (soda blasting). Price varies on markings to be removed on a multi-lane roadway. Remove soda-blasting cost component if the road is being resurfaced. The cost for resurfacing to be part of resurfacing project. Price for 1.5m bike lanes on both sides of the roadway (1.5m x 2 sides = 3.0m). The price assumes: - \$14,000 for catch basins and leads (\$350 per lead x 40 catch basins per linear km) - \$360,000 for asphalt and sub-base (\$55/m ² = 120 x 1.5m BL x 1000 x 2) - \$16,000 for signs, stencils and edge line
1.12	Conventional 1.5m-1.8m Bicycle Lanes in Conjunction with a New Road, or Road Reconstruction / Widening Project	linear KM	\$390,000		The roadway project funds all other improvements.
1.13	Conventional 1.5m-1.8m Bicycle Lanes that require a road widening /reconstruction	linear KM	\$700,000		Price for both sides of the road, includes the cost for excavation, adjust catch basins, lead extensions, new curbs/driveway ramps, asphalt and sub-base, painted markings and signs. All costs associated with widening or reconstructing the road for the purposes of adding bike facilities is born by the bike project i.e. no economies of scale of adding a bike facility in conjunction with a planned
1.14	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet required	linear KM	\$49,000		Price for 1.5m bike lanes with 1m hatched buffer. The price assumes: - \$30,000 for painted lines (\$6 x 5000 metres of line paint) - \$1,000 for hatching paint (1000 metres) - \$10,400 for painted bike symbols (assumes \$400 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - \$2,500 for bike lane signs (assumes \$350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - \$3,900 for 'No Parking' signs (assumes \$150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used
1.15	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet required Includes pre-cast curbs and flexible bollards in the buffer	linear km	\$165,000		Price for 1.5m bike lanes with 1m hatched buffer (includes pre-cast curbs and flexible bollards in the buffer). The price assumes: - \$30,000 for painted lines (\$6 x 5000 metres of line paint) - \$1,000 for hatching paint (1000 metres) - \$10,400 for painted bike symbols (assumes \$400 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - \$2,500 for bike lane signs (assumes \$350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - \$3,900 for 'No Parking' signs (assumes \$150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used - \$95,000 for pre-cast concrete curbs on both sides - Assume 70% of roadway to include physical delineation (700 metres per 1 linear km): 700 metres / 1.83m curb length = 382.5 pre-cast concrete curbs - 382.5 x \$250 = \$95,000 - Assume \$125 each 1.83m long curb x 2 = \$250 per linear metre of roadway (both sides) - \$21,000 for flexible bollards - Assume 700m spacing as per pre-cast curb placement above x 2 (both sides of the road). - 700m x 2 (both sides of the road) = \$1,400 - \$1,400 x \$150 (price per bollard) = \$21,000

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	PRICE USED	COMMENTS/ASSUMPTIONS
Conventional and Separated Bike Lanes - CONT'D					
1.16	Buffered Bicycle Lane with Hatched Pavement Markings with Road Diet	linear KM	\$65,000	\$65,000	Price for 1.5m bike lanes with 1m hatched buffer. The price assumes: - \$30,000 for painted lines (\$6 x 5000 metres of line paint) - \$1,000 for hatching paint (\$1000 metres) - \$10,400 for painted bike symbols (assumes \$400 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - \$2,500 for bike lane signs (assumes \$350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - \$3,900 for 'No Parking' signs (assumes \$150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used. - \$6 to \$8 per linear metre for lane line removal (soda blasting). Price varies on markings to be removed on a multi-lane roadway.
1.17	Buffered Bicycle Lane with Hatched Pavement Markings - Assumes a Road Diet from a 4 Lane Cross-Section to a 2 Lane Cross-section with a two-way centre turn lane. Includes pre-cast curbs and flexible bollards in the buffer	linear km	\$194,620	\$194,620	Price for 1.5m bike lanes with 1m hatched buffer (includes pre-cast curbs and flexible bollards in the buffer). The price assumes: - \$48,000 for painted lines (\$6 x 8000 metres of line paint) - \$1,000 for hatching paint (1000 metres) - \$10,400 for painted bike symbols (assumes \$400 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - \$2,500 for bike lane signs (assumes \$350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - \$3,900 for 'No Parking' signs (assumes \$150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used - \$95,000 for pre-cast concrete curbs on both sides - Assume 70% of roadway to include physical delineation (700 metres per 1 linear km): 700 metres / 1.83m curb length = 382.5 pre-cast concrete curbs - 382.5 x \$250 = \$95,000 - Assume \$125 each 1.83m long curb x 2 = \$250 per linear metre of roadway (both sides) - \$21,000 for flexible bollards - Assume 700m spacing as per pre-cast curb placement above x 2 (both sides of the road). - 700m x 2 (both sides of the road) = \$1,400 - \$1,400 x \$150 (price per bollard) = \$21,000 - \$6 to \$8 per linear metre for lane line removal (soda blasting). Price varies on markings to be removed on a multi-lane roadway. Assume 1,660 metres of lane line removal for a 4 lane road: - 1000m of yellow line (centre line) per km (assume continuous line, no break at intersections) - 1 continuous dashed white line that separates 2 vehicles lanes (x2 for both sides of the road) - dashed white line: 3-3 skip pavement marking (3m long with 3m spacing) = 330m length x 2 for both sides of road = 660m
1.18	Buffered Bicycle Lane with Hatched Pavement Markings - Assumes New Road or Road Reconstruction/Widening already Planned	linear KM	\$393,000		Price for 1.5m bike lanes + 0.5m hatched buffers on both sides of the roadway (1.5m x 2 sides = 3.0m). The price assumes: - \$14,000 for catch basins and leads (\$350 per lead x 40 catch basins per linear km) - \$360,000 for asphalt and sub-base (\$55/m ² = 120 x 1.5m BL x 1000 x 2) - \$19,000 for signs, stencils and edge line The roadway project funds all other improvements.
1.19	Buffered Bicycle Lane with Hatched Pavement Markings - Retrofit / No new road reconstruction or widening is planned	linear KM	\$533,000		Price for 1.5m bike lanes + 0.5m hatched buffers on both sides of the roadway (1.5m x 2 sides = 3.0m). The price assumes: - \$14,000 for catch basins and leads (\$350 per lead x 40 catch basins per linear km) - \$360,000 for asphalt and sub-base (\$55/m ² = 120 x 1.5m BL x 1000 x 2) - \$19,000 for signs, stencils and edge line - \$140,000 for removal and replacement of curb (140 / linear metre) The roadway project funds all other improvements.
1.20	Buffered Bicycle Lane with Flex Bollards - Assumes Road Reconstruction/Widening Already Planned	linear KM	\$423,000		Price for 1.5m bike lanes + 0.5m hatched buffers + flexible bollards on both sides of the roadway (1.5m x 2 sides = 3.0m). The price assumes: - \$14,000 for catch basins and leads (\$350 per lead x 40 catch basins per linear km) - \$360,000 for asphalt and sub-base (\$55/m ² = 120 x 1.5m BL x 1000 x 2) - \$19,000 for signs, stencils and edge line - \$30,000 for flexible bollards (\$150 per bollard, spaced every 10m) The roadway project funds all other improvements.

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	PRICE USED	COMMENTS/ASSUMPTIONS
Conventional and Separated Bike Lanes - CONT'D					
1.21	Buffered Bicycle Lane with Pre-Cast Barrier - Assumes New road or Road Reconstruction/Widening Already Planned	linear KM	\$483,000		Price for 1.5m bike lanes + 0.5m hatched buffers + flexible bollards+ pre-cast and anchored curb delineators. The price assumes: - \$14,000 for catch basins and leads (\$350 per lead x 40 catch basins per linear km) - \$360,000 for asphalt and sub-base (\$55/m ² = 120 x 1.5m BL x 1000 x 2) - \$19,000 for signs, stencils and edge line - \$30,000 for flexible bollards (\$150 per bollard, spaced every 10m) - \$50,000 - \$60,000 pre-cast curb delineators (\$250 / pre-case unit 2m length + \$7.5 / pins and anchoring. Assumes 2m long x 2 = 200-250 per km depending on intersections and driveways) The roadway project funds all other improvements.
1.22	Supply and install surface mounted flexible post delineators	each	\$100 to \$150		Price depends on product, volume and supplier.
1.23	Standard precast concrete curb 178 mm high, 216 mm wide and 1.83 metre long	each	\$250		Approximately \$95,000 - \$100,000 per 1 linear kilometre. Assumes 70% of roadway to include physical delineation (700 metres per 1 linear kilometre): - 700 metres / 1.83 metres = 382.5 pre-cast concrete curbs - 382.5 x \$250 = \$95,000 Assume \$125 each 1.83m long curb x 2 = \$250 per linear metre of roadway (both sides).
1.24	Standard precast concrete curb 457 mm high, 457 mm wide and 3.05 metre long	each	\$1,380		Approximately \$315,000 - \$320,000 per 1 linear kilometre. Assumes 70% of roadway to include physical delineation (700 metres per 1 linear kilometre): - 700 metres / 3.05 metres = 229.5 pre-cast concrete curbs - 229.5 x \$1,380 = \$317,000
1.25	Standard precast concrete bullnose 457 mm high, 457 mm wide and 1.22 metre long	each	\$970		Approximately \$550,000 - \$560,000 per 1 linear kilometre. Assumes 70% of roadway to include physical delineation (700 metres per 1 linear kilometre): - 700 metres / 1.22 metres = 573.8 pre-cast concrete curbs - 573.8 x \$970 = \$556,557
Cycle Tracks					
1.26	Uni-directional Cycle Tracks: Raised and Curb Separated - In conjunction with existing road reconstruction / resurfacing project	linear KM	\$250,000 - \$500,000		Both sides. Assumes cycle track will be implemented as part of road construction. Could include minor utility / lighting pole relocations. Other components such as bike signals, bike boxes etc. are project specific and will impact unit price.
1.27	Uni-directional Cycle Tracks: Raised and Curb Separated - Retrofit Existing Roadway	linear KM	\$500,000 - \$1,200,000		Both sides. Includes construction but excludes design and signal modifications. Form of cycle track and materials as well as related components such as bike signals, upgrade/modification of signal controllers, utility/lighting pole relocations, bike boxes etc. are project specific and will impact unit price
1.28	Two Way Cycle Track - Retrofit Existing Roadway	linear KM	\$500,000 - \$800,000		One side. Includes construction but excludes design and signal modifications. Form of cycle track and materials as well as related components such as bike signals, upgrade/modification of signal controllers, utility/lighting pole relocations, bike boxes etc. are project specific and will impact unit price

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	PRICE USED	COMMENTS/ASSUMPTIONS
Active Transportation Paths and Multi-Use Trails					
1.29	Two Way Active Transportation Multi-use path within road right-of-way	linear KM	\$275,000 - \$375,000	\$375,000	3.0m wide hard surface pathway (asphalt) within road right of way (no utility relocations). Price depends of scale / complexity of project and if existing sidewalk is being removed (i.e. crushing of existing sidewalk and compacting for trail base).
1.30	Concrete Splash Strip placed within road right-of-way between Active Transportation Multi-Use Path and Roadway	m²	\$150		Colour Stamped Concrete
1.31	Hard Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in an Urban Setting (New)	linear KM	\$300,000 - \$400,000	\$375,000	3.0m wide hard surface pathway (asphalt) within park setting (normal conditions) 90mm asphalt depth. Price depends of scale / complexity of project.
1.32	Hard Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in Urban Setting (Upgrade existing granular surface)	linear KM	\$150,000 - \$225,000		Includes some new base work (25% approx.), half of the material excavated is removed from site. Price depends of scale / complexity of project.
1.33	Granular Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in Urban Setting	linear KM	\$150,000 - \$165,000		3.0m wide, compacted stone dust surface normal site conditions. Price depends of scale / complexity of project.
1.34	Granular Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in Rural Setting	linear KM	\$200,000		3.0m wide, compacted stone dust surface in complex site conditions (includes cost of clearing and grubbing). Price depends of scale / complexity of project.
1.35	Upgrade existing granular surface trail to meet 3.0m wide compacted granular trail standard	linear KM	\$75,000 - \$125,000		Includes some new base work (25% approx.) and an average of 20 regulatory signs per kilometre. Price depends of scale and existing trail conditions e.g. width, slope, location of trail, etc.
1.36	Off-Road Multi-Use Trail Outside of Road Right-of-Way on Abandoned Rail Bed	linear KM	\$80,000 - \$125,000		3.0m wide, compacted stone dust surface, includes signage along trail and gates at road crossings. Assumes ballast is still in place. Price depends of scale / complexity of project.
1.37	Granular Surfaced Multi-use Trail in a Woodland Setting	linear KM	\$175,000		2.4m wide, compacted stone dust surface. Price depends of scale / complexity of project.
1.38	Major rough grading (for multi-use pathway)	m²	\$8.00		Varies depending on a number of factors including site access, disposal location etc.
2.0 PEDESTRIAN FACILITIES					
2.1	Sidewalk	linear KM	\$300,000	\$300,000	Price for 1.5m concrete sidewalk. Include site prep., select utility relocation, minor drainage modifications / traffic control.
3.0 STRUCTURES AND CROSSINGS					
3.1	Pedestrian Bridge	each	\$1,140,000 - \$1,560,000	\$1,560,000	Cost for two prefabricated pedestrian bridge structures excluding cost for studies, design and construction administration. This will require the construction of a pier within the river channel. A 'pony truss' or 'H-section' bridge style can span up to 55m and are the most economical design choice. For larger spans, a full 'box truss' is required and can span up to 80m.
3.2	Pedestrian Boardwalk (Light-Duty)	linear m	\$1500 - \$2500		Structure on footings, 3.0m wide with railings. Price depends of scale / complexity of project.
3.3	Self weathering steel truss pedestrian / cyclist bridge	linear m	\$10,000		Price for 4.0m width bridge includes abutments
3.4	Feature Trail Bridge crossing over a valley land / highway	each	\$2,500,000 - \$4,500,000		Depends on location, length and complexity of crossing as well as architectural detail.
3.5	Metal stairs with hand railing and gutter to run rainwater	each	\$6,500		1.8m wide, galvanized steel (assumes 8ft between each landing).
3.6	Pathway Crossing of Private Entrance	each	\$1500 - \$2000		Adjustment of existing curb cuts to accommodate 3.0m multi-use pathway
3.7	Median Refuge	each	\$20,000		Average price for basic refuge with curbs, no pedestrian signals
3.8	Mid-block Crossing	each	\$150,000 - \$180,000		Average price for new mid-block crossing
3.9	Stop signs and pavement markings for crossing	each		\$6,000	Average price for stop sign and durable pavement markings per intersection
3.10	Normalize Intersection	each		\$75,000	Close existing intersection to normalize as a standard 4 legged stop controlled intersection
3.11	Move Existing School Crossing	each		\$25,000	Average price for removing existing school crossing and repainting in a new location
3.12	Future Study for Local Intersection	each		\$15,000	Average price for a design study for local intersections
3.13	Future Study for Provincial Intersection	each		\$35,000	Average price for a design study for Provincial intersections (involving one or more Provincial roads)
3.14	Addition of Bollards to Enhance Crossing	each		\$5,000	Average price for the addition of bollards per intersection or crossing
3.15	Intersection Signalization	each		\$180,000	Full signalization of intersection with potential to add cycling facility and improvements
3.16	Intersection Pedestrian / Bike Signal	each	\$80,000		Average price for intersection pedestrian signal. Assumes partial rebuild of intersection for bike signals i.e. rearrangement of ducts and poles.
3.17	At grade railway crossing	each	\$120,000		Flashing lights, motion sensing switch (C.N. estimate)
3.18	At grade railway crossing with gate	each	\$300,000		Flashing lights, motion sensing switch and automatic gate (C.N. estimate)
3.19	Below grade railway crossing	each	\$500,000 - \$750,000		3.0m wide, unlit culvert style approx. 10 m long for single elevated railway track
3.20	Multi use subway under 4 lane road	each	\$1,000,000 - \$1,200,000		Guideline price only for basic 3.3 m wide, lit.
3.21	Retaining Wall	m²	\$1,200		Face metre squared

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	PRICE USED	COMMENTS/ASSUMPTIONS
4.0 BARRIERS AND ACCESS CONTROL FOR MULTI-USE TRAILS OUTSIDE OF THE ROAD RIGHT-OF-WAY					
4.1	Lockable gate (2 per road crossing)	each	\$4,000		Heavy duty gates (e.g. equestrian supported step over gate). Price for one side of road - 2 required per road crossing. Typically only required in rural settings or city boundary areas
4.2	Metal offset gates	each	\$2,000		"P"-style park gate
4.3	Removable Bollard	each	\$500 - \$750		Basic style (e.g. 75mm diameter galvanized), with footing. Increase budget for decorative style bollards
4.4	Berming/boulders at road crossing	each	\$1,200		Price for one side of road (2 required per road crossing)
4.5	Granular parking lot at staging area (15 car capacity-gravel)	each	\$45,000		Basic granular surfaced parking area (i.e. 300mm granular B sub-base with 150mm granular A surface), with precast bumper curbs. Includes minor landscaping and site furnishings, such as garbage receptacles and bike racks.
4.6	Paige wire fencing	linear M	\$60		1.5m height with peeled wood posts
4.7	Chain link fencing	linear M	\$90 - \$110		Galvanized, 1.5m height
5.0 SIGNAGE					
5.1	Regulatory and caution Signage (off-road pathway) on new metal post	each	\$150 - \$250		300mm x 300mm metal signboard c/w metal "u" channel post
5.2	Signboards for interpretive sign	each	\$2,400		Does not include graphic design. Based on a 600mm x 900mm typical size and embedded polymer material, up to 40% less for aluminum or aluminum composite panel
5.3	Staging area kiosk	each	\$2,000 - \$10,000		Wide range provided. Price depends on design and materials selected. Does not include design and supply of signboards
5.4	Signboards for staging area kiosk sign	each	\$1,500 - \$2,000		Typical production cost, does not include graphic design (based on a 900mm x 1500mm typical size and embedded polymer material). Up to 40% less for aluminum or aluminum composite panel
5.5	Pathway directional sign	each	\$350 - \$500		Bollard / post (100mm x100mm marker), with graphics on all 4 sides
5.6	Pathway marker sign	each	\$250		Bollard / post (100mm x100mm marker), graphics on one side only
5.7	Pathway marker sign	linear KM	\$1,000		Price for both sides of the path, assumes one sign on average, per direction of travel every 0.5 km
5.8	Bike sign	each	\$200		Price for one side of road.
6.0 BICYCLE PARKING INFRASTRUCTURE					
6.1	Bicycle rack (Post and Ring style)	each	\$150 - \$250		Holds 2 bicycles , price varies depending on manufacturer (includes installation).
6.2	Bicycle rack (U style)	each	\$600		Holds 2 bicycles , price varies depending on manufacturer (includes installation).
6.3	Bicycle rack	each	\$1,800		Holds 6 bicycles, price varies depending on manufacturer (includes installation).
6.4	Bicycle Locker	each	\$3,000		Price varies depending on style and size. Does not include concrete mounting pad.
6.5	Bike Loop	each	\$2,500		Price for installation including labour and equipment. Price also includes materials e.g. two channel detector for traffic cabinet, bike loop (wire and sealant), cable to traffic cabinet, handhole and conduit.
6.6	Bicycle Corral (one parking space with bollards)	each	\$1,500 - \$2,900		Price may vary from \$1,500 (galvanized finish with the mad shield corrosion warranty) to \$2,900 (stainless finish with the mad shield corrosion warranty) for one parking space.
7.0 LIGHTING AND UTILITIES					
7.1	Pathway Lighting	per 25 m	\$5,000		Includes cabling, connection to power supply, transformers and fixtures.
7.2	Relocation of Light / Support Pole	each	\$4,000		Adjustment of pole offset (distance between pole and roadway).
7.3	Relocation of Signal Pole / Utility Box	each	\$8,000		Adjustment of pole offset (distance between pole and roadway).
8.0 PAVEMENT MARKINGS					
8.1	Sharrow Symbol	each	\$400		Price for durable paint. Sharrow symbol with green pavement marking
8.2	Bike Symbol	each	\$400		Price depends on volume
8.2	Line Painting	linear M	\$6		Price for durable paint.
8.2	Removal of Line Painting	linear M	\$3		N/A
9.0 OTHER					
9.1	Bike Box	each	\$1,500		Price may vary depending on road cross-section (e.g. two lane roadway, four lane roadway, etc.). Price includes installing a bike box on the approach of an intersection using a bike stencil and durable e.g. green surface treatment (\$250 / each). Price also include estimate to move stop-bar back to provide space for bike box.
9.2	Clearing and Grubbing	m²	\$15		
9.3	Bench	each	\$1,000 - \$2,000		Price varies depending on style and size. Does not include footing/concrete mounting pad
9.4	Safety Railings / Rubrail	linear M	\$300		1.4m height basic post and rail style
9.5	Small diameter culvert	each (6 m)	\$1,200		Price range applies to 400mm to 600mm diameter PVC or CSP culverts for drainage below trail
9.6	Flexible Bollards	each	\$110		Should be placed at 10m intervals where required. Cost depends on product type used.

- Notes:**
- Unit Prices are for functional design purposes only, include installation but exclude contingency, design and approvals costs (unless noted) and reflect 2021 dollars, based on projects in southern Ontario.
 - Estimates do not include the cost of property acquisitions, signal modifications, utility relocations, major roadside drainage works or costs associated with site-specific projects such as bridges, railway crossings, retaining walls, and stairways, unless otherwise noted.
 - Assumes typical environmental conditions and topography.
 - Applicable taxes and permit fees are additional.

Table 2 - Proposed Crossing Enhancements

This table provides an overview of the estimated costs and phasing for the proposed crossing enhancements.

ID	Existing Crossing	Proposed Enhancement	Intersection	PHASE	Total Cost
C0	4 legged, stop controlled on North, East and South approach.	Add stop signs and pavement markings	Ferguson Avenue/Main Street	Short	\$ 6,000
C1	4 legged, stop controlled on North, West and South approach. Channelized right turn on the South School crossing	Closing channelized intersection and normalizing it as a standard 4 legged stop controlled intersection	Rorke Avenue/Main Street	Short	\$ 75,000
C2	4 legged, stop controlled on East and West School crossing just north of the intersection	Move school crossing for Ecole Saint Croix School to Rorke/Cecil	Cecil St/Rorke Avenue	Short	\$ 25,000
C3	4 legged, stop controlled on East and West Steep coming down on Browning	Add stop signs and pavement markings	Browning Street/Ferguson Avenue	Short	\$ 6,000
C4	3 legged, stop controlled on Hessle No pedestrian facility to cross coming off of the STATO Trail	Monitor current configuration of the raised crosswalk at the school Recommend for future detail design study in this intersection to improve safety and reduce conflicts	STATO Trail/Hessle Avenue	Long	\$ 15,000
C5	4 legged, signalized intersection Angle and configuration difficult for cyclists to cross	Add bollards	Armstrong Street/Elm Avenue	Short	\$ 5,000
C6	3 legged, stop controlled on Farah	Monitor for future traffic control	Lakeshore Road North/Farah Avenue	Long	-
C7	4 legged, stop controlled on East and West, channelized right turns	Recommend for active transportation consideration in future reconstruction of the road for improved safety for all users	Highway 11/Drive In Theatre Road	Long	\$ 35,000
C8	3 legged, stop controlled on Grant No pedestrian facilities	Add stop signs and pavement markings	Drive In Theatre/Grant Drive	Short	\$ 6,000
C9	3 legged, stop controlled on Radley Hill Road Steep hill coming off of Radley Hill	Signalized, potential to add cycling facility with improvements	Radley Hill Road/STATO Trail	Long	\$ 180,000

Table 3 - Proposed Active Transportation Routes

This table provides a breakdown of the proposed routes, including length, phase and costing.

ID	Street	From	To	Facility	Phase	Length KM	Unit Cost	Segment Cost	Design Cost (10%)	Contingency Cost (15%)	Total Cost
1212	MAIN STREET	Rorke Avenue	Niven Street South	BL	Short	0.40	\$ 29,000	\$ 11,659	\$ 1,166	\$ 1,749	\$ 14,574
12	RORKE AVENUE	Joyal Drive	Arnold Drive	BUFF BL	Short	0.08					
15	MAIN STREET	Ferguson Avenue	Georgina Avenue	BUFF BL	Short	0.17	\$ 65,000	\$ 10,986	\$ 1,099	\$ 1,648	\$ 13,732
16	WHITEWOOD AVENUE	Golding Street	Grills Street	BUFF BL	Short	0.04	\$ 65,000	\$ 2,861	\$ 286	\$ 429	\$ 3,576
56	RIVERSIDE DRIVE	May Street	Sharpe Street	BUFF BL	Short	0.04	\$ 65,000	\$ 2,860	\$ 286	\$ 429	\$ 3,575
59	RORKE AVENUE	Algonquin Drive	Lawlor Street	BUFF BL	Short	0.09					
93	RORKE AVENUE	Arnold Drive	Algonquin Drive	BUFF BL	Short	0.16					
94	RORKE AVENUE	Albert Street	Little Street	BUFF BL	Short	0.09					
101	RORKE AVENUE	Blackwall Street	Marcella Street	BUFF BL	Short	0.09					
108	RORKE AVENUE	Russel Street	Blackwall Street	BUFF BL	Short	0.09					
143	RORKE AVENUE	Morrisette Drive	Buffam Drive	BUFF BL	Short	0.10					
179	RORKE AVENUE	Lawlor Street	Albert Street	BUFF BL	Short	0.10					
216	ARMSTRONG STREET	Whitewood Avenue	Church Street	BUFF BL	Long	0.14	\$ 65,000	\$ 8,973	\$ 897	\$ 1,346	\$ 11,216
322	RORKE AVENUE	View Street	Cecil Street	BUFF BL	Short	0.09					
348	RORKE AVENUE	Buffam Drive	Joyal Drive	BUFF BL	Short	0.08					
386	WHITEWOOD AVENUE	Paget Street	Mary Street	BUFF BL	Short	0.11	\$ 65,000	\$ 6,826	\$ 683	\$ 1,024	\$ 8,533
389	WHITEWOOD AVENUE	Nivean Street North	Maple Street North	BUFF BL	Short	0.05	\$ 65,000	\$ 2,925	\$ 293	\$ 439	\$ 3,657
441	RORKE AVENUE	Main Street	Rorke Avenue	BUFF BL	Short	0.03					
462	WHITEWOOD AVENUE	John Street	Niven Street North	BUFF BL	Short	0.12	\$ 65,000	\$ 7,671	\$ 767	\$ 1,151	\$ 9,589
602	WHITEWOOD AVENUE	Edith Street	Scott Street	BUFF BL	Short	0.14	\$ 65,000	\$ 9,101	\$ 910	\$ 1,365	\$ 11,376
607	RORKE AVENUE	Amwell Street	Main Street	BUFF BL	Short	0.06					
677	RORKE AVENUE	Little Street	Elliot Street	BUFF BL	Short	0.10					
681	MAIN STREET	Georgina Avenue	Rorke Avenue	BUFF BL	Short	0.15	\$ 65,000	\$ 9,492	\$ 949	\$ 1,424	\$ 11,865
743	ARMSTRONG STREET SOUTH	Whitewood Avenue	Cedar Street	BUFF BL	Long	0.21	\$ 65,000	\$ 13,685	\$ 1,368	\$ 2,053	\$ 17,106
745	WHITEWOOD AVENUE	Wellington Street	Paget Street	BUFF BL	Short	0.11	\$ 65,000	\$ 7,086	\$ 709	\$ 1,063	\$ 8,857
752	RORKE AVENUE	Amwell Street	Marcella Street	BUFF BL	Short	0.09					
753	ARMSTRONG STREET	Sharpe Street	Church Street	BUFF BL	Long	0.06	\$ 65,000	\$ 3,578	\$ 358	\$ 537	\$ 4,472
782	WHITEWOOD AVENUE	Mary Street	Mary Street	BUFF BL	Short	0.02	\$ 65,000	\$ 1,235	\$ 124	\$ 185	\$ 1,544
795	RORKE AVENUE	Elliot Street	View Street	BUFF BL	Short	0.10					
849	WHITEWOOD AVENUE	Armstrong Street	Wellington Street	BUFF BL	Short	0.11	\$ 65,000	\$ 6,826	\$ 683	\$ 1,024	\$ 8,532
862	WHITEWOOD AVENUE	Regina Street	Glen Road	BUFF BL	Short	0.05	\$ 65,000	\$ 3,202	\$ 320	\$ 480	\$ 4,002
893	WHITEWOOD AVENUE	Mary Street	John Street	BUFF BL	Short	0.12	\$ 65,000	\$ 7,800	\$ 780	\$ 1,170	\$ 9,750
925	WHITEWOOD AVENUE	Scott Street	Rockeby Street	BUFF BL	Short	0.03	\$ 65,000	\$ 1,885	\$ 189	\$ 283	\$ 2,357
936	WHITEWOOD AVENUE	Grill Street	Regina Street	BUFF BL	Short	0.15	\$ 65,000	\$ 9,555	\$ 956	\$ 1,433	\$ 11,944
971	WHITEWOOD AVENUE	Maple Street North	Edith Street	BUFF BL	Short	0.18	\$ 65,000	\$ 11,505	\$ 1,151	\$ 1,726	\$ 14,382
978	WHITEWOOD AVENUE	May Street	Armstrong Street South	BUFF BL	Short	0.11	\$ 65,000	\$ 7,151	\$ 715	\$ 1,073	\$ 8,939
985	WHITEWOOD AVENUE	Jaffray Street	Golding Street	BUFF BL	Short	0.10	\$ 65,000	\$ 6,500	\$ 650	\$ 975	\$ 8,125
989	RORKE AVENUE	Cecil Street	Russel Street	BUFF BL	Short	0.09					
1013	WHITEWOOD AVENUE	Rockeby Street	Jaffray Street	BUFF BL	Short	0.06	\$ 65,000	\$ 3,966	\$ 397	\$ 595	\$ 4,957
241	LAKESHORE ROAD NORTH	Beach Boulevard	Melville Street	BUFF BL OR 2WAY 1SIDE	Short	0.38	\$ 65,000	\$ 24,389	\$ 2,439	\$ 3,658	\$ 30,486
469	LAKESHORE ROAD NORTH	Cedar Avenue	Wedgewood Avenue	BUFF BL OR 2WAY 1SIDE	Short	0.17	\$ 65,000	\$ 11,191	\$ 1,119	\$ 1,679	\$ 13,989
479	LAKESHORE ROAD NORTH	Melville Street	Montgomery Avenue	BUFF BL OR 2WAY 1SIDE	Short	0.15	\$ 65,000	\$ 9,527	\$ 953	\$ 1,429	\$ 11,909
807	PAGET STREET	Whitewood Avenue	Farah Avenue	BUFF BL OR 2WAY 1SIDE	Short	0.15	\$ 65,000	\$ 10,034	\$ 1,003	\$ 1,505	\$ 12,543
1292	LAKESHORE ROAD NORTH	Bay Street	Montgomery Avenue	BUFF BL OR 2WAY 1SIDE	Short	0.19	\$ 65,000	\$ 12,309	\$ 1,231	\$ 1,846	\$ 15,386
1293	LAKESHORE ROAD NORTH	Wedgewood Avenue	Broadwood Avenue	BUFF BL OR 2WAY 1SIDE	Short	0.17	\$ 65,000	\$ 10,853	\$ 1,085	\$ 1,628	\$ 13,566
1304	LAKESHORE ROAD NORTH	Market Street	Bay Street	BUFF BL OR 2WAY 1SIDE	Short	0.15	\$ 65,000	\$ 9,728	\$ 973	\$ 1,459	\$ 12,160
24	HIGHWAY 65	Bedard Drive	Bedard Drive	BUFF PS	Short	0.04	\$ 300,000	\$ 13,151	\$ 1,315	\$ 1,973	\$ 16,439
104	KING STREET	Cross Lake Road	Niven Street South	Buff PS	Short	0.06					
340	HIGHWAY 65	Bedard Drive	Highway 65	BUFF PS	Long	1.45	\$ 300,000	\$ 434,318	\$ 43,432	\$ 65,148	\$ 542,898
424	WHITEWOOD AVENUE	Glen Road	High Street	BUFF PS	Short	0.18	\$ 300,000	\$ 52,723	\$ 5,272	\$ 7,908	\$ 65,903
532	KING STREET	4th Street	South of 4th Street	Buff PS	Short	0.03					
554	KING STREET	South of 4th Street	North of Louise Street	Buff PS	Short	0.63					
569	KING STREET	North of Louise Street	Louise Street	Buff PS	Short	0.82					
707	KING STREET	Crosslake Road	Steward Avenue	Buff PS	Short	0.41					
749	KING STREET	Station Street	Niven Street South	Buff PS	Short	0.13					
762	KING STREET	4th Street	3rd Street	Buff PS	Short	0.14					
804	KING STREET	2nd Street	3rd Street	Buff PS	Short	0.12					
814	KING STREET	Groom Drive	Lakeview Drive	Buff PS	Short	0.30					
819	WHITEWOOD AVENUE	High Street	Bedard Drive	BUFF PS	Short	0.39	\$ 300,000	\$ 116,456	\$ 11,646	\$ 17,468	\$ 145,570
848	PETES DAM ROAD	Highway 65	West of Highway 65	BUFF PS	Long	0.69	\$ 300,000	\$ 206,896	\$ 20,690	\$ 31,034	\$ 258,620
970	KING STREET	2nd Street	1st Street	Buff PS	Short	0.11					
974	KING STREET	1st Street	Groom Drive	Buff PS	Short	0.21					

ID	Street	From	To	Facility	Phase	Length KM	Unit Cost	Segment Cost	Design Cost (10%)	Contingency Cost (15%)	Total Cost
991	KING STREET	Lakeview Drive	Stewart Avenue	Buff PS	Short	0.21					
1008	KING STREET	Carter Boulevard	Station Street	Buff PS	Short	0.16					
1347	PETES DAM ROAD	West of Highway 65	Petes Dam Trail	BUFF PS	Long	0.52	\$ 300,000	\$ 155,199	\$ 15,520	\$ 23,280	\$ 193,998
14	MORISSETTE DRIVE	Georgina Avenue	Rorke Street	MUP	Long	0.15	\$ 375,000	\$ 57,256	\$ 5,726	\$ 8,588	\$ 71,570
405	ALBERT STREET	Georgina Avenue	Rorke Avenue	MUP	Long	0.17	\$ 375,000	\$ 64,886	\$ 6,489	\$ 9,733	\$ 81,107
597	CARTER BOULEVARD	Cobalt Street	King Street	MUP	Long	0.06	\$ 375,000	\$ 22,137	\$ 2,214	\$ 3,320	\$ 27,671
731	ALBERT STREET	Meridian Avenue	Georgina Avenue	MUP	Long	0.24	\$ 375,000	\$ 89,270	\$ 8,927	\$ 13,390	\$ 111,587
851	CARTER BOULEVARD	Lakeview Drive	Stewart Avenue	MUP	Long	0.21	\$ 375,000	\$ 77,639	\$ 7,764	\$ 11,646	\$ 97,049
904	CARTER BOULEVARD	Stewart Avenue	Silver Lane	MUP	Long	0.20	\$ 375,000	\$ 73,536	\$ 7,354	\$ 11,030	\$ 91,920
1011	CARTER BOULEVARD	Silver Lake	Cobalt Street	MUP	Long	0.39	\$ 375,000	\$ 147,380	\$ 14,738	\$ 22,107	\$ 184,224
1034	ALBERT STREET	Bruce Street	Meridian Avenue	MUP	Long	0.16	\$ 375,000	\$ 59,269	\$ 5,927	\$ 8,890	\$ 74,086
1348	Dymond Recreation Park Trail	School	Dymond Recreation Park	OFF RD MUT	Short	0.05	\$ 375,000	\$ 18,876	\$ 1,888	\$ 2,831	\$ 23,595
964	ARMSTRONG STREET	Wellington Street	Beavis Terrace	PILOT PROJECT	Short	0.19	\$ 194,620	\$ 36,012	\$ 3,601	\$ 5,402	\$ 45,016
1430	Proposed Pedestrian Bridge	STATO Trail	Murray Street	Proposed Pedestrian Bridge	Long	0.09	\$ 1,560,000	\$ 1,560,000	\$ 156,000	\$ 234,000	\$ 1,950,000
47	LAKEVIEW DRIVE	Crosslake Road	Queen Street	PS	Long	0.11	\$ 215,000	\$ 23,869	\$ 2,387	\$ 3,580	\$ 29,836
48	SHEPHERDSON ROAD	Helmer Pedersen Drive	Bolger Avenue	PS	Long	0.09	\$ 215,000	\$ 20,215	\$ 2,021	\$ 3,032	\$ 25,268
157	LAKEVIEW DRIVE	Birch Street	Carter Boulevard	PS	Long	0.11	\$ 215,000	\$ 22,584	\$ 2,258	\$ 3,388	\$ 28,230
203	LAKEVIEW DRIVE	Carter Boulevard	Station Street	PS	Long	0.11	\$ 215,000	\$ 22,794	\$ 2,279	\$ 3,419	\$ 28,492
221	SHEPHERDSON ROAD	South of Barr Avenue	Barr Avenue	PS	Long	0.29	\$ 215,000	\$ 62,554	\$ 6,255	\$ 9,383	\$ 78,193
232	LAKEVIEW DRIVE	East of Maple Street South	Maple Street South	PS	Long	0.21	\$ 215,000	\$ 44,661	\$ 4,466	\$ 6,699	\$ 55,826
238	PETERS ROAD	Highway 65	Drive In Theatre Road	PS	Long	1.65	\$ 215,000	\$ 354,595	\$ 35,459	\$ 53,189	\$ 443,243
278	RORKE STREET	South of Morissette Drive	Morissette Drive	PS	Short	0.22					
285	PETERS ROAD	Dawson Point Road	Red Fox Avenue	PS	Long	0.11	\$ 215,000	\$ 23,188	\$ 2,319	\$ 3,478	\$ 28,985
319	HIGH STREET	Whitewood Avenue	Douglas Street	PS	Long	0.34	\$ 215,000	\$ 73,685	\$ 7,368	\$ 11,053	\$ 92,106
354	SILVER CENTRE ROAD	Bucke Parkroad	Cobetec Road	PS	Long	0.98	\$ 215,000	\$ 211,086	\$ 21,109	\$ 31,663	\$ 263,857
378	RADLEY HILL ROAD	Lakeshore Road North	Roseneath Avenue	PS	Long	0.26	\$ 215,000	\$ 55,862	\$ 5,586	\$ 8,379	\$ 69,828
385	SHEPHERDSON ROAD	North of Radley Hill Road	North of Radley Hill Road	PS	Long	0.19	\$ 215,000	\$ 41,036	\$ 4,104	\$ 6,155	\$ 51,295
501	SHEPHERDSON ROAD	Barr Avenue	Helmer Pedersen Drive	PS	Long	0.29	\$ 215,000	\$ 61,760	\$ 6,176	\$ 9,264	\$ 77,200
503	SHEPHERDSON ROAD	Broadwood Avenue	Bolger Avenue	PS	Long	0.24	\$ 215,000	\$ 51,615	\$ 5,161	\$ 7,742	\$ 64,519
504	PETERS ROAD	Highway 65	Red Fox Avenue	PS	Long	0.61	\$ 215,000	\$ 130,785	\$ 13,078	\$ 19,618	\$ 163,481
549	SILVER CENTRE ROAD	South of Groom Drive	Groom Drive	PS	Long	0.61	\$ 215,000	\$ 131,185	\$ 13,118	\$ 19,678	\$ 163,981
555	SHEPHERDSON ROAD	North of Radley Hill Road	Radley Hill Road	PS	Long	0.10	\$ 215,000	\$ 20,531	\$ 2,053	\$ 3,080	\$ 25,664
558	LAKEVIEW DRIVE	Proctors Road	East of Maple Street South	PS	Long	0.35	\$ 215,000	\$ 74,675	\$ 7,467	\$ 11,201	\$ 93,344
568	SHEPHERDSON ROAD	Barr Avenue	North of Radley Hill Road	PS	Long	0.13	\$ 215,000	\$ 28,535	\$ 2,853	\$ 4,280	\$ 35,669
574	SHEPHERDSON ROAD	Broadwood Avenue	Douglas Street	PS	Long	0.28	\$ 215,000	\$ 61,000	\$ 6,100	\$ 9,150	\$ 76,249
589	SILVER CENTRE ROAD	Groom Drive	Proctors Road	PS	Long	0.40	\$ 215,000	\$ 86,109	\$ 8,611	\$ 12,916	\$ 107,636
739	LAKEVIEW DRIVE	Maple Street South	Birch Street	PS	Long	0.10	\$ 215,000	\$ 21,725	\$ 2,172	\$ 3,259	\$ 27,156
766	RADLEY HILL ROAD	West of Roseneath Avenue	Shepherdson Road	PS	Long	1.04	\$ 215,000	\$ 223,060	\$ 22,306	\$ 33,459	\$ 278,825
767	LAKEVIEW DRIVE	Lakeview Drive	King Street	PS	Long	0.10	\$ 215,000	\$ 21,934	\$ 2,193	\$ 3,290	\$ 27,418
794	BUCKE PARK ROAD	STATO Trail	Silver Centre Road	PS	Long	1.06	\$ 215,000	\$ 227,274	\$ 22,727	\$ 34,091	\$ 284,092
799	LAKEVIEW DRIVE	Station Street	Crosslake Road	PS	Long	0.09	\$ 215,000	\$ 18,932	\$ 1,893	\$ 2,840	\$ 23,665
846	RORKE STREET	North of Carter Boulevard	Carter Boulevard	PS	Short	0.20					
897	DAWSON POINT ROAD	Peters Road	STATO Trail	PS	Long	0.41	\$ 215,000	\$ 88,004	\$ 8,800	\$ 13,201	\$ 110,006
946	RADLEY HILL ROAD	West of Roseneath Avenue	Roseneath Avenue	PS	Long	0.04	\$ 215,000	\$ 8,095	\$ 809	\$ 1,214	\$ 10,119
1429	Drive In Theatre Road	Peters Road	St Joseph's Court	PS	Short	0.89	\$ 215,000	\$ 192,260	\$ 19,226	\$ 28,839	\$ 240,325
1432	Drive In Theatre Road	St Joseph's Court	Highway 11	PS	Short	0.65	\$ 215,000	\$ 140,784	\$ 14,078	\$ 21,118	\$ 175,980
277	DYMOND AVENUE	Dymond Avenue	Mary Street	SH	Short	0.16	\$ 11,600	\$ 1,812	\$ 181	\$ 272	\$ 2,264
724	CHURCH STREET	Wellington Street	Paget Street	SH	Short	0.14	\$ 11,600	\$ 1,568	\$ 157	\$ 235	\$ 1,961
830	PAGET STREET	Spruce Street	Church Street	SH	Short	0.12	\$ 11,600	\$ 1,380	\$ 138	\$ 207	\$ 1,726
865	WELLINGTON STREET	Armstrong Street	Church Street	SH	Short	0.17	\$ 11,600	\$ 1,995	\$ 199	\$ 299	\$ 2,494
881	CHURCH STREET	Armstrong Street	Wellington Street	SH	Short	0.13	\$ 11,600	\$ 1,451	\$ 145	\$ 218	\$ 1,814
920	SPRUCE STREET	Wellington Street	Paget Street	SH	Short	0.11	\$ 11,600	\$ 1,253	\$ 125	\$ 188	\$ 1,566
949	WELLINGTON STREET	Church Street	Spruce Street	SH	Short	0.04	\$ 11,600	\$ 452	\$ 45	\$ 68	\$ 566
952	DYMOND AVENUE	Mary Street	John Street	SH	Short	0.12	\$ 11,600	\$ 1,381	\$ 138	\$ 207	\$ 1,726
1017	DYMOND AVENUE	John Street	Niven Street North	SH	Short	0.12	\$ 11,600	\$ 1,357	\$ 136	\$ 204	\$ 1,697
1352	Farr Drive	Main Street	Farr Drive	Sidewalk	Long	0.07	\$ 300,000	\$ 19,985	\$ 1,998	\$ 2,998	\$ 24,981
1353	Meridian Avenue	Main Street	South of Amwell Street	Sidewalk	Long	0.10	\$ 300,000	\$ 28,681	\$ 2,868	\$ 4,302	\$ 35,852
1354	Ferguson Avenue	South of Amwell Street	Marcella Street	Sidewalk	Long	0.06	\$ 300,000	\$ 16,830	\$ 1,683	\$ 2,525	\$ 21,038
1355	Browning Street	Lakeshore Road South	West of Lakeshore Road South	Sidewalk	Long	0.02	\$ 300,000	\$ 6,809	\$ 681	\$ 1,021	\$ 8,512
1356	Browning Street	Ferguson Avenue	Georgina Avenue	Sidewalk	Long	0.15	\$ 300,000	\$ 45,762	\$ 4,576	\$ 6,864	\$ 57,203
1357	Broadway Street	Broadway Street	Browning Street	Sidewalk	Long	0.13	\$ 300,000	\$ 38,726	\$ 3,873	\$ 5,809	\$ 48,408
1358	Probyn Street	Latchford Street	Browning Street	Sidewalk	Long	0.15	\$ 300,000	\$ 45,663	\$ 4,566	\$ 6,849	\$ 57,079
1359	Amwell Street	Ferguson Avenue	Georgina Avenue	Sidewalk	Long	0.16	\$ 300,000	\$ 47,530	\$ 4,753	\$ 7,129	\$ 59,412
1360	Marcella Street	Georgina Avenue	Rorke Avenue	Sidewalk	Long	0.15	\$ 300,000	\$ 44,664	\$ 4,466	\$ 6,700	\$ 55,830
1361	Rorke Avenue	South of Main Street	Amwell Street	Sidewalk	Long	0.04	\$ 300,000	\$ 12,455	\$ 1,245	\$ 1,868	\$ 15,569
1362	Rorke Avenue	Marcella Street	Blackwall Street	Sidewalk	Long	0.08	\$ 300,000	\$ 23,003	\$ 2,300	\$ 3,450	\$ 28,754
1363	Sutherland Way	Russel Street	Blackwall Street	Sidewalk	Long	0.07	\$ 300,000	\$ 21,872	\$ 2,187	\$ 3,281	\$ 27,340

ID	Street	From	To	Facility	Phase	Length KM	Unit Cost	Segment Cost	Design Cost (10%)	Contingency Cost (15%)	Total Cost
1364	Russel Street	Georgina Avenue	Rorke Avenue	Sidewalk	Long	0.15	\$ 300,000	\$ 46,454	\$ 4,645	\$ 6,968	\$ 58,068
1365	Cecil Street	Rorke Avenue	Georgina Avenue	Sidewalk	Long	0.16	\$ 300,000	\$ 46,589	\$ 4,659	\$ 6,988	\$ 58,237
1366	Rorke Avenue	Blackwall Street	Russel Street	Sidewalk	Long	0.09	\$ 300,000	\$ 28,331	\$ 2,833	\$ 4,250	\$ 35,414
1367	Sutherland Way	Cecil Street	Russel Street	Sidewalk	Long	0.07	\$ 300,000	\$ 22,434	\$ 2,243	\$ 3,365	\$ 28,043
1368	Blackwall Street	Meridian Avenue	Sutherland Way	Sidewalk	Long	0.07	\$ 300,000	\$ 21,431	\$ 2,143	\$ 3,215	\$ 26,789
1369	Marcella Street	Ferguson Avenue	Meridian Avenue	Sidewalk	Long	0.05	\$ 300,000	\$ 15,206	\$ 1,521	\$ 2,281	\$ 19,008
1370	Ferguson Avenue	Marcella Street	Blackwall Street	Sidewalk	Long	0.08	\$ 300,000	\$ 22,865	\$ 2,287	\$ 3,430	\$ 28,582
1371	Farr Drive	Farr Drive	Marcella Street	Sidewalk	Long	0.30	\$ 300,000	\$ 88,932	\$ 8,893	\$ 13,340	\$ 111,165
1372	Farr Drive	Farr Drive	Marcella Street	Sidewalk	Long	0.29	\$ 300,000	\$ 86,690	\$ 8,669	\$ 13,004	\$ 108,363
1373	Marcella Street	Farr Drive	Meridian Avenue	Sidewalk	Long	0.11	\$ 300,000	\$ 33,678	\$ 3,368	\$ 5,052	\$ 42,098
1374	Blackwall Street	Farr Drive	Meridian Avenue	Sidewalk	Long	0.11	\$ 300,000	\$ 31,736	\$ 3,174	\$ 4,760	\$ 39,669
1375	Blackwall Street	Farr Drive	Meridian Avenue	Sidewalk	Long	0.10	\$ 300,000	\$ 31,401	\$ 3,140	\$ 4,710	\$ 39,252
1376	Leslie Mcfarlane Way	Marcella Street	Main Street	Sidewalk	Long	0.17	\$ 300,000	\$ 50,314	\$ 5,031	\$ 7,547	\$ 62,892
1377	Little Street	Georgina Avenue	Rorke Avenue	Sidewalk	Long	0.14	\$ 300,000	\$ 41,190	\$ 4,119	\$ 6,179	\$ 51,488
1378	Rorke Avenue	Little Street	View Street	Sidewalk	Long	0.20	\$ 300,000	\$ 60,217	\$ 6,022	\$ 9,032	\$ 75,271
1379	Rorke Avenue	South of Little Street	North of Albert Street	Sidewalk	Long	0.05	\$ 300,000	\$ 14,175	\$ 1,418	\$ 2,126	\$ 17,719
1380	Albert Street	Bruce Street	Rorke Avenue	Sidewalk	Long	0.56	\$ 300,000	\$ 168,143	\$ 16,814	\$ 25,221	\$ 210,178
1381	Little Street	West of Meridian Avenue	Georgina Avenue	Sidewalk	Long	0.16	\$ 300,000	\$ 48,137	\$ 4,814	\$ 7,220	\$ 60,171
1382	Meridian Avenue	Cecil Street	Elliot Street	Sidewalk	Long	0.18	\$ 300,000	\$ 54,590	\$ 5,459	\$ 8,189	\$ 68,238
1383	Meridian Avenue	Albert Street	Elliot Street	Sidewalk	Long	0.17	\$ 300,000	\$ 51,907	\$ 5,191	\$ 7,786	\$ 64,883
1384	Meridian Avenue	Little Street	Albert Street	Sidewalk	Long	0.08	\$ 300,000	\$ 22,889	\$ 2,289	\$ 3,433	\$ 28,611
1385	Georgina Avenue	Little Street	Morissette Drive	Sidewalk	Long	0.71	\$ 300,000	\$ 213,809	\$ 21,381	\$ 32,071	\$ 267,261
1386	Cecil Street	Meridian Avenue	Georgina Avenue	Sidewalk	Long	0.22	\$ 300,000	\$ 65,965	\$ 6,596	\$ 9,895	\$ 82,456
1387	Lakeshore Road South	North of Browning Street	Browning Street	Sidewalk	Long	0.04	\$ 300,000	\$ 11,957	\$ 1,196	\$ 1,794	\$ 14,947
1388	Georgina Avenue	West of Lakeshore Road South	West of Lakeshore Road South	Sidewalk	Long	0.03	\$ 300,000	\$ 8,107	\$ 811	\$ 1,216	\$ 10,133
1389	Georgina Avenue	Lakeshore Road South	West of Lakeshore Road South	Sidewalk	Long	0.07	\$ 300,000	\$ 22,055	\$ 2,206	\$ 3,308	\$ 27,569
1390	Florence Street	Lathford Street	Rorke Avenue	Sidewalk	Long	0.08	\$ 300,000	\$ 22,627	\$ 2,263	\$ 3,394	\$ 28,284
1391	Foster Street	East of Lathford Street	Lathford Street	Sidewalk	Long	0.08	\$ 300,000	\$ 22,502	\$ 2,250	\$ 3,375	\$ 28,128
1392	Lakeshore Road South	North of Brewster Street	Brewster Street	Sidewalk	Long	0.02	\$ 300,000	\$ 7,321	\$ 732	\$ 1,098	\$ 9,151
1393	Rorke Avenue	Probyn Street	Florence Street	Sidewalk	Long	0.20	\$ 300,000	\$ 61,332	\$ 6,133	\$ 9,200	\$ 76,665
1394	Lathford Street	South of Lakeshore Road South	Lakeshore Road South	Sidewalk	Long	0.10	\$ 300,000	\$ 29,929	\$ 2,993	\$ 4,489	\$ 37,411
1395	Lakeshore Road North	Beach Boulevard	South of Market Street	Sidewalk	Long	0.81	\$ 300,000	\$ 242,953	\$ 24,295	\$ 36,443	\$ 303,692
1396	Market Street	East of Lakeshore Road North	Lakeshore Road North	Sidewalk	Long	0.04	\$ 300,000	\$ 10,720	\$ 1,072	\$ 1,608	\$ 13,400
1397	Whitewood Avenue	Farah Avenue	Rockeby Street	Sidewalk	Long	0.09	\$ 300,000	\$ 27,312	\$ 2,731	\$ 4,097	\$ 34,140
1398	Maple Street North	Farah Avenue	McCamus Avenue	Sidewalk	Long	0.09	\$ 300,000	\$ 28,318	\$ 2,832	\$ 4,248	\$ 35,398
1399	John Street	Whitewood Avenue	Farah Avenue	Sidewalk	Long	0.09	\$ 300,000	\$ 28,491	\$ 2,849	\$ 4,274	\$ 35,614
1400	Maple Street North	Whitewood Avenue	Farah Avenue	Sidewalk	Long	0.11	\$ 300,000	\$ 34,249	\$ 3,425	\$ 5,137	\$ 42,811
1401	Rockeby Street	West of Edith Street	Farah Avenue	Sidewalk	Long	0.14	\$ 300,000	\$ 41,750	\$ 4,175	\$ 6,262	\$ 52,187
1402	Rockeby Street	West of Edith Street	Jaffray Street	Sidewalk	Long	0.26	\$ 300,000	\$ 77,458	\$ 7,746	\$ 11,619	\$ 96,822
1403	Edith Street	Farah Avenue	McCamus Avenue	Sidewalk	Long	0.10	\$ 300,000	\$ 29,806	\$ 2,981	\$ 4,471	\$ 37,257
1404	Edith Street	Broadwood Avenue	McCamus Avenue	Sidewalk	Long	0.11	\$ 300,000	\$ 33,593	\$ 3,359	\$ 5,039	\$ 41,991
1405	Broadwood Avenue	Lakeshore Road North	Davidson Street	Sidewalk	Long	0.21	\$ 300,000	\$ 63,713	\$ 6,371	\$ 9,557	\$ 79,642
1406	Maple Street North	South of McCamus Avenue	North of Broadwood Avenue	Sidewalk	Long	0.05	\$ 300,000	\$ 13,518	\$ 1,352	\$ 2,028	\$ 16,898
1407	McCamus Avenue	Dymond Crescent	East of Maple Street North	Sidewalk	Long	0.08	\$ 300,000	\$ 22,566	\$ 2,257	\$ 3,385	\$ 28,208
1408	Dymond Crescent	South of McCamus Avenue	Farah Avenue	Sidewalk	Long	0.23	\$ 300,000	\$ 69,150	\$ 6,915	\$ 10,372	\$ 86,437
1409	Market Street	Cedar Avenue	Wedgewood Avenue	Sidewalk	Long	0.15	\$ 300,000	\$ 46,395	\$ 4,640	\$ 6,959	\$ 57,994
1410	Cedar Avenue	West of Wellington Street	East of Paget Street	Sidewalk	Long	0.08	\$ 300,000	\$ 23,263	\$ 2,326	\$ 3,489	\$ 29,079
1411	Cedar Avenue	Armstrong Street South	Wellington Street	Sidewalk	Long	0.09	\$ 300,000	\$ 27,269	\$ 2,727	\$ 4,090	\$ 34,087
1412	Wellington Street	STATO Trail	Cedar Avenue	Sidewalk	Long	0.19	\$ 300,000	\$ 55,643	\$ 5,564	\$ 8,346	\$ 69,554
1413	Whitewood Avenue	Golding Street	Glen Road	Sidewalk	Long	0.27	\$ 300,000	\$ 79,633	\$ 7,963	\$ 11,945	\$ 99,541
1414	Mary Street	Whitewood Avenue	Farah Avenue	Sidewalk	Long	0.09	\$ 300,000	\$ 26,988	\$ 2,699	\$ 4,048	\$ 33,735
1415	Riverside Drive	East of Sharpe Street	West of Sharpe Street	Sidewalk	Long	0.08	\$ 300,000	\$ 24,029	\$ 2,403	\$ 3,604	\$ 30,037
1416	Oak Avenue	Oak Ave Park	Katherine Street	Sidewalk	Long	0.13	\$ 300,000	\$ 39,515	\$ 3,951	\$ 5,927	\$ 49,393
1417	Elm Avenue	West of Katherine Street	Katherine Street	Sidewalk	Long	0.05	\$ 300,000	\$ 15,876	\$ 1,588	\$ 2,381	\$ 19,845
1418	Elm Avenue	East of May Street	May Street	Sidewalk	Long	0.06	\$ 300,000	\$ 16,619	\$ 1,662	\$ 2,493	\$ 20,774
1419	May Street	Elm Avenue	Murray Street	Sidewalk	Long	0.13	\$ 300,000	\$ 40,397	\$ 4,040	\$ 6,060	\$ 50,496
1420	Algonquin Drive	Bruce Street	Rorke Avenue	Sidewalk	Long	0.55	\$ 300,000	\$ 165,728	\$ 16,573	\$ 24,859	\$ 207,159
1421	Bruce Street	Albert Street	End of Bruce Street	Sidewalk	Long	0.30	\$ 300,000	\$ 90,538	\$ 9,054	\$ 13,581	\$ 113,172
1422	Rebecca Street	Elm Avenue	Hessle Avenue	Sidewalk	Long	0.41	\$ 300,000	\$ 123,593	\$ 12,359	\$ 18,539	\$ 154,491
1423	Scott Street	Birch Drive	Whitewood Avenue	Sidewalk	Long	0.49	\$ 300,000	\$ 146,845	\$ 14,684	\$ 22,027	\$ 183,556
1424	Birch Drive	Niven Street North	Scott Street	Sidewalk	Long	0.39	\$ 300,000	\$ 117,833	\$ 11,783	\$ 17,675	\$ 147,291
1425	Brewster Street	Ethel Street	Lakeshore Road South	Sidewalk	Long	0.10	\$ 300,000	\$ 29,668	\$ 2,967	\$ 4,450	\$ 37,085
1426	Brewster Street	Probyn Street	Rorke Avenue	Sidewalk	Long	0.11	\$ 300,000	\$ 32,277	\$ 3,228	\$ 4,842	\$ 40,346
1427	Florence Street	Brewster Street	Rorke Avenue	Sidewalk	Long	0.08	\$ 300,000	\$ 22,582	\$ 2,258	\$ 3,387	\$ 28,228
1428	Crystal Crescent	Drive In Theatre Road	Raymond Street	Sidewalk	Long	0.88	\$ 300,000	\$ 264,693	\$ 26,469	\$ 39,704	\$ 330,867
1431	Raymond Street	Crystal Crescent	Drive In Theatre Road	Sidewalk	Long	0.57	\$ 300,000	\$ 171,794	\$ 17,179	\$ 25,769	\$ 214,742
1433	Crystal Crescent	Drive In Theatre Road	Raymond Street	Sidewalk	Long	0.18	\$ 300,000	\$ 53,114	\$ 5,311	\$ 7,967	\$ 66,393

ID	Street	From	To	Facility	Phase	Length KM	Unit Cost	Segment Cost	Design Cost (10%)	Contingency Cost (15%)	Total Cost
1434	Georgina Avenue	South of Amwell Street	Marcella Street	Sidewalk	Long	0.05	\$ 300,000	\$ 14,717	\$ 1,472	\$ 2,208	\$ 18,396
1435	Marcella Street	Ferguson Avenue	Meridian Avenue	Sidewalk	Long	0.05	\$ 300,000	\$ 15,940	\$ 1,594	\$ 2,391	\$ 19,925
1436	Blackwall Street	Meridian Avenue	Ferguson Avenue	Sidewalk	Long	0.05	\$ 300,000	\$ 15,835	\$ 1,583	\$ 2,375	\$ 19,793
1437	Probyn Street	Rorke Avenue	Latchford Street	Sidewalk	Long	0.07	\$ 300,000	\$ 22,012	\$ 2,201	\$ 3,302	\$ 27,515
1438	Elm Avenue	West of May Street	May Street	Sidewalk	Long	0.05	\$ 300,000	\$ 14,134	\$ 1,413	\$ 2,120	\$ 17,668
1439	Cedar Avenue	Lakeshore Road North	Market Street	Sidewalk	Long	0.08	\$ 300,000	\$ 25,334	\$ 2,533	\$ 3,800	\$ 31,667
1440	Wedgewood Avenue	Market Street	Lakeshore Road North	Sidewalk	Long	0.09	\$ 300,000	\$ 27,088	\$ 2,709	\$ 4,063	\$ 33,860
1441	Farah Avenue	Lakeshore Road North	Dymond Crescent	Sidewalk	Long	0.11	\$ 300,000	\$ 33,461	\$ 3,346	\$ 5,019	\$ 41,826
38	LATCHFORD STREET	Foster Street	Temiskaming Street	SR	Short	0.17	\$ 1,200	\$ 200	\$ 20	\$ 30	\$ 251
63	CEDAR AVENUE	Paget Street	Paget Street	SR	Short	0.03	\$ 1,200	\$ 30	\$ 3	\$ 5	\$ 38
69	PROBYN STREET	Rorke Avenue	Latchford Street	SR	Short	0.09	\$ 1,200	\$ 103	\$ 10	\$ 15	\$ 128
190	CEDAR AVENUE	Paget Street	Lakeshore Road North	SR	Short	0.07	\$ 1,200	\$ 86	\$ 9	\$ 13	\$ 107
202	FARAH AVENUE	Paget Street	Mary Street	SR	Short	0.06	\$ 1,200	\$ 77	\$ 8	\$ 12	\$ 96
240	NIVEN STREET NORTH	Dymond Avenue	Birch Drive	SR	Short	0.18	\$ 1,200	\$ 212	\$ 21	\$ 32	\$ 266
351	LATCHFORD STREET	Lakeshore Road South	Temiskaming Street	SR	Short	0.15	\$ 1,200	\$ 178	\$ 18	\$ 27	\$ 222
371	PETERS ROAD	Toblers Road	Dive In Theatre Road	SR	Long	1.61	\$ 1,200	\$ 1,930	\$ 193	\$ 289	\$ 2,412
399	ROCKEY STREET	Farah Avenue	Whitewood Avenue	SR	Short	0.10	\$ 1,200	\$ 125	\$ 12	\$ 19	\$ 156
421	LATCHFORD STREET	Probyn Street	Florence Street	SR	Short	0.22	\$ 1,200	\$ 263	\$ 26	\$ 39	\$ 329
449	PETERS ROAD	Toblers Road	Dales Road	SR	Long	1.63	\$ 1,200	\$ 1,951	\$ 195	\$ 293	\$ 2,439
512	LATCHFORD STREET	Florence Street	Ethels Street	SR	Short	0.12	\$ 1,200	\$ 149	\$ 15	\$ 22	\$ 186
522	PETERS ROAD	Dales Road	Uno Park Road	SR	Long	1.58	\$ 1,200	\$ 1,897	\$ 190	\$ 284	\$ 2,371
651	RORKE AVENUE	Browning Street	Brewster Street	SR	Short	0.05	\$ 1,200	\$ 65	\$ 6	\$ 10	\$ 81
697	FARAH AVENUE	Maple Street North	Edith Street	SR	Short	0.18	\$ 1,200	\$ 212	\$ 21	\$ 32	\$ 266
711	NIVEN STREET NORTH	Dymond Avenue	Spruce Street	SR	Short	0.16	\$ 1,200	\$ 188	\$ 19	\$ 28	\$ 236
720	FARAH AVENUE	Edith Street	Rockeby Street	SR	Short	0.17	\$ 1,200	\$ 204	\$ 20	\$ 31	\$ 255
728	FARAH AVENUE	John Street	Maple Street North	SR	Short	0.16	\$ 1,200	\$ 192	\$ 19	\$ 29	\$ 240
808	RORKE AVENUE	Main Street	Broadway Street	SR	Short	0.09	\$ 1,200	\$ 109	\$ 11	\$ 16	\$ 137
836	CEDAR AVENUE	Armstrong Street South	Wellington Street	SR	Short	0.11	\$ 1,200	\$ 131	\$ 13	\$ 20	\$ 163
876	CEDAR AVENUE	Wellington Street	Paget Street	SR	Short	0.10	\$ 1,200	\$ 119	\$ 12	\$ 18	\$ 149
886	LATCHFORD STREET	Ethel Street	Foster Street	SR	Short	0.18	\$ 1,200	\$ 210	\$ 21	\$ 32	\$ 263
892	RORKE AVENUE	Browning Street	Broadway Street	SR	Short	0.08	\$ 1,200	\$ 98	\$ 10	\$ 15	\$ 123
901	RORKE AVENUE	Brewster Street	Probyn Street	SR	Short	0.03	\$ 1,200	\$ 38	\$ 4	\$ 6	\$ 48
972	NIVEN STREET NORTH	Whitewood Avenue	Spruce Street	SR	Short	0.17	\$ 1,200	\$ 199	\$ 20	\$ 30	\$ 249
1004	FARAH AVENUE	Mary Street	Dymond Crescent	SR	Short	0.06	\$ 1,200	\$ 77	\$ 8	\$ 12	\$ 96
1009	FARAH AVENUE	Dymond Crescent	John Street	SR	Short	0.08	\$ 1,200	\$ 92	\$ 9	\$ 14	\$ 116
1046	CEDAR AVENUE	Riverside Drive	Armstrong Street South	SR	Short	0.16	\$ 1,200	\$ 187	\$ 19	\$ 28	\$ 234
1349	WELLINGTON STREET	Wellington Street	Cedar Avenue	SR	Short	0.19	\$ 1,200	\$ 223	\$ 22	\$ 33	\$ 278
864	MURRAY STREET	Rebecca Street	May Street	STATO	Long	0.14	\$ 194,620	\$ 26,975	\$ 2,697	\$ 4,046	\$ 33,718
1350	MURRAY STREET	Katherine Street	Rebecca Street	STATO	Long	0.11	\$ 194,620	\$ 21,498	\$ 2,150	\$ 3,225	\$ 26,872
S0	STATO Trail	Albert Street	Bucke Park Road	STATO	Long	3.22	\$ 375,000	\$ 1,208,421	\$ 120,842	\$ 181,263	\$ 1,510,527
S3	STATO Trail	South of Cedar Avenue	South of Wellington Street	STATO	Long	0.30	\$ 375,000	\$ 112,136	\$ 11,214	\$ 16,820	\$ 140,170
S4	STATO Trail	South of Cedar Avenue	Riverside Place Park	STATO	Long	0.69	\$ 375,000	\$ 259,602	\$ 25,960	\$ 38,940	\$ 324,502
S5	STATO Trail	New Liskeard Spur Line	New Liskeard Spur Line	STATO	Long	0.01	\$ 375,000	\$ 4,221	\$ 422	\$ 633	\$ 5,276
S6	STATO Trail	Katherine Street	Dawson Point Road	STATO	Long	0.99	\$ 375,000	\$ 371,550	\$ 37,155	\$ 55,733	\$ 464,438
159	MAIN STREET	Meridian Avenue	Ferguson Avenue	Traffic calming	Short	0.07	\$ 11,600	\$ 812	\$ 81	\$ 122	\$ 1,015
196	DRIVE IN THEATRE ROAD	Crystal Crescent	Grant Drive	Traffic calming	Short	0.20	\$ 11,600	\$ 2,263	\$ 226	\$ 339	\$ 2,829
280	DRIVE IN THEATRE ROAD	St Josephs Court	Crystal Crescent	Traffic calming	Short	0.15	\$ 11,600	\$ 1,766	\$ 177	\$ 265	\$ 2,208
502	GOLF COURSE ROAD	Highway 11	Mclean Road	Traffic calming	Short	1.54	\$ 11,600	\$ 17,914	\$ 1,791	\$ 2,687	\$ 22,392
685	MAIN STREET	Leslie McFarlane Way	Meridian Avenue	Traffic calming	Short	0.06	\$ 11,600	\$ 740	\$ 74	\$ 111	\$ 925
695	FERGUSON AVENUE	Main Street	Amwell Street	Traffic calming	Short	0.08	\$ 11,600	\$ 975	\$ 98	\$ 146	\$ 1,219
700	DRIVE IN THEATRE ROAD	Laurette Street	Raymond Street	Traffic calming	Short	0.11	\$ 11,600	\$ 1,265	\$ 126	\$ 190	\$ 1,581
717	MAIN STREET	Farr Drive	Leslie McFarlane Way	Traffic calming	Short	0.04	\$ 11,600	\$ 504	\$ 50	\$ 76	\$ 630
792	FERGUSON AVENUE	Farr Drive	Browning Street	Traffic calming	Short	0.09	\$ 11,600	\$ 997	\$ 100	\$ 150	\$ 1,247
860	FERGUSON AVENUE	Main Street	Farr Drive	Traffic calming	Short	0.09	\$ 11,600	\$ 1,056	\$ 106	\$ 158	\$ 1,320
966	DRIVE IN THEATRE ROAD	Raymond Street	Highway 11	Traffic calming	Short	0.13	\$ 11,600	\$ 1,544	\$ 154	\$ 232	\$ 1,930
995	DRIVE IN THEATRE ROAD	Peters Road	St Josephs Court	Traffic calming	Short	0.90	\$ 11,600	\$ 10,395	\$ 1,040	\$ 1,559	\$ 12,994
1346	GOLF COURSE ROAD	Mclean Road	Wabi Creek	Traffic calming	Short	0.10	\$ 11,600	\$ 1,207	\$ 121	\$ 181	\$ 1,509

Table 4 - Summary of Proposed AT Network

This table provides a summary of the proposed active transportation and crossing enhancements as part of the Temiskaming Shores network.

Facility Type	Short-Term		Long-Term		Total	
	Length (KM)	Estimated Cost	Length (KM)	Estimated Cost	Length (KM)	Estimated Cost
Off-Road Multi-Use Trail	0.1	\$23,595	5.5	\$2,505,503	5.6	\$2,529,098
In-Boulevard Multi-Use Path	0	0	1.6	\$739,214	1.6	\$739,214
Buffered Bike Lane	3.3	\$149,292	0.4	\$32,794	3.7	\$182,086
Buffered Bike Lane or Two-Way On-Road	1.4	\$110,038	0	0	1.4	\$110,038
Bike Lane	0.4	\$14,574	0	0	0.4	\$14,574
Buffered Paved Shoulders	3.9	\$227,912	2.7	\$995,516	6.6	\$1,223,428
Paved Shoulder	2	\$416,305	10.3	\$2,764,183	12.3	\$3,180,488
Sharrows Markings	1.1	\$15,813	0	0	1.1	\$15,813
Signed Route	3.1	\$4,711	4.8	\$7,222	7.9	\$11,933
Candidate Locations for Pilot Projects	0.2	\$45,016	0	0	0.2	\$45,016
Candidate Locations for Traffic Calming Measures	3.6	\$51,796	0	0	3.6	\$51,796
Pedestrian Bridge	0	0	0.1	\$1,950,000	0.1	\$1,950,000
Sidewalks	0	0	14.4	\$5,389,125	14.4	\$5,389,125
Crossing Enhancement	-	\$123,000	-	\$230,000	-	\$353,000
Total	19.1	\$1,182,052	39.8	\$14,613,557	58.9	\$1,432,814

Solicitor General

Office of the Solicitor General

25 Grosvenor Street, 18th Floor
Toronto ON M7A 1Y6
Tel: 416 326-5000
Toll Free: 1-866-517-0571
SOLGEN.Correspondence@ontario.ca

Solliciteur général

Bureau du solliciteur général

25, rue Grosvenor, 18^e étage
Toronto ON M7A 1Y6
Tél. : 416 326-5000
Sans frais : 1-866-517-0571
SOLGEN.Correspondence@ontario.ca



132-2021-4188

By email

October 14, 2021

Dear Head of Council/Chief Administrative Officer/Municipal Clerk:

On behalf of the Ministry of the Solicitor General, I want to thank all municipalities, together with their multi-sectoral partners, that have taken steps towards developing, adopting and implementing their local community safety and well-being (CSWB) plans.

As you know, the ministry extended the deadline for the completion and adoption of CSWB plans to July 1, 2021, to provide municipalities with an additional six months from the original deadline of January 1, 2021. Since then, we have received an overwhelming response from municipalities regarding their CSWB planning progress. This includes the submission of completed and interim plans and status updates. To date, of the 372 municipalities required to prepare and adopt a CSWB plan, 95 per cent (356 municipalities) have plans that are completed or in progress.

The development and completion of these plans demonstrates municipal leadership and commitment to proactively addressing crime and complex social issues facing your communities. Municipalities are best positioned to work with local partners to develop effective community strategies and programs and create sustainable communities that respond to local needs and conditions.

At this time, we are encouraging municipalities who have not already done so, to please submit their completed CSWB plan or provide an update on their CSWB planning status to the ministry via the following email address: SOLGEN.Correspondence@ontario.ca. Additionally, as a reminder, municipalities are required to publish their completed plans online within 30 days of adoption.

As you may be aware, under the *Police Services Act*, the Solicitor General has the power to enforce the CSWB planning requirements by appointing a CSWB planner to any municipalities that repeatedly and intentionally fail to complete a plan, at the municipality's expense. However, our government recognizes that municipalities are currently facing unprecedented circumstances in their communities due to the on-going impact of COVID-19. We also understand that some municipalities may experience delays in their planning and engagement processes as a result of the pandemic.

Ministry staff will continue to look for ways to support our municipal partners to ensure they are able to meet their legislative requirements for CSWB planning. Where possible, municipalities are encouraged to explore alternative and innovative approaches to continue on-going planning efforts, such as through virtual engagement (e.g., webinars, teleconferences, online surveys, etc.).

Municipalities are also encouraged to continue to work with respective police services, local multi-sectoral partners, and community members on the development and implementation of local CSWB plans. Localized, community-driven collaboration remains key to the success of CSWB planning, given the focus on creating workable solutions that are grounded in and tailored to individual community needs and features.

If you have any questions about CSWB planning, please contact Shamitha Devakandan, Community Safety Analyst, Public Safety Division, at Shamitha.Devakandan@ontario.ca.

I greatly appreciate your continued efforts as we move forward on this modernized approach to CSWB together. It is by working together that we can truly build safer and stronger communities in Ontario.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Jones', with a stylized flourish at the end.

Sylvia Jones
Solicitor General

**Ministry of Transportation
Agencies Oversight & Partnership
Division**
Municipal Programs Branch
Strategic Investments Office
777 Bay Street, 30th Floor
Toronto ON M7A 2J8
Tel : 416-585-7347

**Ministère des Transports
Division de la surveillance des organismes
et des partenariats**
Direction des programmes municipaux
Bureau des investissements stratégiques
777 rue Bay, 30^e étage
Toronto ON M7A 2J8
Tel: 416-585-7347

MEMORANDUM TO : All Gas Tax funding recipients
All Safe Restart Agreement (SRA) funding recipients

FROM : James Pearce
Director, Municipal Programs Branch
Ministry of Transportation

DATE : November 5, 2021

SUBJECT : Fall Economic Statement

The province released the 2021 Fall Economic Statement (FES) on November 4, 2021. This statement included an important announcement on municipal transit funding, and I am pleased to provide you with some preliminary details.

The Province has announced \$345M in one-time additional funding to address the impacts of COVID-19 on the Gas Tax program, as well as anticipated pressures in Phase 3 of the Safe Restart Agreement.

Gas Tax Program

The COVID-19 pandemic impacted gasoline sales in 2020-21. As a result, the funding envelope for the 2021-22 Gas Tax program year is \$258M, a reduction of approximately \$120M (approximately 32%) from the prior year's envelope.

The one-time additional funding announced through the FES will restore the funding envelope to the levels of the 2020-21 program year. This funding will help stabilize 2021-22 program allocations as the province continues its COVID-19 recovery and transit systems begin to build back their ridership levels.

MTO will outline additional program details, including specific municipal allocations, as part of the rollout of the 2021-22 Gas Tax program. The program launch is expected in late 2021 or early 2022.

Fare and Service Integration

MTO will be adding conditions to the Gas Tax program guidelines for selected municipalities that will promote improved regional fare and service integration in and around the Greater Toronto and Hamilton Area (GTHA).

Further details will be announced with the launch of the 2021-22 Gas Tax program. In the meantime, please contact Megan Chochla, Systems Optimization Policy Branch (megan.chochla@ontario.ca) for further information.

Safe Restart Agreement Funding

The province has heard municipal transit stakeholders express a desire to access unused Phase 1 & 2 funds to address anticipated Phase 3 pressures. As part of this announcement, up to \$225 million in unused Phase 1 & 2 funds will now be available as a one-time Phase 3 top-up based on reported actuals.

Similar to Phase 1, any municipality that experiences financial impacts in excess of their Phase 3 allocation will receive a top-up.

MTO will be providing additional details on the Phase 3 SRA top-up in the coming weeks, including details on how the funding can be accessed and the associated reporting requirements.

My team is available if you have any questions on any of the above. You can reach the Gas Tax team at MTO-PGT@ontario.ca, and the SRA team at MTO-COVID_Transit_Funding@ontario.ca.

Thank you, and I look forward to our continued collaboration.

Sincerely,

James Pearce
Director, Municipal Programs Branch
Agency Oversight and Partnerships Division
Ministry of Transportation
437-218-1788

November 8, 2021

Re: Item for Discussion – Request for Action Related to “Renovictions” (Councillor, C. Wilson)

At its meeting of October 20, 2021, the Council of the Corporation of the Town of Bracebridge ratified motion 21-GC-251, regarding Request for Action Related to “Renovictions”, as follows:

“WHEREAS “Renovictions” happen when a landlord evicts a tenant by claiming they will complete major renovations (or demolish the unit or convert it to commercial use);

AND WHEREAS Citizens and communities are hurt by these unscrupulous practices which can and does directly impact the affordable housing crisis, as well as inflict damage (both financially and mentally) particularly on our most vulnerable citizens;

NOW THEREFORE BE IT RESOLVED THAT the Council of the Corporation of the Town of Bracebridge request that the Government of Ontario take additional and meaningful steps to address the ever-increasing problem of “Renovictions” in The Province of Ontario;

AND FURTHER THAT this resolution be sent to other Municipalities in Ontario for their consideration and endorsement.”

In accordance with Council's direction, I am forwarding you a copy of the resolution for you reference.

Please do not hesitate to contact me if I can provide any additional clarification in this regard.

Yours truly,



Lori McDonald
Director of Corporate Services/Clerk

1000 Taylor Court
Bracebridge, ON
P1L 1R6 Canada

telephone: (705) 645-5264
corporate services and finance fax: (705) 645-1262
public works fax: (705) 645-7525
planning & development fax: (705) 645-4209



**Canadian Mental
Health Association**

**Association canadienne
pour la santé mentale**
Cochrane-Timiskaming

National Addictions Awareness Week

CMHA Ontario will join with the Canadian Centre on Substance Abuse (CCSA) and addiction prevention, treatment, and recovery organizations across the country to mark National Addictions Awareness Week (NAAW). National Addictions Awareness Week highlights solutions to help address harms related to alcohol and other drugs. It provides an opportunity for people in Canada to learn more about prevention, to talk about treatment and recovery, and to bring forward solutions for change.

The theme for this year's National Addictions Awareness Week, in coordination with the theme for CCSA's Issues of Substance conference, is **Driving Change Together**.

Substance use is a complex, far-reaching, and consequential issue. COVID-19 is making the substance use landscape in Canada even more complex. It takes a wide range of perspectives and collective efforts to drive the needed change to shape a brighter future for people who use substances. Addiction workers, mental health workers, healthcare professionals, researchers, policy makers, knowledge brokers and people with lived and living experience of substance use and their families will come together with their passion and ideas during National Addictions Awareness Week and during the conference to **Drive Change Together**.

This year's theme, **Drive Change Together**, celebrates community partnerships and initiatives that work together to create positive, lasting change within our communities. Because we know we are nothing without our community partnerships, the CMHA-CT will honor a local business, organization, or person for their contribution to addictions and mental health of the community.

Get involved. Please visit our Facebook, Instagram, and Twitter accounts for detailed information regarding local events and initiatives, and visit www.cmhact.ca for info and tools about mental health and addiction services.



RESOLUTION NO. 21-247

Moved by: Marc Dupuis
Seconded by: Steve Brousseau

WHEREAS the government of Ontario recently announced the continued postponement of the province-wide assessment update for the 2022 and 2023 taxation years, and;

WHEREAS this means that property values will continue to be based on the January 1, 2016 valuation date until at least 2024, and;

WHEREAS the Municipality of Mattice – Val Côté is aware of the important increase in property values throughout the province and within its own jurisdiction and;

WHEREAS the continued postponement of property valuation translates into a significant loss of taxation revenue for Municipalities;

NOW THEREFORE BE IT RESOLVED THAT Council for the Municipality of Mattice – Val Côté urges the government of Ontario to reconsider its decision and to direct MPAC to proceed with a province-wide assessment update in order for Ontario Municipalities to be able to collect property taxes based upon actual property values, and;

BE IT FURTHER RESOLVED THAT a copy of this resolution be forwarded to the Premier of Ontario, to MPAC, to AMO, to all Ontario municipalities and to our federal and provincial government representatives, Carol Hughes and Guy Bourgouin.

- CARRIED -

I, Guylaine Coulombe, CAO/Clerk of the Municipality of Mattice – Val Côté, do hereby certify this to be a true and complete copy of Resolution 21-247, passed by the Council of the Municipality of Mattice – Val Côté at its meeting held the 8th day of November 2021.

DATED at Mattice, Ontario
This 10th day of November 2021


Guylaine Coulombe

1. CALL TO ORDER

Meeting called to order at 2:40 p.m.

2. ROLL CALL

PRESENT:	<p>Mayor Carman Kidd Councillor Jesse Foley (left meeting at 3:30 pm) Councillor Patricia Hewitt Chris Oslund, City Manager Matt Bahm, Director of Recreation Paul Cobb, Public Appointee Maria McLean, Public Appointee Jamie Dabner, Public Appointee Kelly Conlin, Deputy Clerk (Committee Secretary) Steve Burnett, Manager of Environmental Services (9b only)</p>
REGRETS:	

3. REVIEW OF REVISIONS OR DELETIONS TO AGENDA

None

4. DISCLOSURE OF PECUNIARY INTEREST AND GENERAL NATURE

None

5. APPROVAL OF AGENDA

Recommendation CCC-2021-004

Moved by: Councillor Jesse Foley

Be it resolved that:

The Climate Change Committee agenda for the September 28, 2021 meeting be approved as printed.

CARRIED

6. REVIEW AND ADOPTION OF PREVIOUS MINUTES

Recommendation CCC-2021-005

Moved by: Jamie Dabner

Be it resolved that:

The Climate Change Committee minutes for the September 2, 2021 meeting be approved as presented.

CARRIED

7. CORRESPONDENCE

8. UNFINISHED BUSINESS

9. NEW BUSINESS

a) Review of Greenhouse Gas Reduction Plan (completed by VIP Energy Services)

The Committee previously reviewed the Greenhouse Gas Reduction Plan, which was completed in 2015. The Committee felt that the emission targets contained in the plan were minimal and that more could be done to reduce in our community. The Committee would be interested in targeting more of the high energy use facilities such as arenas, water/wastewater treatment plants, etc, and access into government funding to assist with the capital costs of making these facilities efficient.

b) New Liskeard Landfill

Steve Burnett attended the meeting to provide the Committee with a background and current status of the re-opening plan for the New Liskeard landfill, detailing the process the City has gone through in order to apply for the Environmental Compliance Approval (ECA) for this location. It is anticipated that the ECA will be finalized in early 2022. The Committee inquired about carbon capture at this location; to which Steve advised is not a requirement due to the size of the landfill.

c) Target Measures

Staff presented a slide of target measures for the Committee to consider. The goals of the Committee would be to determine the emissions reduction targets, develop and implement a local-scaled action plan, and then ensure the monitoring and reporting on any outcomes from the plan. Staff provided the baseline emissions that were identified as part of the Greenhouse Gas Reduction Plan.

10. NEXT MEETING

The next meeting for the Climate Change Committee will be on October 26, 2021 @ 2:30 p.m.

11. ADJOURNMENT

Recommendation CCC-2021-006

Moved by: Mayor Carman Kidd

Be it resolved that:

The Climate Change Committee meeting is adjourned at 4:04 p.m.

CARRIED

1.0 CALL TO ORDER

The meeting convened at 7:00p.m.

2.0 ROLL CALL**Community Representatives**

- ☐ Darlene Bowen – Chair (NOFIA)
- ☒ Chuck Durrant–Vice Chair (TSACC)
- ☐ Dalton Potter (Temfund)
- ☐ Cherie Stanger (TFN)
- ☒ John Bernstein (STCFDC)
- ☒ Tom Cambridge
- ☒ Hugo Rivet

City Representatives

- ☒ Carman Kidd
- ☒ Jeff Laferriere
- ☒ Mike McArthur
- ☒ Chris Oslund- Secretary/Treasurer

Staff Resources

- ☐ Shelly Zubyck
- ☒ James Franks

3.0 REVIEW OF REVISIONS OR DELETIONS TO AGENDA

None

4.0 APPROVAL OF AGENDA

Resolution: TSDC-2021-009

Moved by: Hugo

Seconded by: John

To accept the Temiskaming Shores Development Corporation Agenda as presented

Carried

5.0 DISCLOSURE OF PECUNIARY INTEREST AND GENERAL NATURE

None

6.0 REVIEW AND ADOPTION OF MINUTES

Review of Minutes from June 28th, 2021

Resolution: TSDC-2021-010

Moved by:

Seconded by:

To approve the previous minutes as presented/amended.

As the Minutes were not available, the motion was deferred to the next meeting.

7.0 DELEGATIONS

Dan Taché to present on potential development on New Liskeard's waterfront. He discussed options to develop all or part of the New Liskeard waterfront as well as opportunities to develop affordable housing on municipal land if lands could be made available for that purpose at a reduced rate.

8.0 COMMUNICATIONS

- 8.1 Letter of Intent – NL Waterfront Development 2021

9.0 UNFINISHED BUSINESS

- 9.1 CannAssist Project – Staff provided an update stating that no new contact has been made in several years, so this project will be removed from further agendas until such time that the company resurfaces.
- 9.2 TIME Ltd. Land Purchase – Chris Oslund declared a conflict, left the room and did not participate in the discussion.
Staff provided an update that the land appraisal was being completed this week and that TIME Ltd. wished to purchase additional land from the Haileybury Heritage Museum to facilitate a large expansion of their business. Staff are coordinating meetings between the parties to see if HHM can find another location to enable TIME Ltd. to purchase their current site for expansion.
- 9.3 Canada Meat Group Abattoir – staff provided an update that although meetings had been set up with potential financing partners, a deal could not be reached. Nothing further has moved on this project, so it will be removed from the agenda until new information arises.

10.0 NEW BUSINESS

- 10.1 Economic Update Q3, 2021
Resolution: TSDC-2021-011
Moved by: Hugo
Seconded by: Jeff
To approve the Q3, 2021 Economic Update as presented.

Carried

10.2 TSDC Draft 2022 Budget
Resolution: TSDC-2021-012

Moved by: Mike
Seconded by: John

The Temiskaming Shores Development Corporation supports the draft 2022 Economic Development budget presented.

Carried

It was recommended that staff contact The Temiskaming Foundation to see if they might provide funding to support the translation needs of local service providers.

10.3 Municipal Accommodation Tax
Resolution: TSDC-2021-013

Moved by: Hugo
Seconded by: Jeff

Whereas the Temiskaming Shores Development Corporation (TSDC) was established to assist the community to see further growth in the commercial, tourism and industrial sectors, and

Whereas the TSDC wishes to provide support for business growth and expansion while not putting more expense onto the existing ratepayers,

Therefore, the TSDC recommends the implementation of a Municipal Accommodation Tax at the rate of 4% to be charged to overnight visitors of our local accommodations as of January 1, 2023.

Carried

11.0 CLOSED SESSION

None

12.0 ADJOURNMENT

Resolution TSDC-2021-014

Moved by: Tom
Seconded by: Carman

That the meeting of the Temiskaming Shores Development Corporation adjourned at 8:39pm

Carried



TEMISKAMING SHORES POLICE SERVICES BOARD

MINUTES

OCTOBER 18, 2021 AT 1:00 P.M.

COUNCIL CHAMBERS

1. **CALL TO ORDER**

The meeting was called to order by Board Chair Doug Jelly at 1:05 p.m.

2. **ROLL CALL**

PRESENT: Board Chair Doug Jelly
Board Members Monique Chartrand, Tyler Twarowski, Danny Whalen, Jeff Davis

ALSO

PRESENT: Inspector Joel Breault, O.P.P. – Detachment Commander
Kelly Conlin, Board Secretary

REGRETS: None

MEMBERS OF THE PUBLIC PRESENT: 0

3. **ADDENDUM / ANNOUNCEMENTS**

None

4. **APPROVAL OF AGENDA**

Resolution No. 2021-026

Moved by: Tyler Twarowski

Seconded by: Monique Chartrand

Be it resolved that the Temiskaming Shores Police Services Board approves the agenda as printed.

CARRIED

5. **PRESENTATIONS/DELEGATIONS**

None

6. DISCLOSURE OF PECUNIARY INTEREST AND GENERAL NATURE

None

7. APPROVAL OF MINUTES

a) Regular Police Services Board Meeting – September 20, 2021

Resolution No. 2021-027

Moved by: Danny Whalen

Seconded by: Jeff Davis

Be it resolved that the Minutes of the Temiskaming Shores Police Services Board meeting held on September 20, 2021 be approved as printed.

CARRIED

8. COMMUNICATIONS

a) OPP MPS Financial Services Unit
Received: September 30, 2021

Re: 2022 Annual Billing Statement

Reference: Referred to New Business a)

b) Holly Doty, CMP, OAPSB
Received: October 5, 2021

Re: 2021 OAPSB Labour Conference

Reference: Referred to Unfinished Business a)

Resolution No. 2021-028

Moved by: Tyler Twarowski

Seconded by: Monique Chartrand

Be it resolved that the Police Services Board agrees to deal with Communication items 8 a & b according to the agenda references.

CARRIED

9. OPP BUSINESS

a) OPP Temiskaming Detachment Report: July – September 2021

Resolution No. 2021-029

Moved by: Danny Whalen

Seconded: Monique Chartrand

Be it resolved that the Temiskaming Shores Police Services Board acknowledges receipt of the July – September 2021 OPP Temiskaming Detachment Report.

CARRIED

10. UNFINISHED BUSINESS

a) OAPSB Labour Seminar (November)

Resolution No. 2021-030

Moved by: Jeff Davis

Seconded by: Tyler Twarowski

Be it resolved that the Temiskaming Shores Police Services Board hereby approves the attendance of Danny Whalen or Monique Chartrand at the 2021 Labour Seminar.

CARRIED

11. NEW BUSINESS

a) 2022 Annual Billing Statement

Resolution No. 2021-031

Moved by: Danny Whalen

Seconded by: Tyler Twarowski

Be it resolved that the Temiskaming Shores Police Services Board hereby acknowledges receipt of the 2022 Billing estimates in the amount of \$2,393,303; and further directs the Board Secretary to provide the estimates to Council for their consideration and approval.

CARRIED

b) 2022 Budget – Draft 1

Resolution No. 2021-032

Moved by: Tyler Twarowski

Seconded by: Monique Chartrand

Be it resolved that the Temiskaming Shores Police Services Board hereby acknowledges receipt of the draft 2022 Police Services Board budget and Training Plan; and further directs the Board Secretary to provide the information as presented to Council for their consideration and approval.

CARRIED

c) OAPSB Board of Directors Report - Doug Jelly

Chair Doug Jelly informed the Board that he will attending a virtual OAPSB meeting in December.

12. BY-LAWS

None

13. CLOSED SESSION

None

14. SCHEDULE OF MEETINGS

a) Regular Police Services Board meetings for 2022 are as follows:

- Monday, January 17 – 1:00 PM, Council Chambers, City Hall
- Monday, April 18 – 1:00 PM, Council Chambers, City Hall
- Monday, July 18 – 1:00 PM, Council Chambers, City Hall
- Monday, October 17 – 1:00 PM, Council Chambers, City Hall

15. ADJOURNMENT

Resolution No. 2021-033

Moved by: Danny Whalen

Seconded by: Jeff Davis

Be it resolved that the Regular Meeting of the Temiskaming Shores Police Services Board be hereby adjourned 2:00 p.m.

CARRIED

1. CALL TO ORDER

Meeting called to order at 6:29 p.m.

2. ROLL CALL

PRESENT:	Councillor Mike McArthur (Chair) Mayor Carman Kidd Councillor Jesse Foley Chris Oslund, City Manager Matt Bahm, Director of Recreation Paul Allair, Manager of Parks & Facilities Jeff Thompson, Manager of Programming Chuck Durrant, Public Appointee Simone Holzamer, Public Appointee (arrived at 7:00 PM) Robert Ritchie, Public Appointee Danny Lavigne, Public Appointee Kelly Conlin, Deputy Clerk (Committee Secretary)
REGRETS:	Richard Beauchamp, Public Appointee

3. REVIEW OF REVISIONS OR DELETIONS TO AGENDA

None

4. DISCLOSURE OF PECUNIARY INTEREST AND GENERAL NATURE

None

5. APPROVAL OF AGENDA

Recommendation RS-2021-035

Moved by: Danny Lavigne

Be it resolved that:

The Recreation Committee agenda for the October 18, 2021 meeting be approved as printed.

CARRIED

6. REVIEW AND ADOPTION OF PREVIOUS MINUTES

Recommendation RS-2021-036

Moved by: Chuck Durrant

Be it resolved that:

The Recreation Committee minutes of the September 13, 2021 meeting be approved as presented/amended.

CARRIED

7. CORRESPONDENCE

8. UNFINISHED BUSINESS

a) Active Transportation Plan

Staff provided the Committee with a verbal update in regards to the Active Transportation plan, which is nearing completion. There is a public webinar scheduled for November 4, 2021, followed by a presentation to Council on November 16, 2021.

b) Facility Reopening Plans

The Committee was provided with an amended plan, which outlines the increase of capacity to 600 at the Don Shepherdson Memorial Arena (DSMA), allows for use of showers and the elimination of physical distancing when in the general seating area. Physical distancing is still required in the changerooms.

Recommendation RS-2021-037

Moved by: Danny Lavigne

Be it resolved that:

The Recreation Committee hereby supports the amended Facility Re-opening plan as presented.

CARRIED

c) Recreation Fees (2022-2024)

Staff reviewed the report that was provide to the Committee outlining the proposed changes the Recreation Fees for 2022-2024. Following the Committee's recommendation, staff reached out to users of the facilities for feedback.

Recommendation RS-2021-038

Moved by: Chuck Durrant

Be it resolved that:

The Recreation Committee hereby supports and recommends that Council approve the 2022-2024 Recreation Fee schedule as presented.

CARRIED

d) Arena Users Liability Insurance

Users of our arenas will now be required to either provide a copy of their insurance or purchase coverage through the City at the time of booking for a cost of \$25.00.

9. NEW BUSINESS

a) Programming Update (Verbal)

Staff provided the Committee an update of daily operations at the Pool Fitness Centre and community and facility programs. Currently there is plenty of activities available through the Age Friendly Programming, as well as some fall activities planned through Healthy Kids.

b) Parks and Facilities Update (Verbal)

Staff provided the Committee with an update in regards to operations and projects underway in our facilities and outdoor amenities. The marinas have now been closed and the skateboard park has been fenced for the winter. Bucke Park has also been shut down for the season and work on the dog park is on-going.

c) Directors Update

The Committee was provided with an update in regards to the rollout of the City's vaccination policy over the last 4 weeks and the impact on our facilities. Overall, it has gone fairly well. Staff also reminded the Committee that our halls are not yet available for rentals until such time that we have more screeners in place.

The tennis court resurfacing is nearing completion and Pedersen Construction recently completed the work on the Farr Drive extension of the STATO trail.

d) 2022 Budget

Draft #1 of the 2022 Operating budget has been submitted and work is on-going for proposed 2022 Capital. At this time, staff are considering an ice plant, a Zamboni and upgrades at the Pool Fitness Center. On-going.

10. NEXT MEETING

The next Recreation Committee Meetings are will be scheduled as follows:

- November 8, 2021

11. ADJOURNMENT

Recommendation RS-2021-039

Moved by: Danny Lavigne

Be it resolved that:

The Recreation Committee meeting is adjourned at 7:18 p.m.

CARRIED

COMMITTEE CHAIR

COMMITTEE SECRETARY

THE CITY OF TEMISKAMING SHORES JANUARY - OCTOBER 2021 YEAR-TO-DATE CAPITAL FINANCIAL REPORT

Finance Department Contact:
Stephanie Leveille, Treasurer

12-Nov-21

GENERAL CAPITAL
Revenues & Expenditures
as at October 31, 2021

Department	Project	2021		Variance	%	G	Y	R
		Actual	Budget	B/(W)				
REVENUES:	Transfer from Operations		1,065,365	(1,065,365)				
	Transfer from Reserves	57,099	3,103,939	(3,046,840)				
	Borrowing	3,712,027	4,676,130	(964,103)				
	Federal Gas Tax		1,894,874	(1,894,874)				
	Efficiency Funding		456,747	(456,747)				
	FCM Funding		50,000	(50,000)				
	OCIF Funding	195,000	195,000	0				
	FedNor Funding		18,000	(18,000)				
	COVID Resilience Funding		100,000	(100,000)				
	EDSC Accessibility Funding	100,000	100,000	0				
	Provincial Gas Tax		31,738	(31,738)				
	ICIP		87,262	(87,262)				
	Transport Canada		39,200	(39,200)				
	Ontario Trillium Fund	135,000	150,000	(15,000)				
	Partnership - Tennis Court							
	Partnership - Splashpad	67,573	300,000	(232,427)				
Total Revenues		4,266,699	12,268,255	(8,001,556)				
EXPENDITURES:								
Corporate Services:	Cemetery Columbarium Upgrades		15,000	15,000				
	Asset Management Software	24,371	100,000	75,630	33%	X		
Fire:	Jordair Fill Station (Stn #1)	11,224	11,200	-24	100%	X		
	2021 Roads Program	1,867,791	5,000,000	3,132,209	100%	X		
Public Works:	Roy's Bridge (Uno Park Road)	190,627	195,000	4,373	100%	X		
	Street Lights - Grant Drive	10,645	130,000	119,355	75%	X		
	Engineering - Bridges Structural Report	20,773	20,000	-773	80%	X		
	Decorative Street Light LED Upgrades Phase 1		75,000	75,000				
	Radley Hill Road Crossing Engineering	507	49,000	48,493	75%	X		
	Landfill Expansion	6,365	1,500,000	1,493,635	25%	X		
	Spoke Transfer Station - Rehab Project	28,865	50,000	21,135	100%	X		
Property Mtnce:	Haileybury Fire Station	93,310	2,513,000	2,419,690	25%	X		
	NL Arena Accessibility Project	18,425	450,000	431,575	15%			X
	PFC Upgrades	21,818	43,750	21,932	75%	X		
	Spurline Building Accessibility Upgrades		30,000	30,000	15%	X		
	CJTT Window Upgrades		30,305	30,305	100%	X		
	NL Library Relocation	17,256	0	-17,256				
	Small Fleet Replacement	61,264	155,000	93,736	50%	X		
Fleet:	Tri Axle Dump Truck		225,000	225,000	75%	X		
	Loader	229,900	350,000	120,100	100%	X		
	Fire Rescue		415,000	415,000	75%	X		
Transit:	Bus Shelters	15,290	20,000	4,710	100%	X		
	Ridership App	12,875	99,000	86,125	100%	X		
Recreation:	Tennis Court Resurfacing	3,011	70,000	66,989	75%	X		
	Pool Regrouting	22,879	31,000	8,121	100%	X		
	Splash Pad	343,431	550,000	206,569	75%	X		
	Stairmaster	7,634	11,000	3,366	100%	X		
	Farr Park - Old Hlby Food Bank Demolition	3,730	10,000	6,271	50%	X		
	Wabi Pedestrian Project - Engineering	1,649	20,000	18,352	75%	X		
	COVID Resilience Project	172,361	100,000	-72,361	100%	X		
Total Expenditures		3,185,998	12,268,255	9,129,996				

ENVIRONMENTAL CAPITAL
Revenues & Expenditures
as at October 31, 2021

	2021			%	G Y R		
	Actual	Budget	Variance B/(W)				
REVENUES:							
Tranfer from Operations		487,000	(487,000)				
Total Revenues	0	487,000	(487,000)				
EXPENDITURES:							
ICI Water Meter Program	108,203	100,000	(8,203)	90%	X		
Farr Drive Sewer Repair	27,780	35,000	7,220	100%	X		
Robert/Elm Pumping Station	120,111	190,000	69,889	90%	X		
Hwy 11 Emergency Watermain Relocation	163,206	162,000	(1,206)	100%	X		
Total Expenditures	419,300	487,000	67,700				

Memo

To: Mayor and Council
From: Jennifer Pye, Planner
Date: November 16, 2021
Subject: Deeming By-law for Daniil Subbotin and Sara Worth – 604 Brewster Street
Attachments: Appendix 01: Deeming By-law Application Form
Appendix 02: Draft Deeming By-law (**Please refer to By-law No. 2021-172**)

Mayor and Council:

Daniil Subbotin and Sara Worth have submitted a request for a deeming by-law for their property at 604 Brewster Street in Haileybury. The applicants are seeking the deeming by-law in order to permit the placement of a portable garage structure, and the eventual construction of a detached accessory building on a portion of the property along Rorke Avenue. The properties are described as: PLAN M54NB LOTS 33 TO 35 PT LOT 77 PLAN M37NB PT LOT 116 PT LANE AND RP 54R4188 PARTS 1 TO 4 RP 54R5366 PART 4 PCL 4159 3415 1030 24666 and PLAN M54NB LOT 78 PCL 23867SST.

The subject properties are designated Residential Neighbourhood in the City of Temiskaming Shores Official Plan. The majority of the property is zoned Tourist Commercial (C4) in the City of Temiskaming Shores Zoning By-law, but the portion of the property where the portable garage is proposed to be located is zoned Medium Density Residential (R3). If the deeming by-law is approved the resultant property will have two zoning categories. Section 4.13 of the Zoning By-law sets out the provisions that apply in this situation, and requires that each portion of the property is subject to the provisions of the applicable zone category, that each portion shall be considered as a separate lot for the purposes of determining zone provisions, and that not more than one dwelling unit is permitted on the entire lot unless specifically permitted by the by-law. The applicant is aware of these provisions, and has indicated that the portable garage and the future detached accessory building will meet the setback provisions of the Zoning By-law.

There is an existing dwelling on the C4 zoned portion of the property, and if the deeming by-law is approved, then any future transfer of the R3 zoned portion of the property would require approval of a consent application through the City's Committee of Adjustment; therefore, an accessory building is acceptable on the R3 portion of the property.

**Application for Deeming By-law
Under Section 50(4) of the Planning Act**

Approval authority:
Council of the City of Temiskaming Shores

Fee: \$200 + 13% HST
= \$226.00
+ legal and land titles fees required to register by-law
(billed directly from solicitor)

Office Use Only

File No.: D-2021-10
Date Received: October 28, 2021
Roll No.: 5418- 030-001-053.00+082.02

1. Owner Information

Name of Owner: Daniil Subbotin

Mailing Address: 604 Brewster Street. [REDACTED] Haileybury, ON, P0J1K0

Email Address: [REDACTED] Phone: [REDACTED]

If more than one registered owner, please provide information below (attach separate sheet if necessary):

Name of Owner: Sara Justine Worth

Mailing Address: 604 Brewster Street. [REDACTED] Haileybury, ON, P0J1K0

Email Address: [REDACTED] Phone: [REDACTED]

2. Applicant/Agent Information (if applicant is not the owner or applicant is an agent acting on behalf of the owner):

Name of Agent: _____

Mailing Address: _____

Email Address: _____ Phone: _____

3. Please specify to whom all communications should be sent:

☒ Owner ☐ Applicant/Agent

4. Property Information

a. Location of the subject land:

☐ Dymond ☐ New Liskeard ☒ Haileybury

Municipal Address

604 Brewster Street. Haileybury, ON, P0J1K0

Legal Description (concession and lot numbers, reference plan and lot/part numbers)

Residential home

b. Date the property/properties were acquired by the current owner: October 19, 2021

c. Are there any easements or restrictive covenants affecting the property/properties?

☐ Yes ☒ No

If yes, describe the easement or covenant and its effect:

5. Reason a deeming by-law is required:

Placing accessory structure on empty residential lot (R3), (portable tarp garage/shelter measuring 20'W x 30'L x 15'H at peak, 600 sq. ft.).

6. Registration of By-law

If approved the deeming by-law must be registered on title to the property/properties to which it applies. The City will send the approved by-law directly to the lawyer of the applicant's choosing to ensure registration. The applicant is responsible for all fees associated with the registration of the by-law.

Name of Lawyer: Brigid Wilkinson

Name of Firm: Kemp Pirie

Mailing Address: 22 Armstrong St N, Temiskaming Shores, ON P0J 1P0

Email Address: bwilkinson@kempirrie.com Phone: (705) 647-7353

7. Applicant/Agent Authorization

If the applicant is not the owner of the land that is the subject of this application, the written authorization of the owner that the applicant is authorized to make the application must be included with this form or the authorization set out below must be completed.

I/We, N/A are the registered owners of the subject land and I/we hereby authorize N/A to make this application on my/our behalf and to provide any of my/our personal information that will be included in this application or collected during the processing of the application.

Date: _____ Signature of Owner: _____

Date: _____ Signature of Owner: _____

8. Authorization for Site Visits

I/We authorize Municipal Staff and Council and/or Committee members, as necessary, to enter the subject property to gather information necessary in the assessment of the application.

D.S.
Applicant Initial

SDW
Applicant Initial

9. Notice re: Use and Disclosure of Personal Information

In accordance with the Planning Act and the Municipal Freedom of Information and Protection of Privacy Act, I/We acknowledge and understand that any information collected on this form and any supplemental information submitted as part of this application can be disclosed to any person or public body.

D.S.
Applicant Initial

SDW
Applicant Initial


10. Declaration of Applicant

- ✓ If the application is being submitted by the property owner and there is more than one registered owner, each owner must complete a separate declaration.
- ✓ If the application is being submitted by the property owner and the owner is a firm or corporation the person signing this declaration shall state that he/she has authority to bind the corporation or affix the corporate seal.
- ✓ This declaration must be completed in front of a Commissioner for Taking Affidavits.

I, Daniil Subbotin of the City of Temiskaming Shores
in the District of Temiskaming make oath and say
(or solemnly declare) that the information contained in this application is true and that the information contained in the documents that accompany this application is true and I make this solemn declaration conscientiously knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Sworn (or declared) before me

at the City of Temiskaming Shores
in the District of Temiskaming
this 28th day of October, 2021


Signature of Applicant


A Commissioner for Taking Affidavits

Jennifer Lynn Pye, a Commissioner, etc.,
Province of Ontario, for the Corporation of the
City of Temiskaming Shores
Expires June 26, 2024.


10. Declaration of Applicant

- ✓ If the application is being submitted by the property owner and there is more than one registered owner, each owner must complete a separate declaration.
- ✓ If the application is being submitted by the property owner and the owner is a firm or corporation the person signing this declaration shall state that he/she has authority to bind the corporation or affix the corporate seal.
- ✓ This declaration must be completed in front of a Commissioner for Taking Affidavits.

I, Sara Worth of the City of Temiskaming Shores
in the District of Temiskaming make oath and say
(or solemnly declare) that the information contained in this application is true and that the information contained in the documents that accompany this application is true and I make this solemn declaration conscientiously knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Sworn (or declared) before me

at the City of Temiskaming Shores
in the District of Temiskaming
this 28th day of October, 2021



Signature of Applicant



A Commissioner for Taking Affidavits

Jennifer Lynn Pye, a Commissioner, etc.,
Province of Ontario, for the Corporation of the
City of Temiskaming Shores
Expires June 26, 2024.

Memo

To: Mayor and Council
From: Logan Belanger, Municipal Clerk
Date: November 16, 2021
Subject: Appoint Wildlife Control Agent
Attachments: Draft Amending By-law (**Please refer to By-law No. 2021-173**)

Mayor and Council:

Council for the City of Temiskaming Shores adopted By-law No. 2010-111 on July 20, 2010, being a by-law to appoint agents for the purpose of wildlife control within the City, and an amending By-law No. 2020-119 on December 1, 2021. The current appointees are: Normand Beland, Larry Elliott and Matt Howe.

Following a review of the By-law, staff recommends removing Matt Howe as a Wildlife Control Agent, and appointing Larry Durling as a Wildlife Control Agent for the City of Temiskaming Shores. Mr. Durling has over 30 years of trapping experience.

Appointees for the purpose of Wildlife Control carry out the duties imposed upon them pursuant to the Fish and Wildlife Conservation Act, 1997, and any regulation enacted thereto, and will comply with all Municipal By-laws, including By-law No. 2009-081, as amended, being a by-law to Control and Regulate the Discharge of Firearms in the City of Temiskaming Shores.

Prepared by:

Reviewed by:

Reviewed and submitted for
Council's consideration by:

"Original signed by"

"Original signed by"

"Original signed by"

Logan Belanger
Municipal Clerk

Shelly Zubyc
Director of Corporate
Services

Christopher W. Oslund
City Manager

Memo

To: Mayor and Council
From: Stephanie Léveillé, Treasurer
Date: November 16, 2021
Subject: Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement
Attachments: Draft Amending By-law (**Please refer to By-law No. 2021-174**)

Mayor and Council:

Council for the City of Temiskaming Shores adopted Resolution No. 2021-143 at the April 6, 2021 regular meeting to petition the Ministry of the Attorney General to honour its commitment to modernize the prosecution of Provincial Offences Act (POA) matters, and transfer responsibility of permitted Part III POA prosecutions to the City of Temiskaming Shores.

The Ministry of the Attorney General responded and has selected the City of Temiskaming as a pilot community to administer POA matters in the District of Timiskaming, to include prosecutions under Parts III and IX of the Provincial Offences Act, for a two-year term.

It is recommended that Council direct staff to prepare the necessary by-law to authorize the execution of the Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement between Her Majesty the Queen in Right of Ontario as represented by the Attorney General and The Corporation of the City of Temiskaming Shores, for consideration at the November 16, 2021 regular meeting.

Prepared by:	Reviewed by:	Reviewed and submitted for Council's consideration by:
<u>"Original signed by"</u>	<u>"Original signed by"</u>	<u>"Original signed by"</u>
Stephanie Léveillé, Treasurer	Shelly Zubyck Director of Corporate Services	Christopher W. Oslund City Manager

Subject: Site Plan Agreement: Haileybury
Fire Hall, Rorke Avenue

Report No.: CS-045-2021

Agenda Date: November 16, 2021

Attachments

Appendix 01: Draft Site Plan Agreement (**Please refer to By-law No. 2021-175**)

Recommendations

It is recommended:

1. That Council for the City of Temiskaming Shores acknowledges receipt of Administrative Report CS-045-2021; unsure
2. That Council agrees to enter into a Site Plan Agreement with CGV Builders Inc. for the property described as PLAN M128NB LOTS 147 148 150 152 154 156 158 160 162 PT FOURTH ST PCL 3393NND 4120TIM 5396SST; and
3. That Council directs staff to prepare the necessary by-law to enter into a Site Plan Agreement with CGV Builders Inc. for the property described as PLAN M128NB LOTS 147 148 150 152 154 156 158 160 162 PT FOURTH ST PCL 3393NND 4120TIM 5396SST, for consideration at the November 16, 2021 Regular Council meeting.

Background

CGV Builders Inc. has been engaged by the City for the design and build of a new Fire Hall on the west side of Rorke Avenue in Haileybury. Staff identified the requirement for a site plan agreement for this project, as a new building is to be constructed on a property that is currently vacant.

The property is designated Mixed Use Areas in the City of Temiskaming Shores Official Plan, and is zoned Highway Commercial (C2) in the City of Temiskaming Shores Zoning By-law. Section 4.24 of the Zoning By-law permits the use of any land, building or structure for public uses by the City, or any local Board, department of the Provincial or Federal Government, and any electrical distribution company, telephone, telegraph, or gas company, or any railway. A fire hall is permitted on the subject property under this provision.

Analysis

The application and plans were circulated to applicable City staff and no concerns were indicated.

This application was circulated to the Temiskaming Shores Accessibility Advisory Committee (TSAAC) for review. The Committee had no concerns.

There is a design feature on the current plans that includes a canopy over the main, accessible entrance door, complete with support posts against the building and a diagonal brace that extends from the canopy on a diagonal to the base of the posts. The posts will encroach into the overall width of the sidewalk, and the diagonal braces will impede the headroom available on the sidewalk. Staff are working with the contractor on an alternative design that will not hinder accessibility.

A total of 20 on-site parking spaces are proposed for this development, including two accessible parking spaces. The 18 standard parking spaces will be gravel surfaced and will be located at rear (west side) of the building. The accessible spaces will be located at the front of the building and will include a 1.5m wide access aisle between the spaces leading to a concrete walkway at the head of and on-level with the spaces. The walkway will also be on level with the sidewalk leading to the main entrance to the building. The main entrance will be equipped with push button door operators.

As this is a City project, the requirement for a security deposit has been waived.

Staff recommends that Council adopt a by-law to enter into a Site Plan Agreement with CGV Builders Inc. The agreement will be registered on title to the property at the owner's expense.

Relevant Policy / Legislation / City By-Law

- City of Temiskaming Shores Zoning By-law 2017-154
- Site Plan Control By-law 2018-097

Consultation / Communication

- Consultation with City staff as necessary
- Per Section 41 of the Planning Act, RSO 1990 c.P. 13, public notification/circulation is not required for Site Plan Agreements

Financial / Staffing Implications

This item has been approved in the current budget: Yes ☐ No ☐ N/A ☒

This item is within the approved budget amount: Yes ☐ No ☐ N/A ☒

Staffing implications related to this matter are limited to normal administrative functions and duties.

Alternatives

No alternatives were considered.

Submission

Prepared by:

Reviewed by:

Reviewed and submitted for
Council's consideration by:

"Original signed by"

"Original signed by"

"Original signed by"

Jennifer Pye, MCIP,
RPP
Planner

Shelly Zubyck
Director of Corporate
Services

Christopher W. Oslund
City Manager

Memo

To: Mayor and Council
From: Mathew Bahm, Director of Recreation
Date: November 16, 2021
Subject: Age Friendly Program Update
Attachments: N/A

Mayor and Council:

The Age Friendly Community Plan was adopted by Mayor and Council in September of 2016. In the following years, the City has received funding from the Seniors Community Grant, New Horizons and the Inclusive Community Grant to complete larger scale projects such as travel training, revamping of the Community Resources for Older Adults Guide, development of a 1-800 number for transportation, the Get Active program and the Age Friendly Fair.

The Age Friendly Coordinator position became a permanent position within the municipality in May 2019 to carry on the work that was identified in the Age Friendly Community Plan. The pandemic caused quick adaption and changes to programs, whether it be virtual or in-person.

When in-person programming was once again able to resume in June of this summer, the number of participants has steadily increased since resumption. The importance of being physically active for older adults as well as continuing social interaction, was noticeable among staff and participants.

Since resuming in-person programming, we have seen an increase in the number of people participating and the number of new people participating in our programming. We've seen success offering line dancing and exercise classes out of the Haileybury arena. So far, we've offered six (6) line dancing sessions with 25 people participating in each session, and our exercise classes have been averaging 14 people per class. In addition to new programming in Haileybury, we have also been offering a new exercise class at the Dymond Court, bringing our programming directly to residents where they live.

Throughout the summer months we focused on outdoor activities, not only because of the decreased risk of COVID-19, but also to take advantage of the seasonal weather. A weekly Age Friendly hiking group steadily increased to the maximum allowable 20 people per week, with participants noting that they enjoyed the social aspect of the group after months of limited social opportunities.

With the cool weather approaching we have shifted our focus to some more traditional indoor activities, such as daytime public skating, indoor pickleball and bowling. We have also incorporated more leisure activities, such as card playing into our program offerings. Participants continue to follow applicable public health measures including providing proof of vaccination.

Moving into 2022, we are excited to continue this important work keeping our older adults active and engaged in our community. We are working on reaching our local business community to make them more Age Friendly and want to expand upon the social opportunities available to older adults which have been lacking throughout the pandemic.

Prepared by:

“Original signed by”

Mathew Bahm
Director of Recreation

Reviewed and submitted for Council’s
consideration by:

“Original signed by”

Christopher W. Oslund
City Manager

The Corporation of the City of Temiskaming Shores

By-law No. 2021-171

Being a by-law to authorize the Execution of a Memorandum of Understanding with the Ontario Northland Transportation Commission for the cost sharing of the 2021-2022 Rail Safety Improvement Program (Radley Hill Road Railway Right-of-Way)

Whereas under Section 8 of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, the powers of a municipality shall be interpreted broadly to enable it to govern its affairs as it considers appropriate and to enhance the municipality's ability to respond to municipal issues; and

Whereas under Section 9 of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act; and

Whereas under Section 10 (1) of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, a single-tier municipality may provide any service or thing that the municipality considers necessary or desirable for the public; and

Whereas the Ontario Northland Transportation Commission (ONTC) and the City of Temiskaming Shores submitted a joint application for federal funding from the 2021-2022 Rail Safety Improvement Program – Infrastructure, Technology and Research (RSIP-ITR) to make improvements to the Crossing and perform Warning System upgrades at the grade crossing at Mile 111.56- Temagami Subdivision (Radley Hill Road right-of-way); and

Whereas there can only be one funding recipient per project under the RSIP-ITR, which in this case is the City of Temiskaming Shores; and

Whereas at the April 6, 2021 regular meeting, Council for The Corporation of the City of Temiskaming Shores adopted By-law No. 2021-062 being a by-law to authorize the execution of a contribution agreement for the Rail Safety Improvement Program (RSIP) between Transport Canada and The Corporation of the City of Temiskaming Shores for grade crossing improvements at Mile 111.56- Temagami Subdivision (Radley Hill Road Railway Crossing); and

Whereas Council for the City of Temiskaming Shores deems it desirable to enter into a cost sharing arrangement with the ONRC for the Radley Hill Road Railway crossing improvement project.

Now therefore the Council of The Corporation of the City of Temiskaming Shores hereby enacts the following as a by-law:

1. That the Mayor and Clerk be authorized to execute a Memorandum of Understanding with the Ontario Northland Transportation Commission for the improvements to the Crossing and perform Warning System upgrades at the grade

crossing at Mile 111.56- Temagami Subdivision (Radley Hill Road right-of-way), a copy of which is attached hereto as Schedule "A" and forms part of this by-law; and

2. That the Clerk of the City of Temiskaming Shores is hereby authorized to make minor modifications or corrections of a grammatical or typographical nature to the By-law and schedule, after the passage of this By-law, where such modifications or corrections do not alter the intent of the By-law.

Read a first, second and third time and finally passed this 16th day of November, 2021.

Mayor

Clerk



Schedule “A” to

By-law No. 2021-171

Memorandum of Understanding with the Ontario Northland
Transportation Commission for the cost sharing of the 2021-2022 Rail
Safety Improvement Program (Radley Hill Road Railway Right-of-Way)

MEMORANDUM OF UNDERSTANDING

BETWEEN:

ONTARIO NORTHLAND TRANSPORTATION COMMISSION
("ONTC")

AND:

The Corporation of the City of Temiskaming Shores
(the "City")

COST SHARING 2021-2022 Rail Safety Improvement Program

WHEREAS:

- A. ONTC is the owner of certain lands comprising a railway right-of-way located at Mileage 111.56 Temagami Subdivision in the Province of Ontario, commonly known as Radley Hill Road (the "Crossing").
- B. ONTC and the City of Temiskaming Shores submitted a joint application for federal funding from the 2021-2022 Rail Safety Improvement Program – Infrastructure, Technology and Research to make improvements to the Crossing and perform Warning System upgrades (the "Project"); and,
- C. There can only be one funding recipient per project under the RSIP-ITR which in this case is the City, the Parties wish to enter into a cost sharing arrangement in relation to the Project as described in this memorandum of understanding.

NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS IN THIS MOU, THE PARTIES AGREE AS FOLLOWS:

Definitions

1. In this memorandum of understanding:

"Agreement End Date" means the Agreement End Date specified in the Contribution Agreement.

"Application" means the RSIP-ITR funding application submitted by ONTC on behalf of the City and ONTC attached as **Schedule "A"**.

"Business Days" means any working day (Monday to Friday inclusive) excluding statutory and other holidays (i.e., New Year's Day, Family Day, Good Friday, Easter Monday, Victoria Day, Canada Day, Civic Holiday, Labour Day, Thanksgiving Day, Remembrance Day, Christmas Day, Boxing Day).

“Contribution Agreement” means the executed contribution agreement between the City and Her Majesty the Queen in right of Canada, as represented by the Minister of Transport (“Canada”) in relation to the Project attached as **Schedule “B”**.

“Eligible Expenditures” has the same meaning as in the Contribution Agreement.

“Fiscal Year” means the period beginning April 1 of a year and ending March 31 of the following year.

“MOU” means this memorandum of understanding, all schedules attached hereto and any amendments to this memorandum of understanding.

“Parties” means ONTC and the City.

“Payable Contribution” means the amount actually paid by Canada pursuant to the Contribution Agreement.

“Recipient Guidelines for Grade Crossing and Infrastructure Projects” means those guidelines published by Transport Canada in relation to RSIP-ITR-ITR.

“RSIP-ITR” means the Railway Safety Improvement Program – Infrastructure, Technology and Research.

The Project

2. The Project consists of the following, which will take place over the course of the Fiscal Years 2021-22 (“Year 1”) and 2022-23 (“Year 2”)
 - (a) upgrading the grade crossing warning system (“GWCS”) for the Crossing to a Constant Warning Time system with LED light units (Year 1);
 - (b) installing a MUTCD-standard WB-6 Advance Warning Sign with lights and controller on [name of road] that will interconnect with the GWCS (Year 1);
 - (c) paving and grading of part of Radley Hill Road and installation of culverts (Year 2); and,
 - (d) improving the Crossing surface to include a sealed surface and rubber flange ways (Year 2).

Term

3. This MOU shall commence on the Effective Date and terminate on the Agreement End Date. For greater certainty, this MOU shall apply only for the life of the Project and not to the maintenance of the Crossing thereafter nor does it apply to any other

crossing in the City. To the extent that the culverts, referred to above at subsection 2(c), cross ONTC's rail right-of-way, the City agrees to enter into and be bound by the terms of a separate pipe crossing agreement.

ONTC's Obligations

4. ONTC shall be responsible for performing the following work in relation to the Project (the "ONTC Work"):
 - (a) upgrading the existing GCWS at the Crossing to a Constant Warning Time system with LED light units; and,
 - (b) improving the Crossing surface.
5. ONTC shall invoice the City for 100% of the costs of the ONTC Work, which invoices shall include all labour, material, subcontractor costs and other costs required to be expended to perform the ONTC Work and any permitted overhead expenses in accordance with Transport Canada's Guide to Railway Charges for Crossing Maintenance and Construction 2019 (the "**the ONTC Expenses**").
6. ONTC shall not be responsible for the performance of any work to be performed by the City.

City's Obligations

7. The City shall, at its sole cost and expense, be responsible for performing the following work in relation to the Project (the "City Work"):
 - a. installing a MUTCD-standard WB-6 Advance Warning Sign with lights and controller that will interconnect with the GCWS; and,
 - b. paving and grading of part of Radley Hill Road and installation of culverts.
8. The City shall be solely responsible for the costs of the City Work.
9. The City shall **comply with its obligations under the Contribution Agreement**. The City shall submit all claims for Eligible Expenditures for the Project, including the ONTC Work, to the RSIP-ITR in accordance with the Contribution Agreement and the Recipient Guidelines for Grade Crossing and Infrastructure Projects. The City shall ensure that the breakdown of Eligible Expenditures in the claim is accurately completed and the claim is submitted to Canada in accordance with the timelines set out in the Contribution Agreement. If the City fails to comply with any of its obligations under the Contribution Agreement and that failure results in the City not being reimbursed for ONTC Expenses, the City shall be responsible for paying to ONTC the amount that otherwise would have been payable by Canada to the City for the ONTC Work.

10. The City shall pay to ONTC that portion of the Payable Contribution received by the City from Canada **that relates to the ONTC Work and ONTC Expenses within five Business Days after the City is in receipt of the Payable Contribution from Canada.** If the City is not reimbursed by Canada for the ONTC Expenditures as described in section 9, the City shall pay the ONTC Expenditures to ONTC within five Business Days after it receives the notice from Canada of the rejection of the claim for the ONTC Expenditures.
11. Subject to Section 9, the City shall only be responsible to reimburse ONTC for the Payable Contribution it receives from Canada in relation to the ONTC Work.

No Representations

12. ONTC makes no representations or guarantees as to the amount of the Payable Contribution by Canada in relation to the Project and/or City Work. The City acknowledges and understands that the amounts reflected in the Contribution Agreement are based on estimates only and ONTC shall not be responsible for any discrepancies between the amounts proposed to be claimed in the Application and the amounts ultimately paid by Canada to the City.

Liability

13. The Parties agree that each party shall be responsible to the other party and their respective directors, officers, members, employees, sponsors, agents, subcontractors and representatives (collectively, the "Indemnified Parties") for any and all liability, loss, damage, cost or claims (whether or not involving a third party claim), including reasonable legal fees, which may be brought against, suffered or incurred by, or asserted against any one or more of the Indemnified Parties by reason of, in connection with or arising directly from the Project, regardless of the nature of the liability or the damage, that is directly and solely caused by a negligent act or omission of the party or those for whom it is in law responsible.
14. Notwithstanding any other provision of this MOU:
 - (a) Neither party shall be responsible for direct, indirect, consequential, special, incidental or contingent damages of any nature whatsoever, including loss of revenue or profit or damages resulting from interruption of service or transmission. This limitation shall apply regardless of the form of action, damage, claim, liability, cost, expense or loss, whether in contract (including fundamental breach), statute, tort (including negligence), or otherwise, and regardless of whether the other has been advised of the possibility of such damages;
 - (b) The City shall be responsible for any personal injuries to or death of the

any of its employees, agents, contractors or invitees and for any loss of or damage to any property belonging to the City or its employees, agents, contractors or invitees, during the performance of the City Work, unless the death, injury, loss or damage is caused by a negligent act or omission of ONTC or ONTC Indemnified Parties.

- (c) Any express or implied reference to ONTC providing an indemnity or any other form of indebtedness or contingent liability that would directly or indirectly increase the indebtedness or contingent liabilities of ONTC, whether at the time of execution of this MOU or at any time during the Term, shall be void and of no legal effect pursuant to section 28 of the *Financial Administration Act*, RSO 1990, c F12.

Confidentiality

- 15. The Parties shall keep the terms and conditions of this MOU confidential and shall not, except to the extent required by law, voluntarily disclose any information concerning the cost sharing arrangement to any third parties save and except its legal and financial advisers.

General

- 16. This MOU may be executed in any number of counterparts, each of which when executed and delivered shall constitute an original of this MOU, but all the counterparts shall together constitute the same agreement. No counterpart shall be effective until each party has executed at least one counterpart.
- 17. This MOU shall be governed and construed in accordance with the laws of the Province of Ontario, and all applicable federal laws and regulations.
- 18. No term or provision of this MOU may be changed, waived, discharged or terminated except by agreement in writing.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF the Parties have executed this Agreement.

**ONTARIO NORTHLAND
TRANSPORTATION COMMISSION**

Per: 

Drew Duquette
VP Transportation

Date: Nov 10 2021

I have authority to bind the corporation.

**THE CORPORATION OF THE CITY OF
TEMISKAMING SHORES**

Per: 

Name: Carman Kidd
Title: Mayor

Date: November 8, 2021

I have authority to bind the corporation.

Per: 

Name: Logan Belaner
Title: Municipal Clerk

Date: November 8, 2021

I/We have authority to bind the corporation.

SCHEDULE A



Rail Safety Improvement Program (RSIP)

[Home](#) → [Rail Safety Improvement Program \(RSIP\)](#)

→ [Infrastructure and Grade Crossing Improvements](#) → Review

Review

Are you sure you want to submit the following data?

Applicant Information

Full legal name (ex. municipality, company name, etc.)*

Ontario Northland Transportation Commission

Mailing address*

555 Oak Street East

City*

North Bay

Province or territory*

Ontario



Postal code (A1A 1A1)*

P1B 8L3

Applicant type*

Rail Authority



If not listed, please specify

Project Details

Has an application been submitted in the past for this particular crossing or location?*

- ☐ Yes
☒ No

If yes, when?



Project title

Improvements to Radley Hill Road Grade Crossing Approaches and Warning System Upgrades

Full description (maximum 2000 characters)*

This application is in support of a joint project between the Rail Authority (Ontario Northland Transportation Commission), and the Road Authority (City of Temiskaming Shores). The project seeks to substantially reduce the potential for derailment due to chronic silt/gravel run-off that routinely enters the grade crossing during the spring snow melt as well as during heavy rains, and to improve safety of the motoring public by upgrading the GCWS to a Constant Warning Time system with LED light units and proper Advanced Warning Lights in accordance with MUTCD standards.


Full Description (if over 2000 characters) (maximum 20MB)

Is this project's completion reliant on another project?*

- ☐ Yes
☒ No

If yes, please explain (maximum 2000 characters)

Planned start date*



Planned end date*

**Federal riding***

Nipissing-Timiskaming

Type of project

Infrastructure improvement



A *grade crossing project* consists of any type of project, whose main objective is to improve the safety at a grade crossing for the road users, pedestrians or cyclists at the grade crossing.

An *infrastructure project* may include work along the railway line or along a road approach outside the immediate limits/boundary of a grade crossing, whose primary objective is not necessarily to improve the safety at the crossing for users.

Information on grade crossing regulations can be found [here](#).

Is this Project in support of the Grade Crossing Regulations?

Yes



Project Contacts

Primary contact

First name

Michael

Last name

Rennie

Job title

Manager, Signals and Communications

Telephone number (999-999-9999)*

Email*

Secondary contact

First name**Last name****Job title****Telephone number (999-999-9999)****Email**

Other contact

First name**Last name****Job title****Telephone number (999-999-9999)**

Email

Worksite Details

Information for some of the fields below can be found in the document [here](#). Please note the License and other options related to the document [here](#).

Information on grade crossing regulations can be found [here](#).

Rail mile marker*

Project start point or location (GPS coordinates)

Latitude***Longitude***

Project end point (GPS coordinates)

Latitude**Longitude**

To determine the Transport Canada number (TC Number) of a grade crossing, please use the [Grade Crossing Inventory](#). Please note that some grade crossings may not have a TC Number assigned to them. If the crossing has an assigned TC number as per the grade crossing inventory, you must enter it here. A lack of TC number may result in the rejection of your app.

TC Number**Rail subdivision****Rail authority name****Road name****City/town/municipality - Closest municipality****Province****Describe existing protection (maximum 2000 characters)**

Relay/track circuit
based, active warning system with incandescent lights. Obsolete/non-standard
advanced warning lights that do not meet MUTCD
requirements.

Picture of current crossing or proposed infrastructure site (to upload multiple files, store them in a single archive file) (maximum size 20MB)

Is the project located in or in close proximity to any of the following: National Parks, National Park Reserves, National Historic Sites, or Historic Canals?

- ☐ Yes
☒ No

Does the crossing extend outside of the existing roadway or railway right-of-ways?

- ☐ Yes
☒ No

Upgrade Options

Must select at least one option.

Tech/lighting

- ☒ Upgrade to LED (provide number below)
☐ New or additional street lighting
☐ Intelligent Transportation System (ITS) project

LED replacement - total number of LEDs (if applicable)

8

Crossing protection

- ☐ Flashing Lights and Bells (FLB)
☐ Flashing Lights, Bells and Gates (FLBG)
☐ New gates
☐ New pedestrian crossing
☐ Upgrade to existing pedestrian crossing
☒ Upgrade or modification to existing active warning system (i.e. constant warning times, interconnection, etc.)

Signage

- ☐ Improved signage at crossing (i.e. standard railway crossing sign, stop sign, etc.)
☒ Improved signage along roadway (railway crossing ahead sign, advisory speed tab sign, etc.)

Infrastructure improvement/civil work

- ☒ Improvement to road approach
☒ Improvement to crossing surface
☐ Median separation

Other

- ☐ Pedestrian overpass/underpass
- ☐ Access control solutions
- ☐ Other (not listed)

If other, please specify

Environmental Assessment Details

Provide environmental assessment details where applicable.

Local biophysical environment - detailed summary (maximum 2000 characters)

Radley Hill Road is a municipal roadway that climbs the escarpment near Lake Temiskaming in the City of Temiskaming Shores (New Liskeard area). The hill has a slope approaching 27% in the area of the grade crossing on Ontario Northland's Temagami subdivision. The roadway is a compacted gravel surface, with clay deposits that produce extensive silt/sand/gravel runoff into the crossing throughout the year, most notably during the spring snow melt and during significant rain events such as thunderstorms. This ongoing hazard to train operations requires constant monitoring and maintenance work to ensure safe operating conditions.

Will the crossing be within 30 metres of a body of water?

- ☐ Yes
- ☒ No

Will the project result in the likely release of a polluting substance into a water body?

- ☐ Yes
- ☒ No

Safety Issues, Improvements and Benefits

Notices, orders, investigations, advisories, and information letters (maximum 2000 characters) (please provide applicable documents below)*

Ontario
Northland has engaged Hatch Engineering to perform an evaluation of the grade

crossing warning system, as well as the continual problem and possible resolutions for the roadway run-off that fouls the crossing and fills the flangeways.

**Document upload (to upload multiple files, store them in a single archive file)
(maximum size 20MB)**

Direct and indirect benefits (collision, derailment, fatalities, property damage, and risk taking behaviour prevention) (maximum 2000 characters)

The potential risk of a derailment and the threat to the community of Temiskaming Shores due to a passing train encountering an unexpectedly fouled crossing with sand-filled flangeways is significant. In addition, the non-standard advance warning lights creates confusion among road users, often resulting in queuing at the wrong location when a train passes. The project proposes to install hot mix paving on the approaches to the crossing, along with improved crowning and grading of the roadway. This work, coupled with upgraded culverts and an improved crossing with a sealed surface and rubber flangeways is expected to greatly reduce the silt/gravel runoff that is directed into the crossing, and will instead divert water run-off into nearly drainage ditches, lowering the risk of derailment. The project further proposes the replacement of the grade crossing warning system and the provision of an interconnected MUTCD-standard WB-6 Advance Warning Sign with lights and controller. The warning system upgrade will also provide Constant Warning Time and LED light units, which will provide better illumination, and more consistent warning times, which will help to reduce risk taking behavior by motorists.

Rail and Road Details

Has the rail line been in existence for a minimum of 3 years?*

- ☒ Yes
☐ No

Are you the rail or road authority?*

- ☒ Rail authority
☐ Road authority

Is there a cost sharing agreement in place?*

☐ Yes

☒ No

If there is a cost sharing agreement in place, please describe.

**Proof of agreement (to upload multiple files, store them in a single archive file)
(maximum size 20MB)**

 Browse...

Rail design speed (mph)

Road design speed (km/h)

Average daily railway movements

Project Cash Flow

Please refer to [Section 6.2 - Percentage Payable](#) in the RSIP applicant's guide.

The government of Canada provides funding by fiscal year. The government's fiscal year is from April to March. Please ensure funding projections align with the Government of Canada's fiscal year.

If the application being submitted is for a two year project, separate the projected costs between the two years to the best of your abilities. Not separating the projected costs for 2-year projects by year will result in your application being rejected.

Total Project Costs (\$)

Total Eligible Costs (\$) (As of the date of application) (information on this can be found in [Section 4 of the RSIP applicant's guide](#))

Total Rail Safety Improvement Program/Federal Contribution (by fiscal year if it's a 2 year project)

Information can be found in [Section 6 of the RSIP's Application Guide](#)

2021-2022

174885.05

2022-2023

476138.58

Recipients Sources of Funding (by fiscal year if it's a 2 year project)

Information can be found in [Section 6 of the RSIP's Application Guide](#)

2021-2022

2022-2023

Other Project Contributions (by fiscal year if it's a 2 year project)

Information can be found in [Section 6 of the RSIP's Application Guide](#)

Contributor 1

Contributor name

Ontario Northland Transportation Commission

2021-2022

119136.5

2022-2023**Contributor 2****Contributor name****2021-2022****2022-2023****Supporting Documents****Document type(s)**

- ☐ TSB Investigation Reports
- ☐ Rail Safety Information Letters
- ☐ Rail Safety Advisories
- ☐ Feasibility study/business case
- ☐ Design plans/drawings
- ☐ Notice or a Notice and Order
- ☒ Other

Document upload (e.g. photo) (to upload multiple files, store them in a single archive file) (maximum size 20MB)

Version: DEV - 1.0.0.0



Signals & Communications

File: X-TEMA-11156-R
Road: Radley Hill Road
Date: 2020-05-21

ESTIMATE of cost to INSTALL LED flashing light signals and a NEW crossing controller system at the crossing of Radley Hill Road in New Liskeard, ON at Mileage 111.56 Temagami Subdivision.

MATERIAL

Light units (LEDS), Masts, etc.		\$	8,710
Constant Warning Time Control equipment accessories, etc.		\$	-
Insulated Joints		\$	-
Battery Cells		\$	5,903
Foundations, Tunnel Liner, etc.		\$	2,000
Wire, Cable, Bonds, etc.		\$	5,845
Miscellaneous Materials		\$	2,319

MATERIAL

Material Overheads	18.0 % Sched C	SUB-TOTAL:	\$ 24,776
--------------------	----------------	-------------------	------------------

LABOUR & EQUIPMENT, ETC.

Labour (Installation)		\$	53,000
Labour (Contracted)	20% Sched B	\$	10,600
Travel & Expenses	Sched D	\$	11,250
Engineering Services / Site Supervision		\$	32,300
Transport & Rental of Equipment		\$	10,000
Hydro Services		\$	8,200
Pre-wired Housing		\$	72,340

LABOUR & EQUIPMENT

Contract Administration Fees (3% on amounts up to \$50,000)	Sched D	SUB-TOTAL:	\$ 197,691
Contract Administration Fees (2% on \$50,000 up to \$100,000)	Sched D	\$	1,500
Contract Administration Fees (1% on the excess of \$100,000)	Sched D	\$	1,000
		\$	1,225

Contingencies	5%	\$	11,346
ESTIMATE		TOTAL:	\$ 238,273

Estimate is subject to the *Guide to Railway Charges for Crossing Maintenance and Construction* rates in effect at time of construction, otherwise valid for one year from date of issue unless superseded.

Estimate shows present known material prices and anticipated labour effort required. Final billing will show actual price paid and actual labour effort expended.

Estimate is based on work during frost-free ground conditions.
Estimate includes only minor modifications to existing hydro service.

Estimate does not include any costs associated with the relocation of underground utilities or overhead wires.
Estimate does not include costs of supplying or installing insulated joints.

Estimate is based on 30% currency exchange rate for material purchased from United States.

Breakdown of Project Costs

		RSIP eligibility	RSIP contribution	Rail Authority Contribution	Road Authority Contribution
Grade Crossing Warning System (CWT + LED's)	\$238,273.00	50%	\$119,136.50	\$119,136.50	
Road approach work + advance warning system/interconnection	\$620,683.91	80%	\$496,547.13		\$124,136.78
Crossing surface work			\$0.00		
Railway portion (ties/ballast/rail/flangeway)	\$10,200.00	50%	\$5,100.00	\$5,100.00	
Road authority portion (rubber crossing surface)	\$37,800.00	80%	\$30,240.00		\$7,560.00
Total	\$906,956.91		\$651,023.63	\$124,236.50	\$131,696.78

Breakdown by Project Year**Year 1 (FY2021-2022)**

		RSIP eligibility	RSIP contribution	Rail Authority Contribution	Road Authority Contribution
Grade Crossing Warning System (CWT + LED's)	\$238,273.00	50%	\$119,136.50	\$119,136.50	
Advance warning system/interconnection	\$69,685.69	80%	\$55,748.55		\$13,937.14
Year 1 Total	\$307,958.69		\$174,885.05	\$119,136.50	\$13,937.14

Year 2 (FY2022-2023)

Road approach work	\$550,998.22	80%	\$440,798.58		\$110,199.64
Crossing surface work			\$0.00		
Railway portion (ties/ballast/rail)	\$10,200.00	50%	\$5,100.00	\$5,100.00	
Road authority portion (rubber crossing surface)	\$37,800.00	80%	\$30,240.00		\$7,560.00
Year 2 Total	\$598,998.22		\$476,138.58	\$5,100.00	\$117,759.64

Estimate for rehabilitation of Radley Hill Road crossing surface, utilizing OMNI rubber crossing surface.

MATERIALS**ONTC (Rail Authority)**

Track and ties	\$ 10,200
----------------	-----------

City of Temiskaming Shores (Road Authority)

Rubber crossing surface	\$ 20,000
-------------------------	-----------

LABOUR & EQUIPMENT, ETC. (Road Authority)

Labour (Installation)	\$ 12,400
Equipment	\$ 5,400

ESTIMATE

TOTAL:	\$ 48,000
---------------	------------------



MILLER MAINTENANCE NORTHERN

704024 Rockley Rd., P.O. Box 248, New Liskeard, ON, P0J 1P0
Phone: (705) 647-4331 Fax: (705) 647-8182

Quotation

To: Estimating **From:** Sylvain Doucet

Email: Sylvain.doucet@millergroup.ca **Date:** 2020-07-20

Re: Radley Hill Rd. Advanced Beacon

☐ **Urgent** ☒ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

•**Comments:** We are pleased to quote the following on the above noted project:

Electrical	Lump Sum	\$48,750.00\$
-------------------	-----------------	----------------------

Quotation includes the following:

100A-120/240V metered single phase service mounted on direct buried steel pole
2-12" Flashing LED amber beacons c/w railroad ahead sign
Cabling from ONR cabinet c/w relay control box
UPS Battery Back-up

Terms & Conditions:

1. Quote is valid for 30 days.
2. HST not included.
3. Hydro One fees not included.
4. Traffic Control by Others
5. ONR to supply necessary control equipment in train cabinet

Please contact the undersigned if you have any questions.

Thank You,

Sylvain Doucet
Sylvain Doucet



July 27, 2020

The Corporation of the City of Temiskaming Shores
325 Farr Drive,
P.O. Box 2050
Haileybury, ON
POL 1K0
Canada

Attention: Mr. Doug Walsh, Director of Public Works

Re: Radley Hill Railway Crossing Improvements

The City of Temiskaming Shores has obtained the services of EXP Services Inc. to prepare a conceptual design and class 'D' cost estimate for the improvement of the Radley Hill Road railway crossing.

EXP's understanding is that the Ontario Northland Railway (ONR) performed a grade crossing assessment of the crossing on Radley Hill Road in Temiskaming Shores and that this assessment identified several deficiencies according to Transport Canada's Grade Crossing Standards.

The primary concern is the accumulation of fine-grained silt within the crossing requiring frequent and ongoing maintenance. Additional concerns are the steep grade of up to 16% +/- approaching the crossing, and the potential need for an early warning system to provide sufficient advance notice to vehicles descending the steep grade.

The existing roadway consists of a granular surface and roadside drainage ditches that are likely the source of the silty material collecting in the railway crossing. Due to the steep grade of the existing roadway the profile grade may only be adjusted slightly. This limited profile adjustment alone will not be adequate to remedy the maintenance issue that is present at the railway crossing and will not satisfy Transport Canada's Grade Crossing Standards (GCS). Bringing the crossing approach grades into compliance with the GCS specifications would require the lowering of the existing profile grade for the entire length of the road resulting in a substantial excavation at the existing driveways making access to the residential properties impossible. The most effective approach would be to construct an adequate roadbase to support the hot mix asphalt paving of the roadway for a length sufficient to attenuate the collection of silty material within the crossing.

**List of Technical Items:**

- Excavate existing roadway platform to perform vertical profile adjustment, improving roadway approach grade at the railway crossing to bring it closer to Transport Canada's Grade Crossing Standards.
- Construct appropriate roadbase to support hot mix paving of the crossing approaches.
- Regrade existing private entrances to adjacent properties to meet MTO requirements.
- Update 'Prepare to Stop at Railway Crossing Sign' location and railway signs.

Costing & Item Breakdown:

A preliminary construction cost estimate was assembled based on the conceptual design by EXP for the improvements to the Radley Hill Road ONR Railway Crossing.

Major items consist of, but not limited to the following:

- | | |
|-------------------------|------------------------|
| - Earth Excavation | 3,259.4 m ³ |
| - Superpave 12.5 | 316.5 t |
| - Granular 'A' | 871.1 t |
| - Granular 'B', Type II | 3,785.2 t |
| - Railway Signage | 100% LS |

The Preliminary Construction Cost Estimate including Engineering, Construction Contingency and H.S.T. is **\$620,683.91**.

Please refer to attached Preliminary Construction Cost Estimate for a detailed breakdown of items and costing.

Yours truly,

EXP Services INC.

A handwritten signature in black ink, appearing to read "Bradley Gilbert".

Bradley Gilbert, A.Sc.T., rcsi
Project Manager

Attach:

Preliminary Construction Cost Estimate

Preliminary Construction Cost Estimate
CORPORATION OF THE CITY OF TEMISKAMING SHORES
Radley Hill ONR Railway Crossing Improvements
Project No. NWL-02001025
Grading, Ditching and Hotmix Paving
15-Jul-20

Schedule of Items and Prices

ITEM	SPEC NO.*	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	201 SP	Clearing	m ²	2200.7	\$ 5.50	\$ 12,103.85
2	206 SP	Earth Excavation, Grading	m ³	3259.4	\$ 22.00	\$ 71,706.80
3	206	Ditching	m	105.5	\$ 35.00	\$ 3,692.50
4	308	Tack Coat	m ²	994.5	\$ 1.25	\$ 1,243.13
5	310 SP	Superpave 12.5	t	316.5	\$ 330.00	\$ 104,438.40
6	314 SP	Granular 'A'	t	871.7	\$ 31.00	\$ 27,022.08
7	314 SP	Granular 'B', Type II	t	3785.2	\$ 29.00	\$ 109,769.64
8	706 SP	Traffic Control Signing	Lump Sum	100%	\$ 8,250.00	\$ 8,250.00
9	802 SP	Topsoil, Imported	m ²	1611.2	\$ 8.00	\$ 12,889.60
10	803	Seed and Mulch	m ²	1611.2	\$ 11.00	\$ 17,723.20
11	421 SP	500 mm Pipe Culverts	m	54.5	\$ 305.00	\$ 16,622.50
12		Railway Signage	Lump Sum	100%	\$ 48,750.00	\$ 48,750.00
Sub-Total Carried Forward						<u>\$434,211.70</u>

THIS COST ESTIMATE IS BASED ON THE CONCEPTUAL DRAWING COMPLETED BY EXP AND WILL POTENTIALLY BE UPDATED AFTER THE COMPLETION OF THE DETAILED DESIGN

Preliminary Construction Cost Estimate
CORPORATION OF THE CITY OF TEMISKAMING SHORES
Radley Hill ONR Railway Crossing Improvements
Project No. NWL-02001025
Grading, Ditching and Hotmix Paving
 15-Jul-20
Schedule of Items and Prices

ITEM	SPEC NO.*	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Sub-Total Brought Forward						\$ 434,211.70
Sub-Total						\$ 434,211.70
Engineering (10%)						\$ 43,421.17
Construction Contingency (15%)						\$ 71,644.93
H.S.T. (13%)						\$ 71,406.11
Total						\$ 620,683.91

THIS COST ESTIMATE IS BASED ON THE CONCEPTUAL DRAWING COMPLETED BY EXP AND WILL POTENTIALLY BE UPDATED AFTER THE COMPLETION OF THE DETAILED DESIGN

SCHEDULE B



Transport
Canada

Transports
Canada

ORIGINAL - ORIGINALE

NO. - **163850**

CONTRIBUTION AGREEMENT

BETWEEN

HER MAJESTY THE QUEEN IN RIGHT OF CANADA

-AND-

CITY OF TEMISKAMING SHORES

Date of Agreement:	April 26, 2021
Term:	April 26, 2021– September 30, 2024
Description:	AGREEMENT FOR GRADE CROSSING IMPROVEMENTS
Contribution:	\$725,565.53

DEPT'L REFERENCE – RÉFÉRENCE DU MINISTÈRE
FILE NO. – N° DU DOSSIER

MEMORANDA-NOTES

CANADA – CITY OF TEMISKAMING SHORES
RAIL SAFETY IMPROVEMENT PROGRAM
AGREEMENT FOR GRADE CROSSING IMPROVEMENTS

This Agreement is made as of the date of last signature

BETWEEN: **HER MAJESTY THE QUEEN IN RIGHT OF CANADA**, as represented by the Minister of Transport ("Canada")

AND **CITY OF TEMISKAMING SHORES**, continued or incorporated pursuant to the *Cities Act* with its headquarters located at 325 Farr Drive, P.O. Box 2050, Haileybury, in the Province of Ontario (the "Recipient"),

individually referred to as a "Party" and collectively referred to as the "Parties".

RECITALS

WHEREAS the Minister of Transport is responsible for the Program entitled the Rail Safety Improvement Program ("Program");

WHEREAS the Recipient has submitted to Canada a proposal for the funding of the Project which qualifies for support under the Program;

AND WHEREAS the Recipient is responsible for carrying out the Project and Canada wishes to provide financial support for the Project and its objectives;

NOW THEREFORE, the Parties agree as follows:

1. INTERPRETATION

1.1 DEFINITIONS

In addition to the terms defined in the recitals and elsewhere in this Agreement, a capitalized term has the meaning given to it in this Section.

"Agreement" means this contribution agreement and all its schedules, as may be amended from time to time.

"Agreement End Date" means September 30, 2024.

"Asset" means any real or personal property or immovable or movable asset acquired, purchased, constructed, rehabilitated or improved, in whole or in part, with funds contributed by Canada under the terms and conditions of this Agreement.

"Asset Disposal Period" means the period commencing from the Effective Date and ending on the Agreement End Date.

"Contract" means an agreement between the Recipient and a Third Party whereby the latter agrees to supply a product or service to the Project in return for financial consideration.

"Declaration of Completion" means a declaration in the form substantially prescribed in Schedule E (Declaration of Completion).

"Effective Date" means the date of last signature of this Agreement.

"Eligible Expenditures" means those costs incurred that are directly related to the Project and which are considered eligible by Canada and may include cash-equivalent expenditures associated with In-Kind Contributions as set out in Schedule A (Eligible and Ineligible Expenditures).

"Fair Value" means the amount that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

"Final Claim Date" means the Project Completion Date of the Project no later than March 31, 2023.

"Fiscal Year" means the period beginning April 1 of a year and ending March 31 of the following year.

“Guide” means the *Guide to Railway Charges for Crossing Maintenance and Construction* prepared by the Canadian Transportation Agency, applicable to the year that the work was completed.

“In-Kind Contributions” means non-monetary contributions of goods, services or other support provided by the Recipient, or to the Recipient by a third party for the Project, for which Fair Value is assigned, but for which no payment occurs. The associated cash-equivalent expenditures may be considered Eligible Expenditures in accordance with Schedule A (Eligible and Ineligible Expenditures).

“Project” means the project as described in Schedule B (The Project).

“Project Completion Date” means the date at which all funded activities of the Project under this Agreement have been completed and which must be no later than March 31, 2023.

“Third Party” means any person or legal entity, other than a Party, who participates in the implementation of the Project by means of a Contract.

“Total Financial Assistance” means funding from all sources towards Eligible Expenditures of the Project, including funding from the Recipient and federal, provincial, territorial, and municipal governments as well as funding from all other sources, including In-Kind Contributions.

1.2 ENTIRE AGREEMENT

This Agreement comprises the entire agreement between the Parties in relation to the subject of the Agreement. No prior document, negotiation, provision, undertaking or agreement has legal effect, unless incorporated by reference into this Agreement. No representation or warranty express, implied or otherwise, is made by Canada to the Recipient except as expressly set out in this Agreement.

1.3 DURATION OF AGREEMENT

This Agreement will be effective as of the Effective Date and will terminate on the Agreement End Date subject to early termination in accordance with this Agreement.

1.4 SCHEDULES

The following schedules are attached to, and form part of this Agreement:

Schedule A – Eligible and Ineligible Expenditures

Schedule B – The Project

Schedule C – Certificate(s) of Compliance for Claims

Schedule D – Communications Protocol

Schedule E – Declaration of Completion

2. PURPOSE OF AGREEMENT

The purpose of this Agreement is to establish the terms and conditions whereby Canada will provide funding to the Recipient for the Project.

3. OBLIGATION OF THE PARTIES

3.1 CONTRIBUTION BY CANADA

- a) Canada agrees to pay a contribution to the Recipient of not more than eighty percent (80%) of the total Eligible Expenditures for the roadway work and not more than fifty percent (50%) of the total Eligible Expenditures for the railway work, for the Project, as described in Schedule B (The Project), but only up to a maximum of seven hundred and twenty five thousand, five hundred and sixty five dollars, and fifty three cents (\$725,565.53).
- b) Canada will pay the contribution in accordance with the terms and conditions of this Agreement and the Fiscal Year breakdown in Schedule B.2 (Project and Cashflow).
- c) If Canada's total contribution towards the Project exceeds eighty percent (80%) of the Project's total Eligible Expenditures or if the Total Financial Assistance received or due in respect of the total Project costs exceeds one hundred percent (100%) thereof, Canada may recover the excess from the Recipient or reduce its contribution by an

amount equal to the excess.

- d) The Parties acknowledge that Canada's role in the Project is limited to making a financial contribution to the Recipient for the Project and that Canada will have no involvement in the implementation of the Project or its operation. Canada is neither a decision-maker nor an administrator to the Project.

3.2 COMMITMENTS BY THE RECIPIENT

- a) The Recipient will complete the Project in a diligent and timely manner, within the costs and deadlines specified in this Agreement and in accordance with the terms and conditions of this Agreement.
- b) The Recipient will be responsible for all costs of the Project including cost overruns, if any.
- c) The Recipient will inform Canada promptly of the Total Financial Assistance received or due for the Project.
- d) The Recipient will repay to Canada any payment received for disallowed costs, unexpended contributions, and overpayments made under and according to the terms and conditions of this Agreement.
- e) The Recipient will ensure the ongoing operation, maintenance, and repair of any Asset in relation to the Project as per appropriate standards, during the Asset Disposal Period.
- f) Canada may request that the Recipient declare to Canada any amounts owing to the federal Crown, under legislation or contribution agreements that constitute an overdue debt. The Recipient recognizes that any such amount owing is a debt due to the federal Crown and may be set-off by Canada in accordance with Section 18.6 (Set-off by Canada).
- g) The Recipient will inform Canada immediately of any fact or event that could compromise wholly or in part the Project.
- h) Upon Canada's request and throughout the term of the Agreement, the Recipient will promptly provide Canada with updates to the Project status and the Project expenditures and forecasts set out in Schedule B (The Project).

3.3 APPROPRIATIONS AND FUNDING LEVELS

Notwithstanding Canada's obligation to make any payment under this Agreement, this obligation does not arise if, at the time when a payment under this Agreement becomes due, the Parliament of Canada has not passed an appropriation that is sufficient and constitutes lawful authority for making the payment. Canada may reduce or terminate any payment under this Agreement in response to the reduction of appropriations or departmental funding levels in respect of transfer payments, the program under which this Agreement was made or otherwise, as evidenced by any appropriation act or the federal Crown's main or supplementary estimates expenditures. Canada will promptly advise the Recipient of any reduction or termination of funding once it becomes aware of any such situation. Canada will not be liable for any direct, indirect, consequential, exemplary or punitive damages, regardless of the form of action, whether in contract, tort or otherwise, arising from any such reduction or termination of funding.

3.4 FISCAL YEAR BUDGETING

- a) The amount of the contribution payable by Canada for each Fiscal Year of the Project is set out in Schedule B.2 (Project and Cashflow).
- b) If the actual amount payable by Canada in respect of any Fiscal Year of the Project is less than the estimated amount in Schedule B.2 (Project and Cashflow), the Recipient may request that Canada re-allocate the difference between the two amounts to a subsequent Fiscal Year. Subject to Section 3.3 (Appropriations and Funding Levels), Canada agrees to make reasonable efforts to accommodate the Recipient's request. The Recipient acknowledges that requests for re-allocation of Project funding will require appropriation adjustments or federal Crown approvals.
- c) In the event that any requested re-allocation of Project funding is not approved, the amount of Canada's contribution payable pursuant to Section 3.1 (Contribution by Canada) may be reduced by the amount of the requested re-allocation. If the contribution payable by Canada pursuant to Section 3.1 (Contribution by Canada) is so reduced, the Parties agree to review the effects of such reduction on the overall implementation of the Project and to adjust the terms and conditions of this Agreement as appropriate.

3.5 CHANGES DURING THE LIFE OF THE PROJECT

- a) Where a change to this Agreement is contemplated, the Recipient will submit to Canada a request for a change.
- b) Where the change is approved by Canada, the Parties will execute the corresponding amendment to the Agreement in accordance with Section 18.14 (Amendments).

3.6 INABILITY TO COMPLETE PROJECT

If, at any time during the term of this Agreement, one or all of the Parties determine that it will not be possible to complete the Project for any reason, the Party will immediately notify the other Party of that determination and Canada may suspend its funding obligation. The Recipient will, within thirty (30) business days of a request from Canada, provide a summary of the measures that it proposes to remedy the situation. If Canada is not satisfied that the measures proposed will be adequate to remedy the situation, then this will constitute an Event of Default under Section 15 (Default) and Canada may declare a default pursuant to Section 15 (Default).

3.7 GUIDELINES

The Recipient will complete the Project, or cause the Project to be completed, in accordance with all applicable laws, regulations and prevailing industry standards for such design and construction and all applicable building and design codes.

4. RECIPIENT REPRESENTATIONS AND WARRANTIES

The Recipient represents and warrants to Canada that:

- a) the Recipient has the capacity and authority to enter into and execute this Agreement as duly authorized by By-law no. 2021-062, dated April 6, 2021;
- b) the Recipient has the capacity and authority to carry out the Project;
- c) the Recipient has the requisite power to own the Assets;
- d) this Agreement constitutes a legally binding obligation of the Recipient, enforceable against it in accordance with its terms and conditions;
- e) all information submitted to Canada as set out in this Agreement is true, accurate, and was prepared in good faith to the best of its ability, skill, and judgment;
- f) any individual, corporation or organization that the Recipient has hired, for payment, who undertakes to speak to or correspond with any employee or other person representing Canada on the Recipient's behalf, concerning any matter relating to the contribution under this Agreement or any benefit hereunder and who is required to be registered pursuant to the federal *Lobbying Act*, is registered pursuant to that Act;
- g) the Recipient has not and will not make a payment or other compensation that is contingent upon or is calculated upon the contribution hereunder or the negotiation of the whole or any part of the terms and conditions of this Agreement to any individual, or corporation or organization with which that individual is engaged in doing business with, who is registered pursuant to the federal *Lobbying Act*;
- h) there are no actions, suits, investigations or other proceedings pending or, to the knowledge of the Recipient, threatened and there is no order, judgment or decree of any court or governmental agency which could materially and adversely affect the Recipient's ability to carry out the activities contemplated by this Agreement. The Recipient will inform Canada immediately if any such action or proceedings are threatened or brought during the term of this Agreement; and
- i) the Recipient is in good standing under the laws of the jurisdiction in which it is required to be registered.

5. [INTENTIONALLY OMITTED]

6. CONTRACT PROCEDURES

6.1 AWARDING OF CONTRACTS

- a) The Recipient will ensure that Contracts are awarded in a way that is transparent, competitive, consistent with value-for-money principles, or in a manner otherwise acceptable to Canada, and if applicable, in accordance with the Canadian Free Trade Agreement and international trade agreements.

- b) If Canada determines that the Recipient has awarded a Contract in a manner that is not in compliance with the foregoing, upon notification to the Recipient, Canada may consider the expenditures associated with the Contract to be ineligible.

6.2 CONTRACT PROVISIONS

The Recipient will ensure that all Contracts are consistent with, and incorporate, the relevant provisions of this Agreement. More specifically but without limiting the generality of the foregoing, the Recipient agrees to include terms and conditions in all Contracts to ensure that:

- a) the Third Party will keep proper and accurate financial accounts and records, including but not limited to its contracts, invoices, statements, receipts, and vouchers, in respect of the Project for at least six (6) years after the Agreement End Date and that the Recipient has the contractual right to audit them;
- b) all applicable labour, environmental, and human rights legislation are respected; and
- c) Canada and its designated representatives, to the extent permitted by law, will at all times be permitted to inspect the terms and conditions of the Contract and any records and accounts respecting the Project and will have free access to the Project sites and to any documentation relevant for the purpose of audit.

7. ENVIRONMENTAL AND IMPACT ASSESSMENT

7.1 REQUIREMENTS UNDER APPLICABLE ENVIRONMENTAL OR IMPACT ASSESSMENT LEGISLATION

The Recipient agrees that no construction, physical activity or site preparation may be carried out in relation to the Project, and no funds or additional funds for any Eligible Expenditure for the Project will be payable by Canada to the Recipient for the Project unless and until the requirements under the applicable federal environmental or impact assessment legislation are met and continue to be met:

- a) where the Project is a “designated project” under the applicable federal environmental or impact assessment legislation,
 - i. a decision pursuant to that legislation is made indicating that no environmental or impact assessment is required for the Project; or
 - ii. a decision statement made pursuant to that legislation in respect to the Project is issued to the Recipient indicating that:
 - 1. the Project is not likely to cause significant adverse environmental effects, or that the Project is likely to cause significant adverse environmental effects that the Governor in Council decides are justified in the circumstances; or
 - 2. the adverse effects with respect to the impact assessment of the Project are in the public interest,
- b) where the Project is a “project” or includes a physical activity under the applicable federal environmental or impact assessment legislation, a determination required by that legislation is made that the carrying out of the Project:
 - i. is not likely to cause significant adverse environmental effects; or
 - ii. is likely to cause significant adverse environmental effects and the Governor in Council decides that those effects are justified in the circumstances,
- c) the requirements under any applicable federal environmental or impact assessment legislation; and
- d) the requirements under any applicable agreements between Canada and Aboriginal groups.

7.2 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

The Recipient will comply with, to the satisfaction of Canada and at the Recipient’s own expense, any conditions included in the decision statement related to the Project referred to in paragraph 7.1 (a) (Environmental and Impact Assessment) and will ensure access to Project sites, facilities, and documentation in accordance with section 11.6 (Access).

7.3 CHANGES TO PROJECT OR OTHERWISE

If, as a result of changes to the Project or otherwise, Canada is of the opinion that an environmental or impact assessment or a subsequent determination is required for the Project, the Recipient agrees that construction of the Project or any other physical activity that is carried out in relation to the Project, including site preparation, will not be undertaken or will be suspended and no funds or additional funds for any Eligible Expenditure for the Project will become or will be payable by Canada to the Recipient for that Project unless and until:

- a) where a Project is a "designated project" under the applicable federal environmental or impact assessment legislation,
 - i. a decision pursuant to that legislation is made indicating that no environmental or impact assessment is required for the Project; or
 - ii. a decision statement made pursuant to that legislation in respect of the Project is issued to the Recipient indicating that:
 - 1. the Project is not likely to cause significant adverse environmental effects, or that the Project is likely to cause significant adverse environmental effects that the Governor in Council decides are justified in the circumstances; or
 - 2. the adverse effects with respect to the impact assessment of the Project are in the public interest,
- b) where the Project is a "project" or includes a physical activity under the applicable federal environmental or impact assessment legislation, a determination required by that legislation is made stating that the carrying out of the Project:
 - i. is not likely to cause significant adverse environmental effects; or
 - ii. is likely to cause significant adverse environmental effects and the Governor in Council decides that those effects are justified in the circumstances,
- c) the requirements under any applicable federal environmental or impact assessment legislation; and
- d) the requirements under any applicable agreements between Canada and Aboriginal groups,

are met and continue to be met.

8. ABORIGINAL CONSULTATION

The Parties agree that the legal duty to consult does not arise for the Project.

9. CLAIMS AND PAYMENTS

9.1 PAYMENT CONDITIONS

- a) Canada will not pay interest for failing to make a payment under this Agreement.
- b) Canada will not pay any claims submitted after the Final Claim Date, unless otherwise accepted by Canada.
- c) Canada will not pay any claims until the requirements under Section 7 (Environmental and Impact Assessment) and Section 8 (Aboriginal Consultation), if applicable, are, in Canada's opinion, satisfied to the extent possible at the date the claim is submitted to Canada.

9.2 PROGRESS CLAIMS

- a) The Recipient will submit progress claims to Canada covering the Recipient's Eligible Expenditures in a form acceptable to Canada. Each progress claim must include the following:
 - i. a certification by a senior official designated in writing by the Recipient in the form set out in Schedule C.1 (Certificate of Compliance for Progress Claim) stating that the information submitted in support of the claim is accurate;
 - ii. a breakdown of Eligible Expenditures claimed, in accordance with Schedule B.2 (Project and Cashflow);

- iii. documentation to support the Eligible Expenditures claimed that is satisfactory to Canada.
- b) Canada will make a payment upon review and acceptance of a progress claim, subject to the terms and conditions of the Agreement.

9.3 FINAL CLAIM AND FINAL ADJUSTMENTS

- a) The Recipient will submit a final claim to Canada by the Final Claim Date covering the Recipient's Eligible Expenditures in a form acceptable to Canada. The final claim must include the following:
 - i. a certification by a senior official designated in writing by the Recipient in the form set out Schedule C.2 (Certificate of Compliance for Final Claim) stating that the information submitted in support of the claim is accurate;
 - ii. a breakdown of Eligible Expenditures claimed in accordance with Schedule B.2 (Project and Cashflow);
 - iii. confirmation of the Total Financial Assistance in accordance with Section 3.2 c) (Commitments by the Recipient) in the form set out in Schedule D.2 (Certificate of Compliance for Final Claim);
 - iv. a completed Schedule E (Declaration of Completion) in accordance with Section 9.5 (Declaration of Completion); and
 - v. documentation to support the Eligible Expenditures claimed that is satisfactory to Canada.
- b) Upon receipt of the Final Claim, but before issuing the final payment, the Parties will jointly carry out a final reconciliation of all claims and payments in respect of the Project and make any adjustments required in the circumstances.

9.4 WITHHOLDING OF CONTRIBUTION

Canada may withhold up to ten percent (10%) of its contribution towards Eligible Expenditures claimed under the Agreement. Any amount withheld by Canada will be released when the final adjustments have been completed under Section 9.3 (Final Claim and Final Adjustments) and the Recipient fulfills all its obligations under this Agreement.

9.5 DECLARATION OF COMPLETION

- a) Prior to executing the Declaration of Completion, the Recipient will request confirmation in writing from Canada as to whether the Declaration of Completion lists all relevant documents.
- b) The Declaration of Completion must be signed by an authorized official of the Recipient as deemed acceptable by Canada, and it must list all relevant documents as determined by Canada.

10. [INTENTIONALLY OMITTED]

11. AUDIT, EVALUATION AND MONITORING FOR COMPLIANCE

11.1 RECIPIENT AUDIT

Canada may, at its discretion, conduct a Recipient audit related to this Agreement during the term of this Agreement and up to two years after the Agreement End Date, in accordance with the Canadian Auditing Standards and Section 18.3 (Accounting Principles).

11.2 [INTENTIONALLY OMITTED]

11.3 EVALUATION

The Recipient agrees to cooperate with Canada in the conduct of any evaluation of the Program during or after the term of this Agreement.

11.4 CORRECTIVE ACTION

The Recipient agrees to ensure that prompt and timely corrective action is taken in response of any audit findings and recommendations conducted in accordance with this Agreement.

11.5 RECORD KEEPING

The Recipient will keep proper and accurate financial accounts and records, including but not limited to its Contracts, invoices, statements, receipts, and vouchers, in respect of the Project, for at least six (6) years after the Agreement End Date.

11.6 ACCESS

The Recipient will provide Canada and its designated representatives with reasonable and timely access, at no cost, to the Project sites, facilities, and any documentation for the purposes of audit, evaluation, inspection and monitoring compliance with this Agreement.

12. COMMUNICATIONS

12.1 COMMUNICATIONS PROTOCOL

The Parties will comply with Schedule D (Communications Protocol).

12.2 RECOGNITION OF CANADA'S CONTRIBUTION

The Recipient will acknowledge Canada's contribution in all signage and public communication produced as part of the Project or Agreement, in a manner acceptable to Canada, unless Canada communicates in writing to the Recipient that this acknowledgement is not required.

12.3 PUBLIC INFORMATION

The Recipient acknowledges that the following may be made publicly available by Canada:

- a) its name, the amount awarded by Canada, and the general nature of the Project; and
- b) any evaluation or audit report and other reviews related to this Agreement.

12.4 OFFICIAL LANGUAGES

- a) The Recipient will ensure that basic information is available in both official languages.
- b) The Recipient will communicate in such a manner as to address the needs of both official languages communities.

13. INTELLECTUAL PROPERTY

- a) All intellectual property that arises in the course of the Project will vest in the Recipient.
- b) The Recipient will obtain the necessary authorizations, as needed, for the implementation of the Project, from third parties who may own the intellectual property rights or other rights in respect of the Project. Canada will assume no liability in respect of claims from any third party in relation to such rights and to the Agreement.

14. DISPUTE RESOLUTION

- a) The Parties will keep each other informed of any issue that could be contentious by exchanging information and will, in good faith and reasonably, attempt to resolve potential disputes.
- b) Where the Parties cannot agree on a resolution, the Parties may explore any alternative dispute resolution mechanisms available to them to resolve the issue.
- c) Any payments related to the issue in dispute will be suspended, together with the obligations related to such issue, pending resolution.
- d) The Parties agree that nothing in this section will affect, alter or modify the rights of Canada to terminate this Agreement.

15. DEFAULT

15.1 EVENTS OF DEFAULT

The following events constitute Events of Default under this Agreement:

- a) the Recipient has not complied with one or more of the terms and conditions of this Agreement;
- b) the Recipient has not completed the Project in accordance with the terms and

conditions of this Agreement;

- c) the Recipient has submitted false or misleading information to Canada or made a false or misleading representation in respect of the Project or in this Agreement, except for an error in good faith, demonstration of which is incumbent on the Recipient, to Canada's satisfaction;
- d) the Recipient has neglected or failed to pay Canada any amount due in accordance with this Agreement.

15.2 DECLARATION OF DEFAULT

Canada may declare a default if:

- i. In Canada's opinion, one or more of the Events of Default occurs;
- ii. Canada gave notice to the Recipient of the event which constitutes an Event of Default; and
- iii. the Recipient has failed, within thirty (30) business days of receipt of the notice from Canada, either to remedy the Event of Default or to notify Canada and demonstrate, to the satisfaction of Canada, that it has taken such steps as are necessary to remedy the Event of Default.

15.3 REMEDIES ON DEFAULT

In the event that Canada declares a default under Section 15.2 (Declaration of Default), Canada may exercise one or more of the following remedies, without limiting any remedy available to it at law:

- a) suspend any obligation by Canada to contribute or continue to contribute funding to the Project, including any obligation to pay an amount owing prior to the date of such suspension;
- b) terminate any obligation of Canada to contribute or continue to contribute funding to the Project, including any obligation to pay any amount owing prior to the date of such termination;
- c) require the Recipient to reimburse Canada all or part of the contribution paid by Canada to the Recipient;
- d) terminate the Agreement.

16. LIMITATION OF LIABILITY AND INDEMNIFICATION

16.1 DEFINITION OF PERSON

In this section, "Person" includes, without limitation, a person, the Recipient, a Third Party, a corporation, or any other legal entity, and their officers, servants, employees or agents.

16.2 LIMITATION OF LIABILITY

In no event will Canada, its officers, servants, employees or agents be held liable for any damages in contract, tort (including negligence) or otherwise, for:

- a) any injury to any Person, including, but not limited to, death, economic loss or infringement of rights;
- b) any damage to or loss or destruction of property of any Person; or
- c) any obligation of any Person, including, but not limited to, any obligation arising from a loan, capital lease or other long term obligation;

in relation to this Agreement or the Project.

16.3 INDEMNIFICATION

The Recipient will at all times indemnify and save harmless Canada, its officers, servants, employees or agents, from and against all actions, claims, demands, losses, costs, damages, suits or other proceedings, whether in contract, tort (including negligence) or otherwise, by whomsoever brought or prosecuted in any manner based upon or occasioned by:

- a) any injury to any Person, including, but not limited to, death, economic loss or any infringement of rights;
- b) any damage to or loss or destruction of property of any Person; or
- c) any obligation of any Person, including, but not limited to, any obligation arising from a loan, capital lease or other long term obligation;

in relation to this Agreement or Project, except to the extent to which such actions, claims, demands, losses, costs, damages, suits or other proceedings are caused by the negligence or breach of the Agreement by an officer, servant, employee or agent of Canada in the performance of his or her duties.

17. ASSETS

- a) Assets acquired, purchased, constructed, rehabilitated, or improved, in whole or in part, through the course of the Project will be the responsibility and remain the property of the Recipient.
- b) Notwithstanding any other provision of this Agreement, the Recipient will preserve, maintain, and use any Assets for the purposes of the Project, and will not dispose of any Asset during the Asset Disposal Period, unless the Recipient notifies Canada in writing and Canada consents to the Asset's disposal.
- c) Unless otherwise agreed to by Canada, upon alternate use or disposal of any Asset, which includes selling, leasing and encumbering an Asset whether directly or indirectly, during the Asset Disposal Period, the Recipient will reimburse Canada, at Canada's discretion, in whole or in part, an amount of funds contributed by Canada to the Asset under this Agreement.

18. GENERAL

18.1 PUBLIC BENEFIT

The Parties acknowledge that their contributions to the Project are meant to accrue to the public benefit.

18.2 SURVIVAL

The Parties' rights and obligations which, by their nature, extend beyond the termination of this Agreement, will survive any termination of this Agreement.

18.3 ACCOUNTING PRINCIPLES

All accounting terms will have the meanings assigned to them, all calculations will be made and all financial data to be submitted will be prepared, in accordance with the Generally Accepted Accounting Principles (GAAP) in effect in Canada as defined in the Chartered Professional Accountants (CPA) Canada Handbook - Accounting or, where applicable, the CPA Canada Public Sector Accounting.

18.4 DEBTS DUE TO THE FEDERAL CROWN

Any amount owed to Canada under this Agreement by the Recipient will constitute a debt due to the federal Crown, which the Recipient will reimburse to Canada forthwith on demand.

18.5 INTEREST ON DEBTS DUE TO THE FEDERAL CROWN

Debts due to the federal Crown by the Recipient will accrue interest in accordance with the federal *Interest and Administrative Charges Regulations*.

18.6 SET-OFF BY CANADA

Any debt due to the federal Crown by the Recipient may be set-off against any amounts payable by Canada to the Recipient under this Agreement.

18.7 MEMBERS OF THE HOUSE OF COMMONS AND SENATE

No member of the House of Commons or the Senate of Canada will be admitted to any share or part of this Agreement, or to any benefit arising from it that is not otherwise available to the public. The Recipient will promptly inform Canada should it become aware of the existence of any such situation.

18.8 CONFLICT OF INTEREST

No current or former public servant or public office holder to whom any post-employment, ethics and conflict of interest legislation, guidelines, codes or policies of Canada applies will derive direct benefit from this Agreement unless the provision or receipt of such benefits is in compliance with such legislation, guidelines, policies or codes. The Recipient will promptly inform Canada should it become aware of the existence of any such situation.

18.9 NO AGENCY, PARTNERSHIP, JOINT VENTURE, ETC.

- a) No provision of this Agreement and no action by the Parties will establish or be deemed to establish a partnership, joint venture, principal-agent relationship or employer-employee relationship in any way or for any purpose whatsoever between Canada and the Recipient or between Canada and a Third Party.
- b) The Recipient will not represent itself, including in any agreement with a Third Party, as a partner, employee or agent of Canada.

18.10 NO AUTHORITY TO REPRESENT

Nothing in this Agreement is to be construed as authorizing any person, including a Third Party, to contract for or to incur any obligation on behalf of Canada or to act as an agent for Canada. The Recipient will take the necessary action to ensure that any Contract between the Recipient and any Third Party contains a provision to that effect.

18.11 ASSIGNMENT

The Recipient will not transfer or assign its rights or obligations under this Agreement without the prior written consent of Canada. Any attempt by the Recipient to assign any of the rights, duties or obligations of this Agreement without Canada's express written consent is void.

18.12 COUNTERPART SIGNATURE

This Agreement and all documents contemplated by or delivered under or in connection with this Agreement may be executed and delivered in any number of counterparts (including by electronic signature, facsimile or other means of electronic transmission, such as by electronic mail in "PDF" form), with the same effect as if all Parties had signed and delivered the same document, and all counterparts shall together constitute one and the same original document.

18.13 SEVERABILITY

If for any reason a provision of this Agreement that is not a fundamental term of this Agreement between the Parties is found to be or becomes invalid or unenforceable, in whole or in part, and if both Parties agree, it will be deemed to be severable and will be deleted from this Agreement, but all the other terms and conditions of this Agreement will continue to be valid and enforceable.

18.14 AMENDMENTS

This Agreement, including its schedules, can only be amended in writing by the Parties.

18.15 WAIVER

A Party may waive any of its rights under this Agreement only in writing. Any tolerance or indulgence demonstrated by the Party will not constitute a waiver.

18.16 NOTICE

- a) Any notice, information or required documentation provided for under this Agreement must be delivered in person or sent by mail, email, messenger or facsimile to the identified representatives of the Parties at the following coordinates, unless otherwise specified by Canada:

Canada:

Director, Transportation Infrastructure Program
Transport Canada
Place de Ville, Tower C, 19th Floor
330 Sparks Street
Ottawa, Ontario
K1A 0N5

Email: TC.RSIPITR-PASFITR.TC@tc.gc.ca

Recipient:

Christopher W. Oslund, City Manager
City of Temiskaming Shores
325 Farr Drive
P.O. Box 2050
Haileybury, Ontario
P0J 1K0

Phone: (705)-672-3363 Ext. 4120

Email: coslund@temiskamingshores.ca

Mitch Lafreniere, Manager of Transportation Services

Phone: 705-672-3363 ext. 4113

Email: mlafreniere@temiskamingshores.ca

- b) Such notice will be deemed to have been received:
- i. in person, when delivered;
 - ii. if sent by mail, email or facsimile, when receipt is acknowledged by the other Party;
 - iii. if sent by messenger or registered mail, when the receiving Party has signed the acknowledgment of reception.
- c) If a Party changes its representative or the coordinates for that representative, it will advise the other Party as soon as possible.

18.17 COMPLIANCE WITH LAWS

The Recipient will comply with all applicable laws and regulations and all requirements of regulatory bodies having jurisdiction over the subject matter of the Project.

18.18 GOVERNING LAW

This Agreement is governed by, and is to be interpreted in accordance with, the applicable federal laws and the laws in force in Ontario. The Parties attorn to the jurisdiction of the Courts of Ontario and all courts competent to hear appeals from the Courts of Ontario.

18.19 SUCCESSORS AND ASSIGNS

This Agreement is binding upon the Parties and their respective successors and assigns.

19. SIGNATURES

This Agreement has been executed on behalf of Her Majesty the Queen in right of Canada by the Minister of Transport and on behalf of City of Temiskaming Shores by the Mayor and the Clerk.

HER MAJESTY THE QUEEN IN RIGHT
OF CANADA



Per: Jonathan Farley
Director, Transportation and Infrastructure
Programs

2021-04-26

Date

CITY OF TEMISKAMING SHORES



Per: Carman Kidd
Mayor

April 23, 2021

Date



Per: Logan Belanger
Clerk

April 23, 2021

Date

SCHEDULE A – ELIGIBLE AND INELIGIBLE EXPENDITURES

SCHEDULE A.1: ELIGIBLE EXPENDITURES

Eligible Expenditures must:

- be reasonable and directly related to the Project, as determined by Canada;
- must not exceed the rates described in the *Guide to Railway Charges for Crossing Maintenance and Construction* (the “Guide”);
- be incurred between the date Canada received the Recipient’s application for Program funding and the Final Claim Date; and
- consist of the following categories of expenditures:
 - Staff salaries and benefits;
 - Purchase and lease of capital assets, technology, equipment and supplies;
 - Professional services, including accounting, translation, audit and consulting;
 - Planning, design and evaluation;
 - Engineering and environmental reviews and follow-up measures;
 - Expenditures related to construction and rehabilitation of assets (including fees paid to general contractors, labourers and power supply companies, materials, licenses, permits, and the rental of construction machinery and equipment);
 - Licenses and permits;
 - Expenditures for Aboriginal consultations, specifically project-related consultation activities pursuant to the Crown’s legal duty to consult;
 - Administrative expenditures (including general administration expenditures, rent, insurance, office equipment rental, and membership fees);
 - Travel expenditures (including the cost of accommodations, vehicle rental and kilometric rates, bus, train, airplane or taxi fares, allowances for meals and incidentals). Travel and per diem expenses cannot be more than the rates and allowances determined in the Travel Directive of the National Joint Council, available at the following link: <http://www.njc-cnm.gc.ca/directive/index.php?did=10&dlabel=travel-voyage&lang=eng&merge=2&slabel=index>;
 - Other costs that are, in the opinion of the Minister or his/her delegated representative, considered to be direct, reasonable, and incremental for the successful implementation of the project and have been approved in writing prior to being incurred.

For the purposes of determining Eligible Expenditures, and notwithstanding the material overhead rates set out in Schedule C to the Guide, the overhead rate applicable to pre-wired packages will be the allowance for contract overheads set out in Schedule D of the Guide.

Eligible Expenditures can be cash-equivalent expenditures associated with In-Kind Contributions. These expenditures may be reimbursed so long as the following three criteria are met:

- 1) The associated costs are deemed as Eligible Expenditures and have been approved by Canada;
- 2) The associated costs are not a donation received from a third party; and
- 3) The associated costs are related to goods, services or other support that would otherwise be purchased and paid for by the Recipient as essential for the Project.

In-Kind Contributions received from a third party are considered donations and may form part of the total Eligible Expenditures of the Project, but are not reimbursable.

SCHEDULE A.2: INELIGIBLE EXPENDITURES

The following expenditures shall be considered ineligible, and therefore will not be considered in the calculation of the total eligible expenditures of the Project:

- Costs incurred before the date Canada received the Recipient's application for Program funding or after the Final Claim Date;
- Expenditures for provincial sales tax and Goods and Services Tax, or the Harmonized Sales Tax, where applicable, for which the Recipient is eligible for a rebate, and any other costs eligible for rebates;
- Purchase of land and/or buildings, related real estate fees, and vehicles;
- Financing charges and interest payments on loans;
- Expenditures that have been reimbursed from other sources of funding, federal statutes or funding programs; and
- Personal mileage to and from Recipient's employees' homes.

SCHEDULE B – THE PROJECT

SCHEDULE B.1: PROJECT DESCRIPTION

Project Description:

The Project involves grade crossing improvements in the City of Temiskaming Shores in the Province of Ontario as described in Schedule B.2 (Project and Cashflow).

Objective(s):

The objective of the Project is to enhance public safety at the public grade crossing described in Schedule B.2 (Project and Cashflow) to reduce the risk of collisions, fatalities and injuries.

Activities:

The Project consists of improvements to the crossing described in Schedule B.2 (Project and Cashflow) through undertaking the following activities:

- **Mile 111.56 - Temagami Subdivision:** Upgrade existing crossing surface from gravel to concrete. Upgrade lights to LED. Add constant warning times.

Project Outcomes:

In order to illustrate how the Project will contribute to rail safety, the Recipient will collect performance data and report on the following performance indicators that the Project will contribute to:

- Single location with rail safety improvements to reduce collisions, fatalities, and injuries.

This data is collected only for the purpose of performance measurement and reporting to Canadians.

SCHEDULE B.2: PROJECT AND CASHFLOW

Province	Description of Project	Estimated Total Project Expenditures	Estimated Total Eligible Project Expenditures	Estimated Contribution by Canada	Estimated contribution to Eligible Expenditures per Party, per Fiscal Year		
	(Main technical and financial stages, location, construction methods, etc.)				Contributor	2021-22	2022-23
ON	Upgrade existing crossing surface from gravel to concrete. Upgrade lights to LED. Add constant warning times. Road: Radley Hill Road Mile/Subdivision: Mile 111.56- Temagami Project Application Date: 2020-07-30	\$906,956.91	\$906,956.91	\$725,565.53	Canada	\$197,716.61	\$527,848.92
					Recipient	\$49,429.15	\$131,962.23
TOTAL	Total Project	\$906,956.91	\$906,956.91	\$725,565.53	Canada	\$197,716.61	\$527,848.92
					Recipient	\$49,429.15	\$131,962.23

For greater certainty, Canada's total contribution cannot exceed the amount set out in Section 3.1 (Contribution by Canada).

SCHEDULE C – CERTIFICATE(S) OF COMPLIANCE FOR CLAIMS

SCHEDULE C.1: CERTIFICATE OF COMPLIANCE FOR PROGRESS CLAIM

In the matter of the Agreement entered into between Her Majesty the Queen in right of Canada, as represented by the Minister of Transport, and the City of Temiskaming Shores (the "Recipient"), represented by _____ (Name), concerning the [PROJECT NAME] Project (the "Agreement").

I, _____ (Name), of the City/Town of _____, Province/Territory of _____, declare as follows:

1. That I hold the position of _____ with the Recipient and as such have knowledge of the matters set forth in this declaration and believe this declaration to be true.
2. I am duly authorized by the Recipient to give this Certificate under [RECIPIENT INSERTS THE COMPLETE REFERENCE TO THE BY LAW OR INTERNAL POLICY AUTHORITY THAT ALLOWS THEM TO PROVIDE THIS CERTIFICATION] dated [DATE].
3. I have read and understood the Agreement and the progress claim submitted by the Recipient thereunder dated the same date as this Certificate and have knowledge of the business and affairs of the Recipient and have made such examinations or investigations as are necessary to give this Certificate and to ensure that the information contained herein is true and accurate.
4. The expenditures claimed are Eligible Expenditures in accordance with the Agreement.
5. The Recipient, at the date of this Certificate, has performed all covenants under the Agreement that are required to be performed by it on or prior to that date.
6. All representations and warranties of the Recipient contained in the Agreement are true and accurate in all respects at the date of this Certificate as though such representations and warranties had been made at the date of this Certificate.

Dated, this _____ day of _____ 20____

Signature

SCHEDULE C.2: CERTIFICATE OF COMPLIANCE FOR FINAL CLAIM

In the matter of the Agreement entered into between Her Majesty the Queen in right of Canada, as represented by the Minister of Transport, and the City of Temiskaming Shores (the "Recipient"), represented by _____ (Name), concerning the [PROJECT NAME] Project (the "Agreement").

I, _____ (Name), of the City/Town of _____, Province/Territory of _____, declare as follows:

1. That I hold the position of _____ with the Recipient and as such have knowledge of the matters set forth in this declaration and believe this declaration to be true.
2. I am duly authorized by the Recipient to give this Certificate under [RECIPIENT INSERTS THE COMPLETE REFERENCE TO THE BY LAW OR INTERNAL POLICY AUTHORITY THAT ALLOWS THEM TO PROVIDE THIS CERTIFICATION] dated [DATE].
3. I have read and understood the Agreement and the final claim submitted by the Recipient thereunder dated the same date as this Certificate and have knowledge of the business and affairs of the Recipient and have made such examinations or investigations as are necessary to give this Certificate and to ensure that the information contained herein is true and accurate.
4. The Recipient, at the date of this Certificate, has performed all covenants under the Agreement that are required to be performed by it on or prior to that date.
5. The expenditures claimed are Eligible Expenditures in accordance with the Agreement.
6. All representations and warranties of the Recipient contained in the Agreement are true and accurate in all respects at the date of this Certificate as though such representations and warranties had been made at the date of this Certificate.
7. The Project as defined in the Agreement has been completed.

[If applicable, add:]

8. The Project, to the best of my knowledge and belief, conforms to the applicable federal environmental or impact assessment legislation.

[If applicable, add:]

9. All applicable mitigation measures, accommodation measures and follow-up measures required to be performed during the Project implementation as a result of Aboriginal consultations have been implemented.
10. The Total Financial Assistance received or due for the Project in accordance with Section 3.2 c) (Commitments by the Recipient) is as follows:
[INCLUDE ALL TOTAL FINANCIAL ASSISTANCE RECEIVED OR DUE]
11. This Certificate of Compliance does not preclude any rights of Canada to verify, audit or inspect as per the terms and conditions of the Agreement.
12. The Recipient is not entitled to payment of any amount under the Agreement, other than any amount requested by the Recipient in accordance with the Agreement on or prior to the date of this Certificate.

Dated, this _____ day of _____ 20____

Signature

SCHEDULE D – COMMUNICATIONS PROTOCOL

GENERAL

1. Canada and the Recipient agree to undertake joint communications activities and products that will enhance opportunities for open, transparent, effective and proactive communications with citizens through appropriate, continuous, and consistent public information activities that recognize the contribution of the Parties and, where applicable, any other contributor.
2. The mechanisms for such communications and public information activities and products will be determined by Canada.
3. All public information material in relation to this Agreement will be prepared jointly and in both official languages and will equitably reflect the funding of all contributors to the Project. This requirement is not needed for tendering documents; the Recipient will carry out any tendering processes in accordance with its own policies, guidelines and governing laws.

COMMUNICATING WITH THE PUBLIC

Public Information Products

The Parties may jointly develop information kits, brochures, public reports, and website material for the public about the Project.

News Releases

A joint news release may be issued when the Agreement is signed and/or at appropriate milestones such as start of Project work or completion of the Project. A news release may include quotations from a federally, provincially, or municipally elected official or, where applicable, any other contributor. Canada must agree on these quotations.

Press Conferences, Public Announcements and Other Joint Events

The Parties will co-operate in organizing press conferences, announcements or official ceremonies. Canada should also agree on the messages and public statements at such events. No public announcement for the Project under this Agreement will be made by the Recipient or, where applicable, any other contributor, unless Canada has been informed of it at least thirty (30) business days in advance.

Either Party may organize a joint press conference. The requestor will give the other Party reasonable notice of at least thirty (30) business days of such a press conference, public announcement or joint event.

COMMUNICATION COSTS

The eligibility of costs related to communication activities that provide public information on this Agreement will be subject to Schedule A (Eligible and Ineligible Expenditures) and must be agreed to in advance by Canada.

SCHEDULE E – DECLARATION OF COMPLETION

[INSTRUCTION FOR RECIPIENTS: PLEASE DO NOT COMPLETE THIS DECLARATION AT THE TIME OF SIGNING THE AGREEMENT. THIS DECLARATION IS ONLY TO BE COMPLETED AND SIGNED AT THE TIME OF SUBMITTING THE FINAL CLAIM FOR REIMBURSEMENT OF ELIGIBLE EXPENDITURES]

In the matter of the Agreement entered into between Her Majesty the Queen in right of Canada, as represented by the Minister of Transport, and the City of Temiskaming Shores (the "Recipient"), represented by _____ (Name), concerning the [PROJECT NAME] Project (the "Agreement").

I, _____ (Name), of the City/Town of _____, Province/Territory of _____, declare as follows:

1. I hold the position of _____ with the Recipient and as such have knowledge of the matters set forth in this declaration and believe this declaration to be true.
2.
 - a) I have received the following documents for the [PROJECT NAME] Project:
 - i. [LIST NAME OF RELEVANT DOCUMENT(S), e.g. Certificate of Completion, Certificate of Performance, Occupancy Permit, etc.] signed by _____ (Name), a _____ (Profession, e.g. professional engineer, professional architect or other applicable professional) for the Project.
 - ii. [ADD SAME TEXT AS IN i FOR EACH DOCUMENT]
 - b) Based on the above documents and the representations made to me by the professionals identified in section 2(a) above, I declare to the best of my knowledge and belief that the Project has been completed, as described in Schedule B.1 (Project Description), as defined in the Agreement, on the _____ day of the _____ 20__.

[Insert #3, if applicable:]

3. I have received the following documents and based on these documents and representations made to me by the professionals identified below, I declare to the best of my knowledge and belief that the Project conforms with the guidelines referenced in Section 3.7 (Guidelines) of the Agreement:
 - i. [LIST NAME OF RELEVANT DOCUMENT(S), e.g. Certificate of Completion, Certificate of Performance, Occupancy Permit, etc.] signed by _____ (Name), a _____ (Profession, e.g. professional engineer, professional architect or other applicable professional) for the Project.
 - ii. [ADD SAME TEXT AS IN i FOR EACH DOCUMENT]

[Insert #4, if applicable:]

4. I have received the following documents and based on these documents and representations made to me by the professionals identified below, I declare to the best of my knowledge and belief that the Project conforms with, as applicable, the [LIST THE APPLICABLE ENVIRONMENTAL REVIEW OR ASSESSMENT e.g., the Canadian Environmental Assessment Act, 2012, the Impact Assessment Act, or Northern Regime]:

- i. [LIST NAME OF RELEVANT DOCUMENT(S)] signed by _____ (Name), an _____ (Profession, e.g. environmental consultant or other applicable professional).
- ii. [ADD SAME TEXT AS IN i FOR EACH DOCUMENT]

5. All terms and conditions of the Agreement that are required to be met as of the date of this declaration have been met.

Declared at _____ (City/Town), in _____ (Province/Territory)

this _____ day of _____, 20_____.

Signature

The Corporation of the City of Temiskaming Shores

By-law No. 2021-172

Being a by-law to designate any plan of subdivision, or part thereof, that has been registered for eight years or more, which shall be deemed as not a registered plan of subdivision 604 Brewster Street (Roll No. 5418-030-001-053.00 and 5418-010-001-082.02)

Whereas Section 50(4) of the Planning Act, R.S.O. 1990, c.P.13, as amended authorizes the Council of a municipality to designate by by-law, a plan of subdivision, or any part thereof, that has been registered for eight (8) years or more, which shall be deemed not to be a registered plan of subdivision for the purposes of subdivision control; and

Whereas Council considered Memo No. 039-2021-CS at the November 16, 2021 Regular Council meeting, and directed staff to prepare the necessary by-law to deem PLAN M54NB LOTS 33 TO 35 PT LOT 77 PLAN M37NB PT LOT 116 PT LANE AND RP 54R4188 PARTS 1 TO 4 RP 54R5366 PART 4 PCL 4159 3415 1030 24666 and PLAN M54NB LOT 78 PCL 23867SST, to no longer be lots on a plan of subdivision for consideration at the November 16, 2021 Regular Council meeting.

Now therefore the Council of the Corporation of the City of Temiskaming Shores enacts as follows:

1. That the lands hereinafter described shall be deemed not to be a lot or block on a Registered Plan of Subdivision for the purposes of Section 50(4) of the Planning Act R.S.O. 1990, c.P.13, as amended and as generally illustrated on Schedule "A" attached hereto and forming part of this by-law.
2. That the lands are described as:
 - PLAN M54NB LOTS 33 TO 35 PT LOT 77 PLAN M37NB PT LOT 116 PT LANE AND RP 54R4188 PARTS 1 TO 4 RP 54R5366 PART 4 PCL 4159 3415 1030 24666; and
 - PLAN M54NB LOT 78 PCL 23867SST.
3. That in accordance with Section 50(28) of the Planning Act, R.S.O. 1990, c.P.13, as amended, a certified copy or duplicate of this by-law shall be registered by the Clerk of the Corporation of the City of Temiskaming Shores at the Land Registry Office in Haileybury, Ontario.
4. That in accordance with Section 50(29) of the Planning Act, R.S.O. 1990, c.P.13, as amended, Council shall give notice of the passing of the by-law within 30 days of the passing to the owner of land to which the by-law applies.
5. That in accordance with Section 50(30) of the Planning Act R.S.O. 1990, c.P.13, as amended, Council shall hear in person or by an agent any person to whom a notice was sent, who within twenty days of the mailing of the notice gives notice to the Clerk of The Corporation of the City of Temiskaming Shores that the

person desires to make representations respecting the amendment or repeal of the by-law.

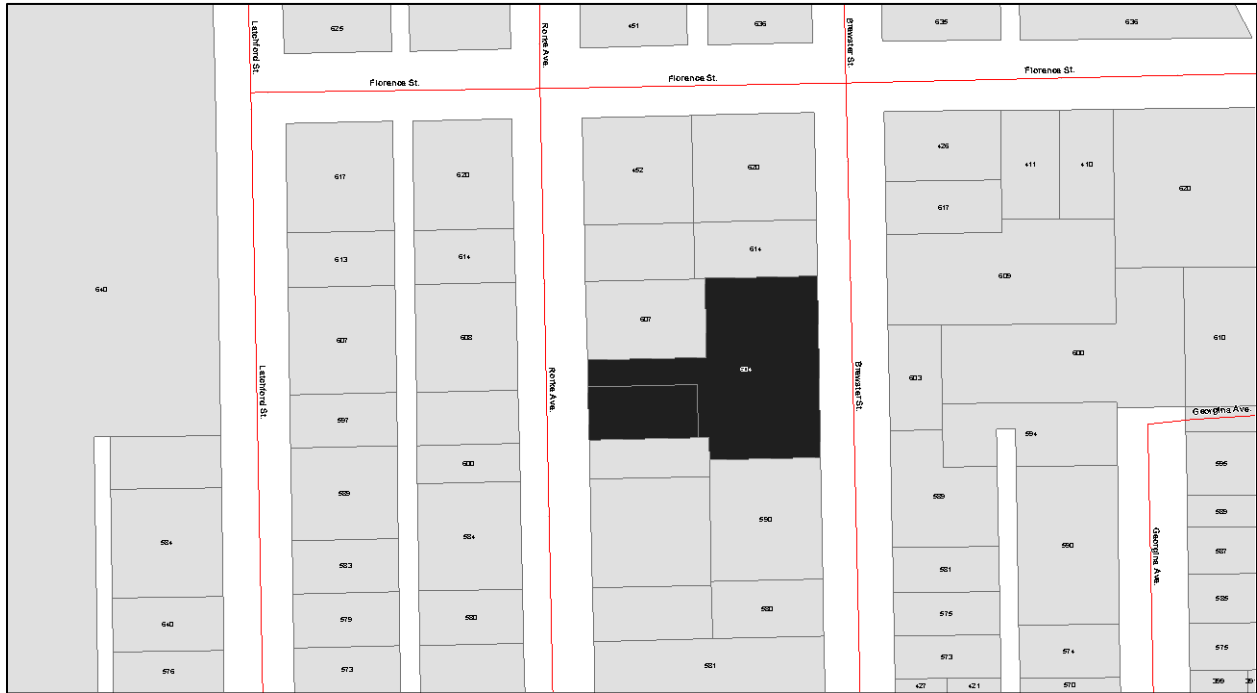
6. That the Mayor and Clerk are authorized to sign all necessary documents in connection with this by-law.
7. That this by-law shall not be effective until a certified copy or duplicate of this by-law is registered by the Clerk of The Corporation of the City of Temiskaming Shores at the Land Registry Office in Haileybury, Ontario.
8. That the passing of this by-law shall be subject to the provisions of the Planning Act.
9. That the Clerk of the City of Temiskaming Shores is hereby authorized to make any minor modifications or corrections of an administrative, numerical, grammatical, semantically or descriptive nature or kind to the By-law and schedule as may be deemed necessary after the passage of this By-law, where such modifications or corrections do not alter the intent of the By-law.

Read a first, second and third time and finally passed this 16th day of November, 2021.

Mayor

Clerk

City of Temiskaming Shores – 604 Brewster Street



The Corporation of the City of Temiskaming Shores

By-law No. 2021-173

Being a by-law to amend By-law No. 2010-111, as amended, a by-law to appoint agents for the purposes of wildlife control (Larry Durling)

Whereas Section 31 (1) of the Fish and Wildlife Conservation Act, 1997 states that if a person believes on reasonable grounds that wildlife is damaging or is about to damage the person's property that the person may, on the person's land, harass the wildlife for the purposes of deterring it from damaging the person's property or capture or kill the wildlife; and

Whereas Section 31 (2) of the Fish and Wildlife Conservation Act, 1997 states that a person may use an agent to harass, capture or kill wildlife under Section 31 (1) of the Act if the agent has the authorization of the Minister or belongs to a class of agents prescribed by the regulations to the Act; and

Whereas Section 132 (1) (5) of Ontario Regulation 665/98 under the Fish and Wildlife Conservation Act, 1997 states that employees or agents of a municipality whose responsibilities relate to wildlife control belong to the class of agents for the purposes of Section 31 (2) of the Fish and Wildlife Conservation Act, 1997; and

Whereas Council adopted By-law No. 2010-111, as amended to appoint agents for the purposes of wildlife control; and

Whereas Council considered Memo No. 040-2021-CS at the November 16, 2021 Regular Council meeting, and directed staff to prepare the necessary by-law to remove Matt Howe and to appoint Larry Durling as an agent for the purpose of wildlife control within the City of Temiskaming Shores, for consideration at the November 16, 2021 Regular Council meeting.

Now therefore the Council of The Corporation of the City of Temiskaming Shores enacts the following as a by-law:

1. That By-law No. 2010-11 entitled "a By-law to appoint agents for the purposes of wildlife control " be amended by deleting Section 3, and replacing it with the following:

That **Larry Durling** is hereby appointed as an Agent of the municipality for the Purpose of Wildlife Control for The Corporation of the City of Temiskaming Shores.

2. That the Clerk of the City of Temiskaming Shores is hereby authorized to make minor modifications or corrections of a grammatical or typographical nature to the by-law and schedule, after the passage of this by-law, where such modifications or corrections do not alter the intent of the by-law or its associated schedule.

Read a first, second and third time and finally passed this 16th day of November 2021.

Mayor

Clerk

The Corporation of the City of Temiskaming Shores

By-law No. 2021-174

A By-law to authorize the execution of a Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement between Her Majesty the Queen in Right of Ontario as represented by the Attorney General and The Corporation of the City of Temiskaming Shores

Whereas Section 8 of the Municipal Act 2001, c.25, as amended, states that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority; and

Whereas Section 9(1) of the Municipal Act 2001, c.25, as amended, interprets Section 8 as to enable a municipality to govern their affairs as they consider appropriate; and

Whereas under Section 10 (1) of the Municipal Act, 2001, S.O. 2001, c.25, as amended, a single-tier municipality may provide any service or thing that the municipality considers necessary or desirable for the public; and

Whereas the Council of The Corporation of the City of Temiskaming Shores acknowledged receipt of Memo 041-2021-CS at the November 16, 2021 Regular Council meeting regarding the Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement, and directed staff to prepare the necessary by-law for consideration at the November 16, 2021 Regular meeting; and

Whereas Council deems it expedient to enter into an agreement between Her Majesty the Queen in Right of Ontario as represented by the Attorney General and The Corporation of the City of Temiskaming Shores for a Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement.

Now therefore the Council of The Corporation of the City of Temiskaming Shores enacts as follows:

1. That the Mayor and Clerk are hereby authorized to execute the Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement between Her Majesty the Queen in Right of Ontario as represented by the Attorney General and The Corporation of the City of Temiskaming Shores, a copy of which is attached hereto as Schedule "A" and forming part of this by-law.
2. That the Mayor and Clerk have the delegation of authority to execute any and all required documentation, on behalf of the City of Temiskaming Shores, as required under the Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement.

3. That the Clerk of the City of Temiskaming Shores is hereby authorized to make any minor modifications or corrections of an administrative, numerical, grammatical, semantical or descriptive nature or kind to the by-law and schedule as may be deemed necessary after the passage of this by-law.

Read a first, second and third time and finally passed this 16th day of November, 2021.

Mayor

Clerk



Schedule “A” to

By-law No. 2021-174

Parts III and IX of Provincial Offences Act (Ontario) Interim Transfer Agreement between Her Majesty the Queen in Right of Ontario as represented by the Attorney General and The Corporation of the City of Temiskaming Shores

**PARTS III AND IX OF PROVINCIAL OFFENCES ACT
(ONTARIO)**

INTERIM TRANSFER AGREEMENT

- between -

**HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO
as represented by the Attorney General**

- and -

CORPORATION OF THE CITY OF TEMISKAMING SHORES

Table of Contents

PREAMBLE.....	2
ARTICLE I – INTERPRETATION.....	3
ARTICLE II – INTERIM TRANSFER OF PARTS III AND IX OF THE POA.....	5
ARTICLE III – COSTS.....	6
ARTICLE IV – COVENANTS	7
ARTICLE V – INDEMNITY AND INSURANCE	8
ARTICLE VI – TERMINATION AND EXPIRY	10
ARTICLE VII – NOTICE	12
ARTICLE VIII – MISCELLANEOUS	13
SIGNATURES.....	15

**PARTS III AND IX OF PROVINCIAL OFFENCES ACT (ONTARIO) INTERIM
TRANSFER AGREEMENT**

**THIS PARTS III AND IX OF PROVINCIAL OFFENCES ACT (ONTARIO) INTERIM
TRANSFER AGREEMENT (“Agreement”)** is made on the 16th day of November 2021,

BETWEEN:

**HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO
AS REPRESENTED BY THE ATTORNEY GENERAL**

(the “**Attorney General**”)

-and-

CORPORATION OF THE CITY OF TEMISKAMING SHORES

(the “**Municipal Partner**”)

WHEREAS, pursuant to the *Streamlining of Administration of Provincial Offences Act*, 1997, S.O. 1998, c.4, (Bill 108), the Attorney General and the Municipalities, as defined below, may enter into an agreement authorizing such municipalities, in general, to conduct court administration and court support functions under the POA, as defined below, and prosecutions of matters commenced under Parts I and II of the POA;

AND WHEREAS, the Attorney General and the Municipalities entered into memorandum of understandings and local side agreements whereby the Attorney General transferred to such municipalities, in general, court administration and court support functions under the POA and prosecutions of matters commenced under Parts I and II of the POA;

AND WHEREAS, such transfer was documented between the Attorney General and the Municipal Partner in the MOU, as defined below, and the LSA, as defined below;

AND WHEREAS, pursuant to the *Stronger, Fair Ontario Act (Budget Measures)*, 2017, S.O. c.34, Sched. 35, s.12, the Attorney General and the Municipalities may enter into an agreement authorizing such municipalities, in general, to conduct prosecutions commenced under the POA;

AND WHEREAS, the Attorney General, as part of its transfer project, intends to request amendments to the memorandum of understandings and the local side agreements in accordance with such documents from the Municipalities in order to

transfer certain prosecutions commenced under Parts III and IX of the POA prosecuted by the Criminal Law Division of the Ministry of the Attorney General to such municipalities;

AND WHEREAS, the Attorney General, as part of an interim transfer project, would like to transfer the prosecutions commenced under Parts III and IX of the POA prosecuted by the Criminal Law Division of the Ministry of the Attorney General to the Municipal Partner and the Municipal Partner, as a participant in such project, wishes to accept such transfer;

NOW THEREFORE, in consideration of the mutual covenants and obligations contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby expressly acknowledged by the parties, the Attorney General and the Municipal Partner covenant and agree as follows:

ARTICLE I – INTERPRETATION

1.1 Definitions. The following terms shall have the meanings ascribed to them below unless there is something in the context inconsistent therewith:

- (a) **“Agreement”** means this agreement, including all of the schedules, attached hereto, and all amendments made hereto in accordance with the provisions hereof as the same may be amended, restated and/or supplemented from time to time;
- (b) **“Attorney General”** means Her Majesty the Queen in right of Ontario as represented by the Attorney General;
- (c) **“Crown”** means Her Majesty the Queen in right of Ontario;
- (d) **“Crown Prosecution Manual”** means the document located at www.ontario.ca/document/crown-prosecution-manual, as amended from time to time;
- (e) **“Effective Date”** means **January 4, 2022**;
- (f) **“Expiry Date”** means two (2) years from the Effective Date;
- (g) **“Indemnified Parties”** means each of the following and their directors, officers, advisors, agents, appointees and employees: the Crown and the members of the Executive Council of Ontario;
- (h) **“Losses”** means liabilities, costs, damages, and expenses (including legal, expert, and consulting fees);
- (i) **“LSA”** means a local side agreement between the Attorney General and the Municipal Partner with an effective date of December 3, 2000;
- (j) **“MOU”** means a memorandum of understanding between the Attorney General and the Municipal Partner dated on the execution date by the Attorney General of December 3, 2000;

- (k) **"Municipalities"** means, collectively, all of the municipalities of the Province of Ontario who have entered into a memorandum of understanding and a local side agreement for purposes of the transfer of, in general, court administration and court support functions under the POA and prosecutions of matters commenced under Parts I and II of the POA;
 - (l) **"Municipal Partner"** means Corporation of the City of Temiskaming Shores;
 - (m) **"POA"** means the *Provincial Offences Act* (Ontario);
 - (n) **"Proceedings"** mean any action, claim, demand, lawsuit, or other proceeding;
 - (o) **"Term"** means the period commencing on the Effective Date and ending on Expiry Date unless the Term is extended or otherwise terminated pursuant to this Agreement;
 - (p) **"Transfer Agreement"** means, collectively, the MOU and the LSA;
 - (q) **"Transferred Property"** means any and all property relating to the Transferred Prosecutions including, but not limited to, systems, records, data, information, and materials in the possession or control of, or owned by, the Municipal Partner unless such property has been purchased by the Municipal Partner and has not been agreed to be transferred to the Attorney General;
 - (r) **"Transferred Prosecutions"** has the meaning ascribed to it in Section 2.2(a) hereof; and
 - (s) **"WSIA"** means the *Workplace Safety and Insurance Act, 1997* (Ontario).
- 1.2 Currency.** Any reference to currency is to Canadian currency and any amount disbursed, paid, or calculated is to be disbursed, paid or calculated in Canadian currency.
- 1.3 Statute and Regulation.** Any reference to a statute is to such statute and to the regulations made pursuant to such statute as such statute and regulations may at any time be amended or modified and in effect and to any statute or regulations that may be passed that have the effect of supplementing or superseding such statute or regulations.
- 1.4 Singular/Plural and Gender Terms.** Each definition in this Agreement using a singular capitalized term or other word or phrase also shall apply to the plural form and such term, word or phrase and vice versa, and all references to the masculine gender shall include reference to the feminine or neuter gender, and vice versa, in each case as the context may permit or require.
- 1.5 Pronouns.** Each use in this Agreement of neuter pronoun shall be deemed to include the masculine and feminine variations thereof and vice versa and a singular pronoun shall be deemed to include a reference to the plural variation thereof, and vice versa, in each case and the context may permit or require.

- 1.6 **Sections and Other Headings**. The section and other headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.
- 1.7 **Paramountcy**. The parties hereto agree that this Agreement shall be read, to the extent possible, as an addition to and not to derogate from the Transfer Agreement and shall only supersede the specific terms and conditions of the Transfer Agreement to the extent of a conflict or an inconsistency in the circumstances. All other terms and conditions of the Transfer Agreement shall remain in full force and effect, unaffected and unaltered by this Agreement.

ARTICLE II –INTERIM TRANSFER OF PARTS III AND IX OF THE POA

- 2.1 **General**. The parties hereto acknowledge and agree that this Agreement shall only apply to the prosecutions prosecuted by the Criminal Law Division of the Ministry of the Attorney General under Parts III and IX of the POA.
- 2.2 **Parts III and IX of the POA Interim Transfer**. On the Effective Date, the Attorney General shall:
- (a) transfer to the Municipal Partner and the Municipal Partner shall accept the following:
 - (i) the prosecutions of matters designated as contraventions under the *Contraventions Act* (Canada) and commenced under Parts III and IX of the POA;
 - (ii) prosecution of proceedings commenced under Parts III and IX of the POA;
 - (iii) the conduct of appeals of proceedings commenced under Parts III and IX of the POA where the Attorney General transferred the prosecution of the proceeding to the Municipal Partner,but such transfer excludes the following:
 - (iv) the prosecution of matters under Parts III and IX of the POA as against a Young Person, as defined under Part VI of the POA;
 - (v) any matter under Parts III and IX of the POA where criminal proceedings have also been commenced arising out of the same circumstances;
 - (vi) any proceeding under *Christopher's Law (Sex Offender Registry)*, 2000 (Ontario);
 - (vii) any proceeding stated in the Crown Prosecution Manual, as amended from time to time, being retained by the Attorney General;
 - (viii) any and all:
 - (A) applications for leave to the Court of Appeal; and

- (B) appeals to the Court of Appeal,
for matters with respect to Parts III and IX of the POA, which have
been prosecuted by the Attorney General at trial;
 - (ix) any and all appeals to the Ontario Court of Justice where:
 - (A) the appeal hearing is scheduled to begin within sixty (60) days
after the Effective Date;
 - (B) the appeal hearing began before the Effective Date; or
 - (C) the Attorney General is an appellant in a matter in which it has
prosecuted such matter at trial,
 for matters with respect to Parts III and IX of the POA; and
 - (x) any and all Part IX of the POA proceedings where:
 - (A) the hearing is scheduled to begin within sixty (60) days after
the Effective Date; or
 - (B) the hearing began before the Effective Date; but the order or
disposition is not complete,
 (collectively, the “**Transferred Prosecutions**”); and
 - (b) deliver to the Municipal Partner:
 - (i) a list of the Transferred Prosecutions;
 - (ii) the original records and files of the Transferred Prosecutions; and
 - (iii) a list of all open files that will be retained by the Attorney General.
- 2.3 Right to Intervene.** Notwithstanding anything else in this Agreement, the Attorney General maintains the right to intervene in any of the Transferred Prosecutions and shall be responsible for any and all costs from such intervention.

ARTICLE III – COSTS

- 3.1 Costs.** The Municipal Partner shall not remit to the Minister of Finance any amount owing pursuant to Section 165(5)(c) of the POA for costs incurred by the Attorney General for matters under Sections 2.2(a)(iv) to (x) hereof; and (b) Sections 173(2)1 and 173(2)2 of the POA.

ARTICLE IV – COVENANTS

4.1 The Municipal Partner's Covenants. The Municipal Partner covenants and agrees, at all times during the Term, that it shall:

- (a) provide full and timely disclosure to defendants in accordance with the law;
- (b) make efforts to advise the family members and other interested parties of significant developments throughout the proceedings in cases that involve a fatality in accordance with the Crown Prosecution Manual;
- (c) only proceed to prosecute a charge where there is a reasonable prospect of conviction and it is in the public interest to do so in accordance with the Crown Prosecution Manual;
- (d) screen all private prosecutions for reasonable prospect of conviction and, when necessary, assume the conduct of the proceedings in order to ensure that they are pursued in the interests of the administration of justice; and
- (e) maintain a reporting protocol to notify the Crown Attorney and the Attorney General of any matter that appears likely to raise a substantive legal issue at trial or appeal, including:
 - (i) an application for judicial review or prerogative writ sought in relation to a prosecution transferred;
 - (ii) any thing that may affect the administration, constitutional validity, or enforceability of a statute or regulation;
 - (iii) any matter where there could be a substantial public interest in its outcome including, but not limited to, where leave to appeal to the Court of Appeal has been granted; and
 - (iv) the anticipated withdrawal or stay of any matter involving a death while using a vehicle, a motorized snow vehicle, or an off-road vehicle under a provincial act;
- (f) as required by the Attorney General, make reasonable efforts to provide workspace for the Attorney General;
- (g) upon request, grant access to its available courtroom technology for such time as required by the Attorney General;
- (h) once informed, adhere to any and all of the Attorney General's intervention policies with respect to the Transferred Prosecutions;
- (i) adhere to all applicable laws;
- (j) provide, at a minimum, the same services and level of service delivery as were provided by the Attorney General with respect to the Transferred Prosecutions; and
- (k) as expeditiously as possible, bring to the attention of the Attorney General any and all matters that may be significant or contentious including, but not limited

to, alleged prosecutorial impropriety, misconduct, and constitutional challenges.

4.2 The Attorney General's Covenants. The Attorney General covenants and agrees, at all times during the Term, that it shall:

- (a) as required by the Municipal Partner, make reasonable efforts to provide workspace for the Municipal Partner; and
- (b) upon request, grant access to its available courtroom technology for such time as required by the Municipal Partner.

ARTICLE V – INDEMNITY AND INSURANCE

5.1 Indemnity from the Municipal Partner. The Municipal Partner shall indemnify and hold harmless the Indemnified Parties from and against all Losses and Proceedings, by whomever made, sustained, incurred, brought or prosecuted, arising out of, or in connection with anything done or omitted to be done by the Municipal Partner or the Municipal Partner's personnel in the course of the performance of the Municipal Partner's obligations under this Agreement or otherwise in connection with this Agreement.

5.2 Municipal Partner's Insurance. The Municipal Partner hereby agrees to put in effect and maintain insurance for the Term, at its own cost and expense, with insurers having a secure A.M. Best rating of B + or greater, or the equivalent, all the necessary and appropriate insurance that a prudent person in the business of the Municipal Partner would maintain including, but not limited to, the following:

- (a) commercial general liability insurance on an occurrence basis for third party bodily injury, personal injury and property damage, to an inclusive limit of not less than Five Million Dollars (\$5,000,000) per occurrence, Five Million Dollars (\$5,000,000) products and completed operations aggregate. The policy is to include the following:
 - (i) the Indemnified Parties as additional insureds with respect to liability arising in the course of performance of the Municipal Partner's obligations under, or otherwise in connection with, this Agreement;
 - (ii) contractual liability coverage;
 - (iii) cross-liability clause;
 - (iv) employers liability coverage (or compliance with the section below entitled "Proof of WSIA Coverage" is required);

- (v) thirty (30) day written notice of cancellation, termination or material change;
- (vi) tenants legal liability coverage (if applicable and with applicable sub-limits); and
- (b) errors & omissions liability insurance, insuring liability for errors and omissions in the performance or failure to perform the services contemplated in this Agreement, in the amount of not less than Five Million Dollars (\$5,000,000) per claim and in the annual aggregate.

5.3 Proof of Insurance. The Municipal Partner shall provide the Attorney General with certificates of insurance, or other proof as may be requested by the Attorney General, that confirms the insurance coverage as provided for in Section 5.2, hereof and renewal replacements on or before the expiry of any such insurance. Upon the request of the Attorney General, a copy of each insurance policy shall be made available to it. The Municipal Partner shall ensure that each of its subcontractors obtains all the necessary and appropriate insurance that a prudent person in the business of the subcontractor would maintain and that the Indemnified Parties are named as additional insureds with respect to any liability arising in the course of performance of the subcontractor's obligations under the subcontract for the provision of the Transferred Prosecutions.

5.4 Proof of WSIA Coverage. If the Municipal Partner is subject to the WSIA, it shall submit a valid clearance certificate of WSIA coverage to the Attorney General prior to the execution of this Agreement by the Attorney General. In addition, the Municipal Partner shall, from time to time at the request of the Attorney General, provide additional WSIA clearance certificates. The Municipal Partner covenants and agrees to pay when due, and to ensure that each of its subcontractors pays when due, all amounts required to be paid by it or its subcontractors, from time to time during the Term, under the WSIA, failing which the Attorney General shall have the right, in addition to and not in substitution for any other right it may have pursuant to this Agreement or otherwise at law or in equity, to pay to the Workplace Safety and Insurance Board any amount due pursuant to the WSIA and unpaid by the Municipal Partner or its subcontractors and to deduct such amount from any amount due and owing from time to time to the Municipal Partner pursuant to this Agreement together with all costs incurred by the Attorney General in connection therewith.

5.5 Municipal Partner Participation in Proceedings. The Municipal Partner shall, at its expense, to the extent requested by the Attorney General, participate in or conduct the defence of any Proceeding against any Indemnified Parties referred to in this Article and any negotiations for their settlement. The Attorney General may elect to participate in or conduct the defence of any such Proceeding by notifying the Municipal Partner in writing of such election without prejudice to any other rights or remedies of the Attorney General under this Agreement, Agreement, at law or in equity. Each party participating in the defence shall do so by actively participating

with the other's counsel. The Municipal Partner shall not enter into any settlement unless it has obtained the prior written approval of the Attorney General. If the Municipal Partner is requested by the Attorney General to participate in or conduct the defence of any such Proceeding, the Attorney General agrees to co-operate with and assist the Municipal Partner to the fullest extent possible in the Proceedings and any related settlement negotiations. If the Attorney General conducts the defence of any such Proceedings, the Municipal Partner agrees to co-operate with and assist the Attorney General to the fullest extent possible in the Proceedings and any related settlement negotiations.

- 5.6 Indemnity from the Attorney General.** Save and except for the indemnification by Ontario in favour of the Municipal Partner as provided for in section 15.2 of the MOU, the wording, scope, effect, and consequence of which shall apply, *mutatis mutandis*, to the provisions and obligations within this Agreement, including but not limited to, those in relation to the Transferred Prosecutions as contemplated hereunder, any express or implied reference in any other document (including subcontracts) as related to the Transferred Prosecutions as contemplated hereunder or to the Attorney General providing any other indemnity or other form of indebtedness or contingent liability that would otherwise directly or indirectly increase the indebtedness or contingent liabilities of the Crown, whether at the time of execution of this Agreement or at any time during its Term, shall be void and of no legal effect.

ARTICLE VI – TERMINATION AND EXPIRY

- 6.1 Termination for Cause.** The Attorney General may immediately terminate this Agreement upon giving notice to the Municipal Partner where there is a breach of this Agreement and such right of termination is in addition to all other rights of termination available at law, or events of termination by operation of law.
- 6.2 Dispute Resolution by Rectification Notice.** Subject to the above section, where the Municipal Partner fails to comply with any of its obligations under this Agreement, the Attorney General may issue a rectification notice to the Municipal Partner setting out the manner and timeframe for rectification. Within seven (7) business days of receipt of that notice, the Municipal Partner shall either: (a) comply with that rectification notice; or (b) provide a rectification plan satisfactory to the Attorney General. If the Municipal Partner fails to either comply with that rectification notice or provide a satisfactory rectification plan, the Attorney General may immediately terminate this Agreement. Where the Municipal Partner has been given a prior rectification notice, the same subsequent type of non-compliance by the Municipal Partner shall allow the Attorney General to immediately terminate this Agreement.
- 6.3 Termination on Notice.** The Attorney General reserves the right to terminate this Agreement, without cause, upon ninety (90) days prior notice to the Municipal Partner.

- 6.4 Municipal Partner's Obligations on Termination.** On termination of this Agreement, the Municipal Partner shall, in addition to its other obligations under this Agreement and the applicable laws:
- (a) at the request of the Attorney General, complete the Transferred Prosecutions that are set for sixty (60) days after the termination of this Agreement;
 - (b) provide access and transfer ownership, to the Attorney General, of the Transferred Property;
 - (c) provide the Attorney General with a report detailing a list of the Transferred Prosecutions that are being transferred to the Attorney General;
 - (d) execute such documentation as may be required by the Attorney General to give effect to the termination of this Agreement;
 - (e) comply with any other instructions provided by the Attorney General, including but not limited to, instructions for facilitating the transfer of its obligations to another person;
 - (f) keep the Attorney General informed of any and all matters that are necessary for the Attorney General to ensure the effective ongoing administration of justice during the termination period; and
 - (g) carry out a financial accounting and shall pay to Attorney General any monies owing to the Attorney General, including the Ministry of Finance.
- 6.5 Termination in Addition to Other Rights.** The express rights of termination in this Agreement are in addition to and shall in no way limit any rights or remedies of the Attorney General under this Agreement, at law or in equity.
- 6.6 Attorney General's Rights and Remedies and Municipal Partner's Obligations Not Limited to Agreement.** The express rights and remedies of the Attorney General and obligations of the Municipal Partner set out in this Agreement are in addition to and shall not limit any other rights and remedies available to the Attorney General, or any other obligations of the Municipal Partner at law or in equity.
- 6.7 Municipal Partner's Rights on Termination.** On termination of this Agreement, the Attorney General shall permit the Municipal Partner access to the Transferred Property including, the right to make and keep copies of documents; provided that, the Municipal Partner is named or otherwise becomes a party to any legal proceedings, or is placed on notice that it will be named as a party to a legal proceedings, arising from or in connection with the performance by the Municipal Partner of the Transferred Prosecutions.
- 6.8 Expiry of Agreement.** This Agreement shall expire on the Expiry Date.
- 6.9 Municipal Partner's Responsibility on Expiry.** On the Expiry Date, the Municipal Partner shall, in addition to its other obligations under this Agreement and the applicable laws:

- (a) at the request of the Attorney General, complete the Transferred Prosecutions that are set for sixty (60) days after the Expiry Date;
- (b) provide access and transfer ownership, to the Attorney General, of the Transferred Property;
- (c) provide the Attorney General with a report detailing a list of the Transferred Prosecutions that are being transferred to the Attorney General;
- (d) execute such documentation as may be required by the Attorney General to give effect to the expiry of this Agreement;
- (e) comply with any other instructions provided by the Attorney General, including but not limited to, instructions for facilitating the transfer of its obligations to another person;
- (f) keep the Attorney General informed of any and all matters that are necessary for the Attorney General to ensure the effective ongoing administration of justice; and
- (g) carry out a financial accounting and shall pay to Attorney General any monies owing to the Attorney General, including the Ministry of Finance.

ARTICLE VII – NOTICE

7.1 Notices. Any demand, approval, consent, notice or communication to be made or given hereunder shall be in writing and may be made or given by personal delivery, courier or mailed by first class registered mail, prepaid postage or by facsimile transmission, or other verifiable electronic means of communication addressed to the respective parties as follows:

- (a) To the Attorney General:

Ministry of Attorney General
Criminal Law Division
720 Bay St., 9th Floor
Toronto, ON M7A 2S9

Attention: Tammy Browes-Bugden, Director, Strategic Operations and
Management Centre (SOMC)

Telephone No.: 416-305-2916
E-mail: Tammy.Browes-Bugden@ontario.ca

(b) To the Municipal Partner:

Corporation of the City of Temiskaming Shores
325 Farr Drive, P.O. Box 2050
Haileybury, Ontario.
P0J 1K0

Attention: Stephanie Leveille, Treasurer

Telephone No.: (705) 672-3363
E-mail: sleveille@temiskamingshores.ca

or to such other address or facsimile number as any party may from time to time designate in accordance with this Section. Any communication made by personal delivery or by courier shall be conclusively deemed to have been given and received on the day of actual delivery thereof or if such day is not a Business Day, on the first (1st) Business Day thereafter. Any communication made or given by facsimile on a Business Day before 4:00 p.m. shall be conclusively deemed to have been given and received on such Business Day and otherwise shall be conclusively deemed to have been given and received on the first (1st) Business Day following the transmittal thereof. Any communication that is mailed shall be conclusively deemed to have been given and received on the fifth (5th) Business Day following the date of mailing but if, at the time of mailing or within five (5) Business Days thereafter, there is or occurs a labour dispute or other event that might reasonably be expected to disrupt delivery of documents by mail, any communication shall be delivered or transmitted by any other means provided for in this Section.

ARTICLE VIII – MISCELLANEOUS

- 8.1 Entire Agreement.** This Agreement, including all documents contemplated hereby, constitutes the entire agreement between the parties with respect to the subject matter and supersedes all prior negotiations, undertakings, representations and understandings. No agreement purporting to amend or modify this Agreement or any document or paper relating thereto or connected herewith is valid and binding unless it is in writing and signed and accepted in writing by the Attorney General and the Municipal Partner.
- 8.2 Assignment.** The Municipal Partner may not assign this Agreement or any of the benefits or obligations hereunder to any person, without the prior written consent of the Attorney General. The Attorney General will have the right at any time to assign this Agreement and any of its rights and obligations hereunder to any person.

- 8.3 Waiver.** The failure or delay by a party in exercising any right or privilege with respect to the non-compliance with any provisions of this Agreement, and any course of action on the part of such party, shall not operate as a waiver of any rights of the party unless made in writing by such party. Any waiver by a party shall be effective only in the specific instance and for the purpose for which it is given and shall not constitute a waiver of any other rights and remedies of such party with respect to any other or future non-compliance.
- 8.4 Severability.** Each provision of this Agreement is intended to be severable. If any provision hereof is illegal or invalid, such illegality or invalidity shall not affect the validity of the remainder hereof.
- 8.5 Further Assurances.** Each party will at any time and from time to time, upon the request of the other party, execute and deliver such further documents and do such further acts and things as the other party may reasonably request in order to evidence, carry out and give full effect to the terms, conditions, intent, and meaning of this Agreement.
- 8.6 Enurement.** This Agreement shall enure to the benefit of and be binding upon the parties and their successors and their permitted assigns.
- 8.7 Survival.** Sections 5.1, 5.5, 6.4, 6.9, and 8.7 shall survive any termination, expiration, or cancellation of this Agreement.
- 8.8 Counterparts and Execution by Facsimile and Electronic Mail.** This Agreement may be executed in one or more counterparts each of which when so executed shall be deemed to be an original and such counterparts together shall constitute but one and the same instrument. Delivery of an executed copy of a signature page to this Agreement by facsimile transmission or electronic mail shall be effective as delivery of a manually executed copy of this Agreement and each party hereto undertakes to provide each other party hereto with a copy of this Agreement bearing original signatures forthwith upon demand.
- 8.9 Non-Agent.** The Municipal Partner shall have no power or authority to bind the Attorney General or to assume or create any obligation or responsibility, express or implied, on behalf of the Attorney General. The Municipal Partner shall not hold itself out as an agent, partner, or employee of the Attorney General. Nothing in this Agreement shall have the effect of creating an employment, partnership or agency relationship between the Attorney General and the Municipal Partner or constitute an appointment under the *Public Service of Ontario Act, 2006*, (Ontario).
- 8.10 Confidentiality.** The parties acknowledge that personal information, as defined under the *Freedom of Information and Protection of Privacy Act* (Ontario) and the *Municipal Freedom of Information and Protection of Privacy Act* (Ontario), will be disclosed and exchanged between the parties hereto and that such disclosure and exchange is authorized under the such acts.
- 8.11 Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.

[The remainder of this page is intentionally left blank; Signature page to follow.]

IN WITNESS HEREOF, each of the parties hereto has caused this Agreement to be executed as of the date first written above.

**HER MAJESTY THE QUEEN IN RIGHT OF
ONTARIO AS REPRESENTED BY THE
ATTORNEY GENERAL**

Susan Kyle,
Assistant Deputy Attorney General,
Criminal Law Division

**CORPORATION OF THE CITY OF
TEMISKAMING SHORES**

Carman Kidd,
Mayor

Logan Belanger,
Municipal Clerk

I/We have the authority to bind the
corporation.

The Corporation of the City of Temiskaming Shores

By-law No. 2021-175

Being a by-law to authorize the execution of a Site Plan Control Agreement with CGV Builders Inc. for the New Haileybury Fire Hall Roll No. 5418-030-012-086.00

Whereas under Section 8 of the Municipal Act, 2001, S.O. 2001, c.25, as amended, the powers of a municipality shall be interpreted broadly to enable it to govern its affairs as it considers appropriate and to enhance the municipality's ability to respond to municipal issues; and

Whereas under Section 9 of the Municipal Act, 2001, S.O. 2001, c.25, as amended, a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act; and

Whereas under Section 10 (1) of the Municipal Act, 2001, S.O. 2001, c.25, as amended, a single-tier municipality may provide any service or thing that the municipality considers necessary or desirable for the public; and

Whereas Section 41 of the Planning Act, R.S.O. 1990 c.P.13, as amended, enables the Municipality to establish a Site Plan Control Area; and

Whereas the Council of the Corporation of the City of Temiskaming Shores passed By-law No. 2018-097 designating the City of Temiskaming Shores as Site Plan Control Areas; and

Whereas Council considered Administrative Report No. CS-045-2021 at the November 16, 2021 Regular Council meeting and directed staff to prepare the necessary by-law to enter into a Site Plan Agreement with CGV Builders Inc. for consideration at the November 16, 2021 Regular Council Meeting.

Now therefore the Council of The Corporation of the City of Temiskaming Shores hereby enacts the following as a by-law:

1. The Mayor and Clerk are hereby authorized to enter into a Site Plan Control Agreement with CGV Builders Inc., a copy of which is attached hereto as Schedule "A" and forming part of the by-law; and
2. That a Notice of Agreement be registered at the Land Titles Office in Haileybury to register Schedule "A" to this by-law; and
3. That this by-law takes effect on the day of its final passing; and
4. That the Clerk of the City of Temiskaming Shores is hereby authorized to make any minor modifications or corrections of an administrative, numerical, grammatical, semantically or descriptive nature or kind to the by-law and schedule

as may be deemed necessary after the passage of this by-law, where such modifications or corrections do not alter the intent of the by-law.

Read a first, second and third time and finally passed this 16th day of November, 2021.

Mayor

Clerk



Schedule “A” to
By-law No. 2021-175
Site Plan Control Agreement
(Haileybury Fire Hall)

This agreement made this 16th day of November, 2021.

Between:

The Corporation of the City of Temiskaming Shores
325 Farr Drive, P.O. Box 2050, Haileybury, ON P0J 1K0
(hereinafter called the “**City**”)

And:

CGV Builders Inc.
56 Connaught Avenue, Cochrane, ON P0L 1C0
(hereinafter called the “**Applicant**”)

Whereas the City of Temiskaming Shores enacted Site Plan Control Area By-law No. 2018-097 pursuant to the provisions of Section 41 of the *Planning Act*, R.S.O. 1990, c. P.13, as amended;

And Whereas By-law No. 2018-097 also sets out policies for site plan control assurances;

And Whereas by By-law 2021-080 the City entered into an agreement with the Applicant for the Design-Build of the Haileybury Fire Station on the Lands;

And Whereas by an application dated on or about July 26, 2021, the Applicant applied to the City for site plan approval in respect of the development described in Schedule “A”;

And Whereas the City owns the property described as PLAN M128NB LOTS 147 148 150 152 154 156 158 160 162 PT FOURTH ST PCL 3393NND 4120TIM 5396SST (the “**Lands**”);

Now Therefore in consideration of the mutual covenants contained herein, the parties covenant and agree as follows:

Conditions for Site Plan Control Agreement

This Agreement shall apply to the Lands, and to the development and redevelopment of the Lands.

The Applicant covenants and agrees:

1. That no development or redevelopment will proceed on the Lands except in accordance with the Plans approved by the City pursuant to Section 41 of the Planning Act R.S.O. 1990, c.P.13, and more specifically identified in Appendix 1 to 5 inclusive attached hereto (collectively, the “**Plans**”);

2. That the proposed buildings, structures and other works shown on the Plans with respect to the Lands shall be completed in conformity with the Plans;
3. To carry out all works in such a manner as to prevent erosion of earth, debris and other material from being washed or carried in any manner onto any road or road allowance whether opened or unopened or onto the property of any other person or persons;
4. To provide and construct all stormwater management works and drainage of the Lands to the satisfaction of the City acting reasonably, as shown on the Plans;
5. To provide such pavement markings, sidewalks, paving, curb cuts, and to landscape the Lands as shown on the Plans;
6. That prior to the work commencing, arrangements for the necessary permits and approvals must be made with the City’s Public Works Department and Building Department;
7. That any required work on the property in respect to municipal water and sanitary sewer must be carried out in accordance with City specifications, by a contractor approved by the City, at the expense of the Applicant;
8. That the Applicant’s engineer shall conduct testing of water and sanitary sewer services and confirm in writing to the Manager of Environmental Services that testing has been completed to the satisfaction of the City;
9. That upon completion of installation and construction of all of the services, works and facilities, the Applicant shall supply the City with a certificate from the Applicant’s engineer verifying that the services, works and facilities were installed and constructed in accordance with the approved plans and specifications.
10. That all conditions as set out in this agreement and as shown on the Plans inclusive, shall be completed within one (1) year of the issuance of an Occupancy Permit. That all work shown on the Plans that is legislated by Ontario Building Code shall be completed prior to the issuance of an Occupancy Permit.
11. That all conditions as set out in the agreement and as shown on the Plans inclusive, shall be completed within two (2) years of the issuance of any building permit. All work shown on the Plans that is legislated by the Ontario Building Code shall be completed prior to the issuance of an Occupancy Permit.
12. That the Applicant will indemnify the City and each of its officers, servants, and agents from all loss, damages, costs, expenses, claims, demands, actions, suits or other proceedings of every nature and kind arising from or in consequence of the execution, non-execution or imperfect execution of any of the work hereinbefore mentioned to be performed by the Applicant or its contractors,

officers, servants or agents or of the supply or non-supply of material therefore to be supplied by the Applicant or its contractors, officers, servants or agents, provided such loss, damages, costs, expenses, claims, demands, actions, suits or other proceedings arise by reason of negligence on the part of the Applicant or its contractors, officers, servants or agents.

13. That the Applicant shall not hold the City responsible for any and all costs related to the provision of revised site plans.

14. The following Appendices are attached to this agreement:

Appendix 1 – SITE PLAN SP-1; DRAWN BY: MB; No. 2 ISSUED FOR SPCA AND PERMIT 2021 09 14

Appendix 2 – SITE GRADING PLAN C201; Drawn By: RJ; No. F OVERHEAD DOORS ASPHALT BY OTHERS ADDED 11/09/2021

Appendix 3 – BUILDING ELEVATIONS A-4.1; DRAWN BY: MB, TB; No. 2 ISSUED FOR SPCA & PERMIT 2021 09 14

Appendix 4 – BUILDING ELEVATIONS A-4.2; DRAWN BY: MB, TB; No. 2 ISSUED FOR SPCA & PERMIT 2021 09 14

Appendix 5 – CGV BUILDERS Haileybury Fire Hall 25 Rorke Avenue, Haileybury, ON Stormwater Management Report; Date: July 23, 2021; Prepared by: Calvin Caldwell, P.Eng Manager; Reviewed by: Jerry Dussault, P.Eng Civil Engineer

This Agreement shall be binding upon the parties hereto and their respective successors and assigns.

Remainder of Page left blank intentionally

In witness whereof the parties have executed this Agreement the day and year first above written.

Signed and Sealed in
the presence of

CGV Builders Inc

Name:

Title:

Municipal Seal

**The Corporation of the City of Temiskaming
Shores**

Mayor – Carman Kidd

Clerk – Logan Belanger

LEGAL INFORMATION:

REFER TO CIVIL DRAWINGS FOR LEGAL DESCRIPTION OF THE PROPERTY

PROJECT DATA:

ZONE: C2
LOT AREA: MIN. 550 m² ACTUAL: 5,987.7 m²
LOT FRONTAGE: REQ. 15 m ACTUAL: 49.9 m
FRONT YARD SETBACK: 15 m
SIDE YARD SETBACK: 4.5 m
REAR YARD SETBACK: 7.5 m
MAX. COVERAGE: 40% MAX. ACTUAL: 16.27%
LANDSCAPED OPEN SPACE: 10% MIN.
BUILDING CLASSIFICATION: GROUP F
MAX. HEIGHT: 15m
BLDG SEPARATION: 2 m

PARKING REQUIREMENTS:

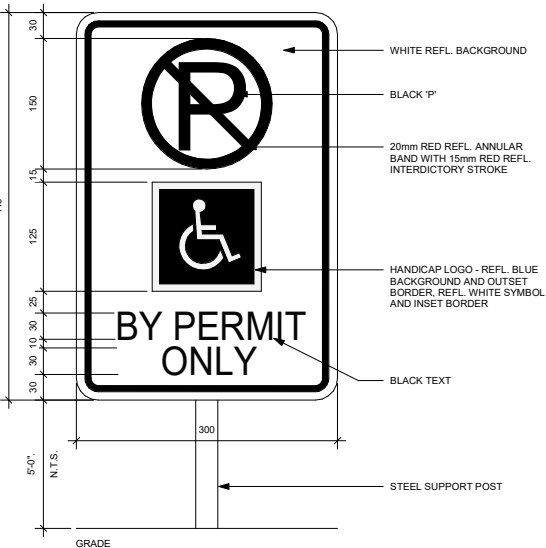
PARKING: MIN. 1 SPACE FOR EACH 50 S.M. OF BUILDING FLOOR SPACE ON THE LOT
TOTAL REQUIRED PARKING SPACES = 900 S.M. / 50 = 20 SPACES
TOTAL PARKING SPACES PROVIDED = 21 SPACES

GENERAL NOTES:

1. REFER TO DRAWINGS PREPARED BY EXP FOR GRADING AND SERVICES INFORMATION.
2. ALL SIDEWALKS & PATHWAYS TO BE 5'-0" MIN. WIDE UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO LOCATE ALL UNDERGROUND SERVICES PRIOR TO COMMENCEMENT OF WORK.

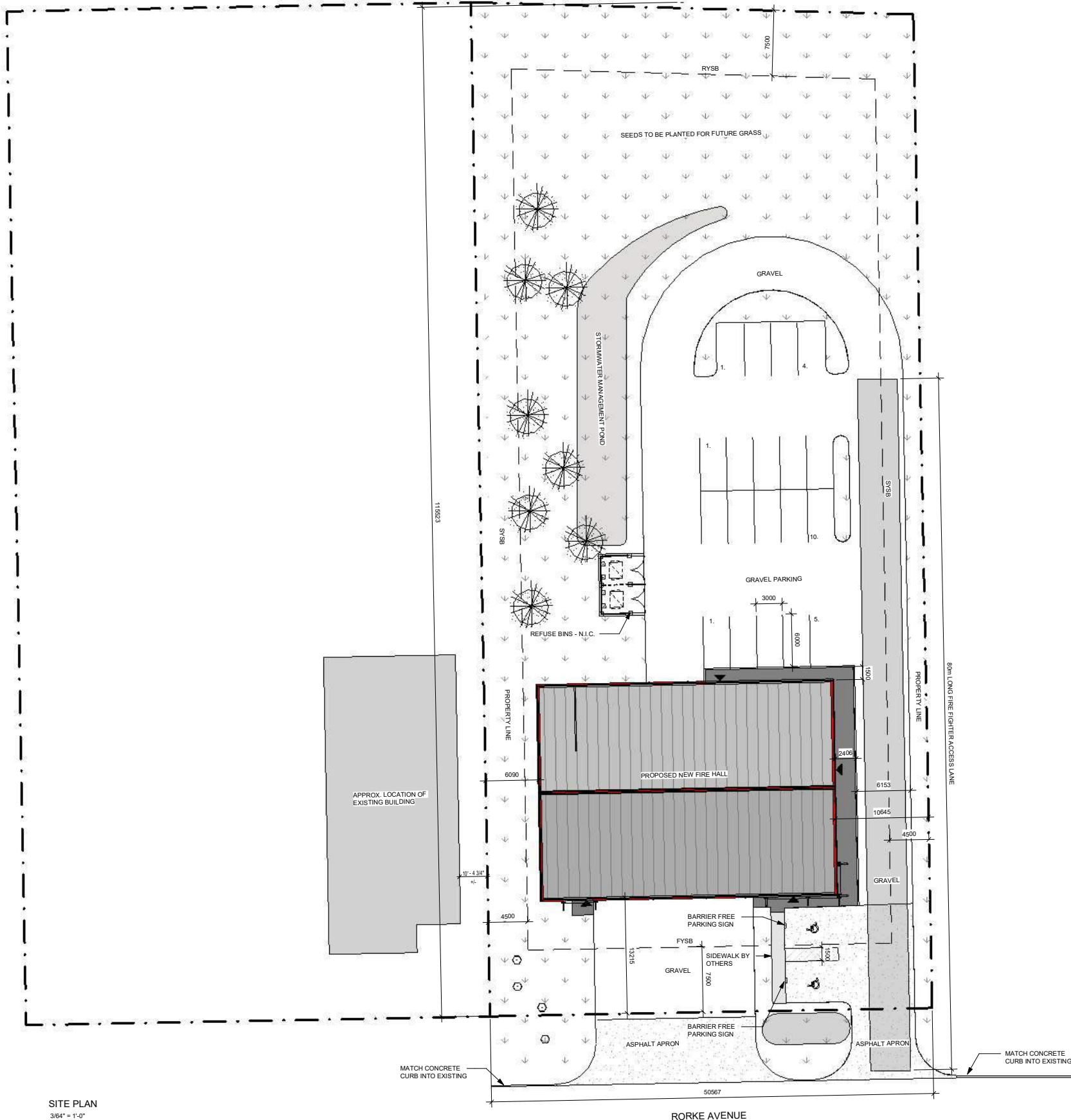
SITE LEGEND:

- DENOTES PROPERTY LINE
- DENOTES SETBACK LINE
- DC DENOTES NEW CURB HATCH DENOTES DROP CURB
- DENOTES NEW CONCRETE WALKWAY
- DENOTES NEW/EXISTING SOD OR LAWN SEEDING
- DENOTES NEW ASPHALT
- D DENOTES NEW DECIDUOUS TREE 3" CALIFER AT 6" ABOVE GROUND
- S DENOTES NEW MUGO PINE SHRUB
- DENOTES BARRIER FREE PARKING SPACE 14'-6" x 20'-0"
- DENOTES EXISTING BUILDING
- HP DENOTES HYDRO POLE
- FH(X) DENOTES EXISTING FIRE HYDRANT
- DENOTES BUILDING LOCATE BENCHMARKS
NOTE: BUILDING BENCHMARKS ARE LOCATED AT INTERSECTING GRID POINTS (4 PROVIDED)
- DENOTES TYPICAL PARKING SPACE 3'-0" x 20'-0" (3m x 6m)
- DENOTES BUILDING ENTRANCE



NOTES:
1. INSTALL ONE SIGN AT EVERY BARRIER FREE PARKING SPACE

BARRIER FREE PARKING SIGN
3" = 1'-0"



SITE PLAN
3/64" = 1'-0"

ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF CGV BUILDERS AND ARE PROTECTED BY COPYRIGHT. ANY REPRODUCTIONS, REVISIONS, OR TRANSMITTAL TO OTHERS WITHOUT WRITTEN PERMISSION BY CGV BUILDERS IS PROHIBITED.

CONTRACTOR MUST VERIFY ALL DIMENSIONS ON THE JOB AND REPORT ANY DISCREPANCIES TO ENGINEER BEFORE PROCEEDING WITH THE WORK.

THIS DRAWING IS NOT TO BE SCALED



No.	Revision / Version	Date	INT.
2	ISSUED FOR SPCA AND PERMIT	2021 09 14	
1	ISSUED FOR SPCA	2021 07 23	



SEAL:



PROJECT:

HAILEYBURY FIRE HALL

LOCATION:

25 Rorke Avenue
Haileybury, Ontario

DATE:
2021 07 23

DRAWN BY:

CGV PROJECT #:
202111

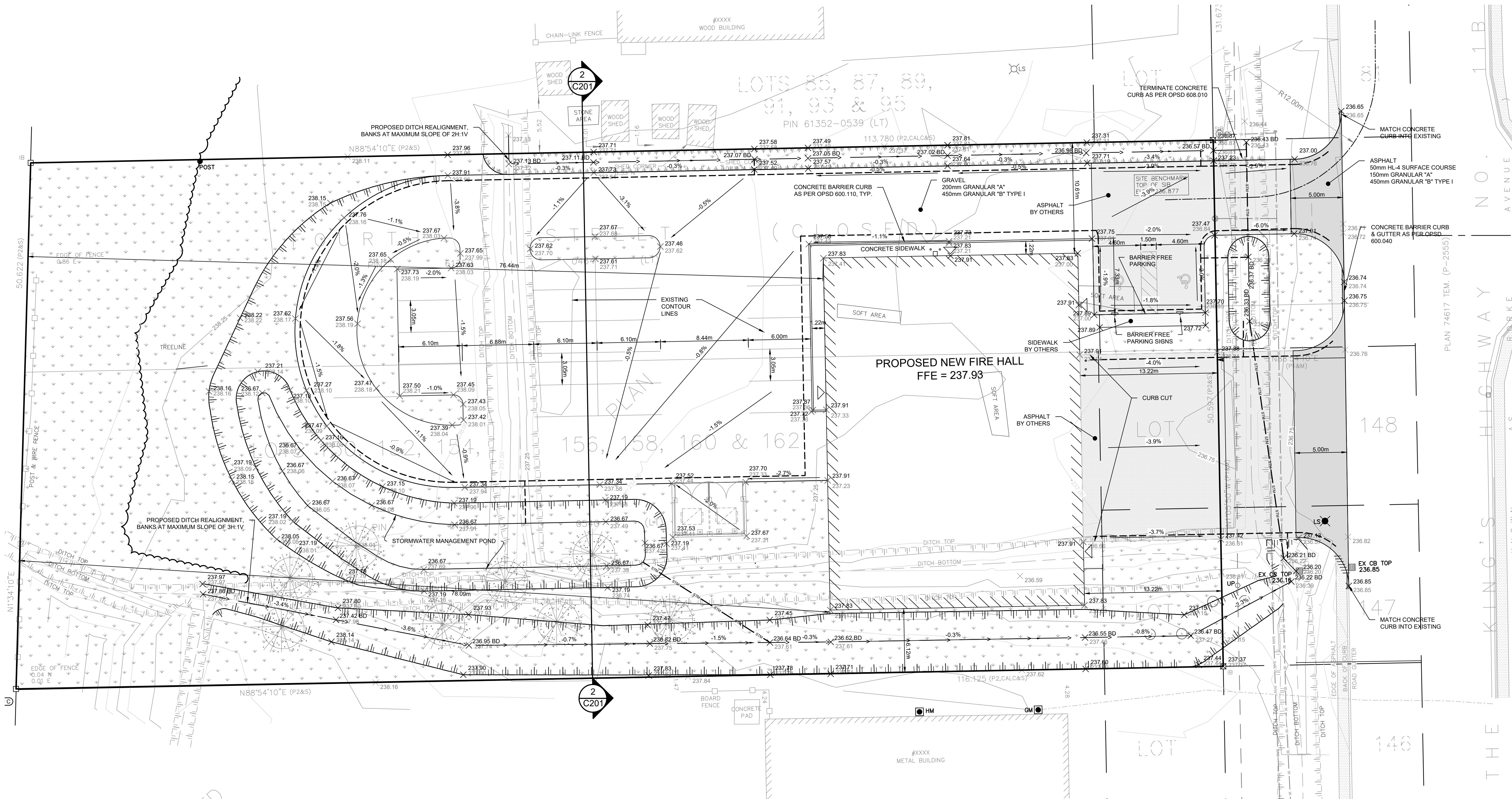
SHEET #:

CHECKED BY:

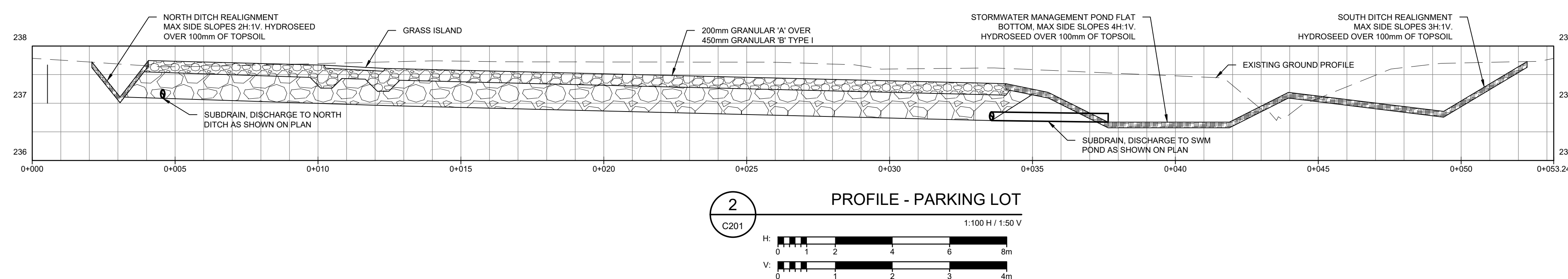
SCALE:
As indicated

SP-1

Rev. 2



1 SITE GRADING PLAN
C201 1:200



2 PROFILE - PARKING LOT
C201 1:100 H / 1:50 V

EXP Services Inc.
Infrastructure Services - North Bay
737 Main Street East
North Bay, Ontario, Canada
P1B 1C2
Ph: 705 474 2700
Fax: 705 474 6615
www.exp.com

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

CAUTION: DO NOT SCALE DRAWINGS.
THIS REPRODUCTION MAY BE AT A SIZE DIFFERENT THAN ORIGINALLY DRAWN. EXP ASSUMES NO RESPONSIBILITY FOR INACCURATE SCALING. UNAUTHORIZED REPRODUCTION OR REUSE IS STRICTLY PROHIBITED. NOT PUBLISHED - ALL RIGHTS RESERVED. EXP EXPRESSLY DISCLAIMS RESPONSIBILITY ARISING FROM UNAUTHORIZED USE OF THESE DRAWINGS AND NOTES. AUTHORIZATION MUST BE IN WRITING.
© EXP, 2021

LEGEND

— SAN —	PROPERTY LINE	— EX. —	EX. EDGE OF PAVEMENT
— SAN —	EX. SANITARY FORCEMAIN	— EX. —	EX. SANITARY FORCEMAIN
— STM —	PROPOSED SANITARY FORCEMAIN	— EX. —	EX. STORM SEWER
— STM —	EX. STORM SEWER	— EX. —	EX. STORM SEWER OR CULVERT
— W —	EX. WATER MAIN	— EX. —	EX. WATER MAIN
— W —	PROPOSED WATER SERVICE	— EX. —	EX. WATER MAIN
— SAN —	HEAVY DUTY STYROFOAM SEWER PIPE INSULATION	— EX. —	EX. GAS LINE
— GAS —	EX. GAS LINE	— EX. —	EX. HYDRO LINE
— HYD —	EX. HYDRO LINE	— EX. —	EXISTING/PROPOSED SANITARY MANHOLE
— EX. —	EXISTING/PROPOSED SANITARY MANHOLE	— EX. —	EXISTING/PROPOSED STORM DITCH INLET
— EX. —	EXISTING/PROPOSED STORM DITCH INLET	— EX. —	EXISTING/PROPOSED STORM MANHOLE CATCH BASIN
— EX. —	EXISTING/PROPOSED STORM MANHOLE CATCH BASIN	— EX. —	EXISTING/PROPOSED STORM CATCH BASIN
— EX. —	EXISTING/PROPOSED STORM CATCH BASIN	— EX. —	EXISTING WATER VALVE
— EX. —	EXISTING WATER VALVE	— EX. —	EXISTING FIRE HYDRANT
— EX. —	EXISTING FIRE HYDRANT	— EX. —	PROPOSED SLOPE
— EX. —	PROPOSED SLOPE	— EX. —	PROPOSED ELEVATION
— EX. —	PROPOSED ELEVATION	— EX. —	EXISTING ELEVATION

0 1 2 5 10 15m

F	OVERHEAD DOORS ASPHALT BY OTHERS ADDED	CLC	11/09/2021
E	REVISED AS PER CITY'S COMMENTS	CLC	10/26/2021
D	REVISED AS PER CITY'S COMMENTS	CLC	10/15/2021
C	RE-ISSUED FOR SPCA	CLC	09/28/2021
B	RE-ISSUED FOR SPCA	JD	09/14/2021
A	ISSUED FOR SPCA	CLC	07/23/2021
No.	Revision	By:	Date

OVERHEAD DOORS ASPHALT BY OTHERS ADDED

Professional Seal

Drawn By: RJ

Checked By: CLC

Approved By: CLC

Date Printed: 11/9/2021

File Name: NTB-4052 BASE November 9, 2021

Project Title

HAILEYBURY FIRE HALL
HAILEYBURY, ON

Dwg. Title

SITE GRADING PLAN

Project No. NTB-21014052

Dwg. No. C201

Rev. No. F

W1

WINDOW TYPE REFERENCE TAG
REFER TO DRAWING A-3.2

Rev: 2

LEGEND

- MTL.S

PARGING

STONE

MTL.R

EL

HB

EO

LV

FD

W1
- DENOTES METAL SIDING
REFER TO SPEC.

DENOTES CEMENTITIOUS PARGING
REFER TO SPEC.

DENOTES MASONRY STONE
REFER TO SPEC.

DENOTES METAL ROOFING - PRE.FIN.
RTL-24 ROOF PANEL SYSTEM

EXTERIOR SURFACE MOUNTED LIGHT FIXTURE
REFER TO ELECTRICAL DRAWINGS

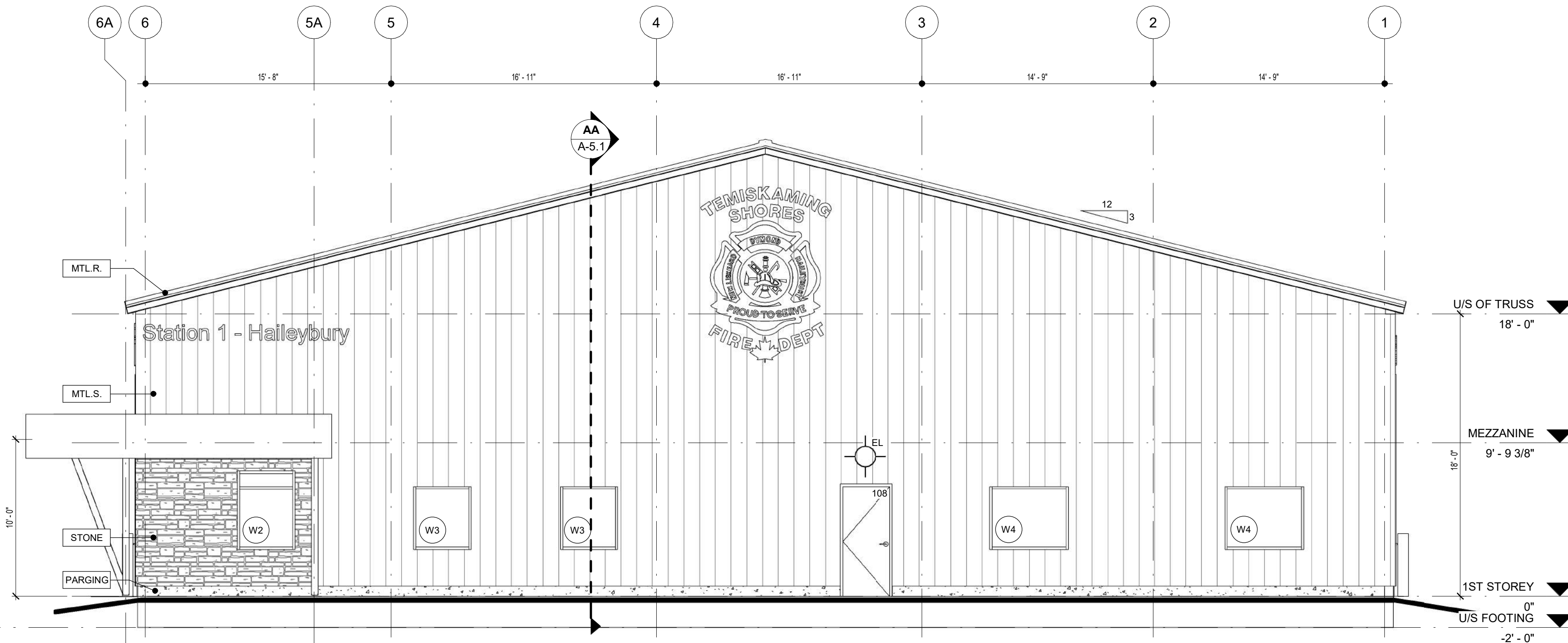
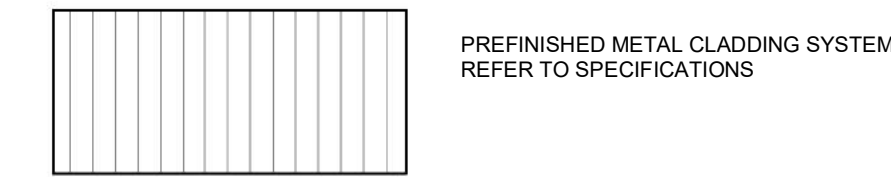
HOSE BIB (NON FREEZE)
REFER TO MECHANICAL DRAWINGS

ELECTRICAL OUTLET
REFER TO ELECTRICAL DRAWINGS

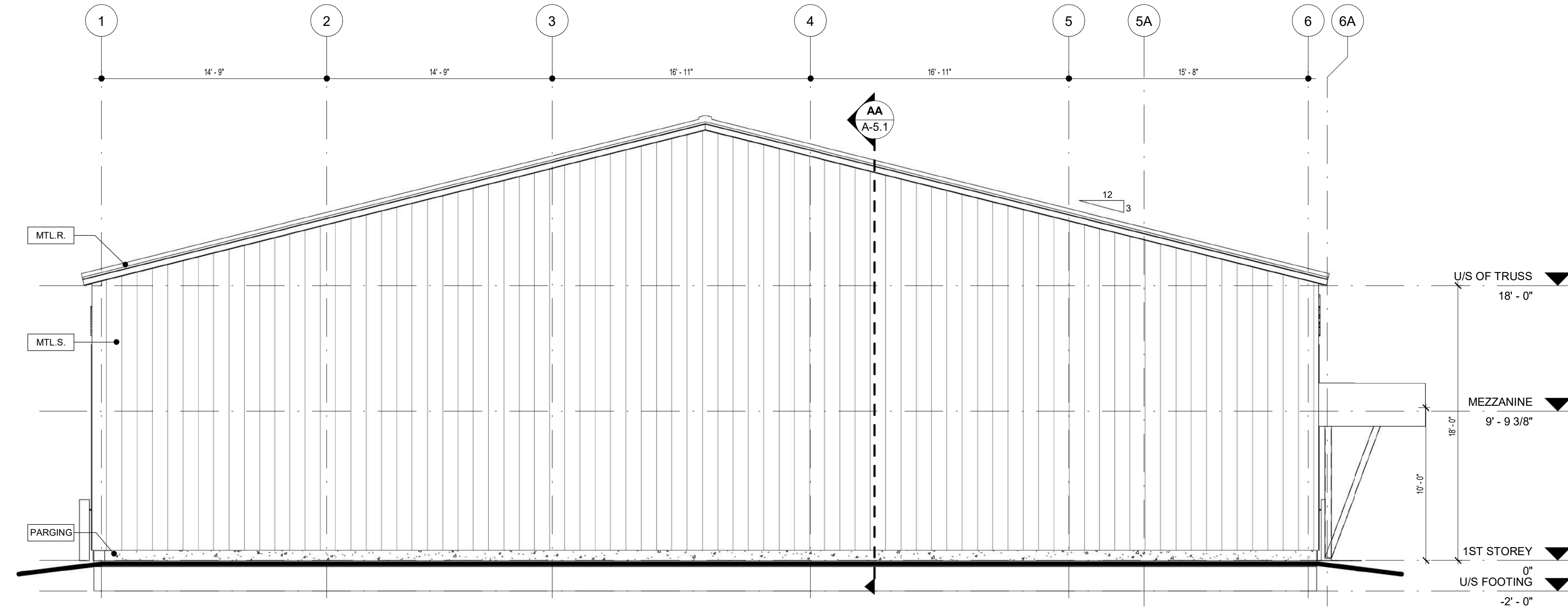
LOUVER
REFER TO MECHANICAL DRAWINGS

FIRE DEPARTMENT CONNECTION
REFER TO ELECTRICAL DRAWINGS

WINDOW TYPE REFERENCE TAG
REFER TO DRAWING A-3.2



EAST ELEVATION
3/16" = 1'-0"

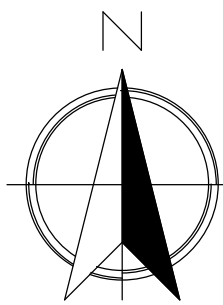


WEST ELEVATION
3/16" = 1'-0"

ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF CGV BUILDERS AND ARE PROTECTED BY COPYRIGHT. ANY REPRODUCTIONS, REVISIONS, OR TRANSMITTAL TO OTHERS WITHOUT WRITTEN PERMISSION BY CGV BUILDERS IS PROHIBITED.

CONTRACTOR MUST VERIFY ALL DIMENSIONS ON THE JOB AND REPORT ANY DISCREPANCIES TO ENGINEER BEFORE PROCEEDING WITH THE WORK.

THIS DRAWING IS NOT TO BE SCALED



2	ISSUED FOR SPCA & PERMIT	2021 09 14	
1	ISSUED FOR SPCA	2021 07 23	
No.	Revision / Version:	Date:	INT.



SEAL:



PROJECT:

HAILEYBURY FIRE HALL

LOCATION:

25 Rorke Avenue
Haileybury, Ontario

DATE:

2021 09 15

CGV PROJECT #:

202111

DRAWN BY:

MB,TB

SHEET #:

TITLE:

BUILDING ELEVATIONS

CHECKED BY:

RV

SCALE:

3/16" = 1'-0"

Rev. 2

A-4.2



**CGV BUILDERS
Haileybury Fire Hall
25 Rorke Avenue, Haileybury, ON**

Stormwater Management Report

Type of Document
Final

Project Number
NTB-21004052-00

Date:
July 23, 2021

Prepared By:
EXP SERVICES INC.
757 Main Street East
North Bay, ON P1B 1C2
Canada
T: +1.705.474.2720
F: +1.705.474.8515
www.exp.com

Infrastructure Division

Legal Notification

This report was prepared by EXP Services Inc.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this project.

Table of Contents

Legal Notification	i
Table of Contents	ii
List of Appendices	ii
List of Figures	ii
1 Site Description	1
1.1 Location	1
1.2 Present Land Use	1
1.3 Terms of Reference	1
2 Existing Drainage	2
3 Proposed Land Use and Drainage	2
4 Stormwater Management	2
4.1 Stormwater Management	2
4.2 Rainfall Intensity	3
4.3 Discharge	4
5 Quantity Control	4
6 Ditch Conveyance Calculations	5
7 Sediment and Erosion Control	5
8 Conclusion	6

List of Appendices

Appendix A – Stormwater Management Calculations
Appendix B – Pre-Development Stormwater Management Catchment Area Plan
Appendix C – Post-Development Stormwater Management Catchment Area Plan
Appendix D – Site Grading Plan – C201 & Site Servicing Plan – C202

List of Figures

Figure 1. Proposed Site 1

List of Tables

Table 1. Pre-Development Condition Runoff Coefficients 2
Table 2. Post-Development Condition Runoff Coefficients 3
Table 3. A & b Coefficients for the City of Temiskaming Shores 3
Table 4. Model Results 3
Table 5. Model Results – Site Release Rates 5

1 Site Description

1.1 Location

The site is located at 25 Rorke Avenue, in the City of Temiskaming Shores and the Town of Haileybury. It is proposed to construct an 827 m² structure on the site shown in Figure 1 below. The legal description of the property is described as Lots 147, 148, 150, 152, 154, 156, 158, 160 & 162 and Fourth Street (Closed) Registered Plan M-128 NB in the City of Temiskaming Shores, Ontario.

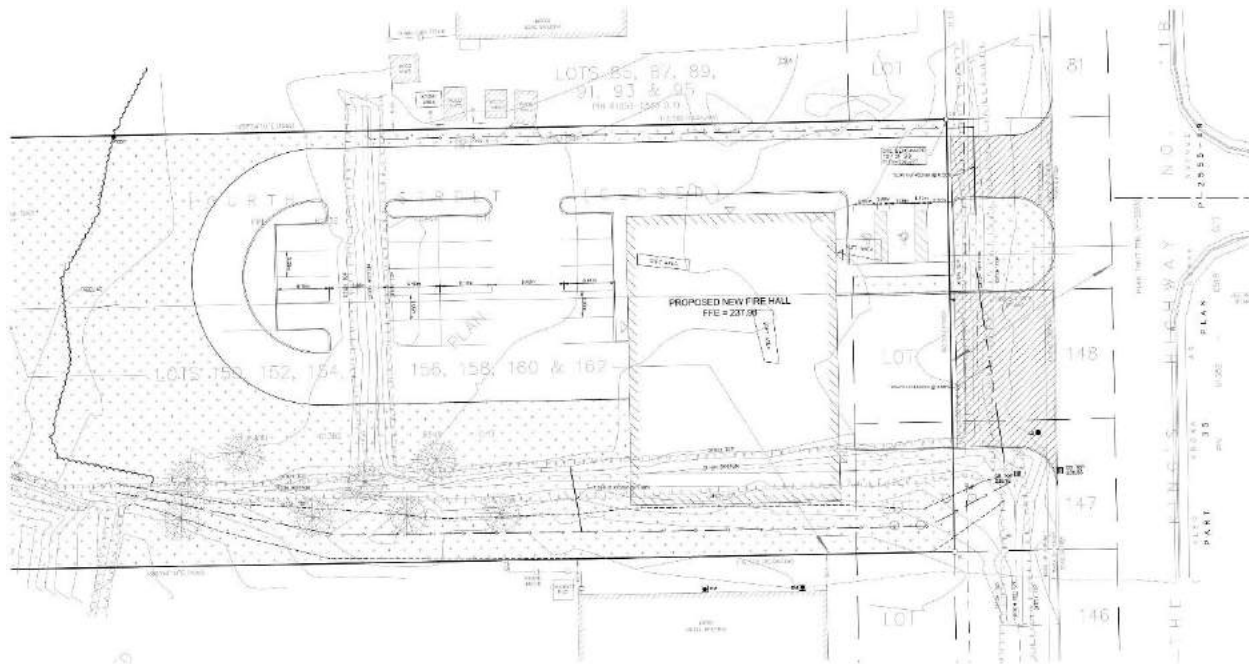


Figure 1. Proposed Site

1.2 Present Land Use

The site currently consists of a vacant grass lot with mixed forest along the west property line. A storm conveyance ditch runs from the north to south and from the west to east on the property ultimately discharging to the ditch inlet catchbasin along Rorke Avenue.

1.3 Terms of Reference

The intent of this Stormwater Management (SWM) Report is to:

- Identify the existing site characteristics including any external drainage conditions.
- Illustrate the design of the stormwater conveyance system capable of accommodating both minor and major storm flows from the site.
- Incorporate the appropriate Best Management Practices for controlling on-site erosion and sedimentation during construction while ultimately ensuring that the post-development release of stormwater is of adequate quality.
- Summarize this design in a technically comprehensive and concise manner.

2 Existing Drainage

The subject site referenced in this report is approximately 5,811 m² in area. The site drains into an existing ditch conveying runoff from the north to south and to an existing ditch running west to east which discharges all runoff from the site to the ditch inlet catchbasin located at the southeast corner of the site. The ditch inlet conveys storm runoff to the storm system beneath Rorke Avenue.

3 Proposed Land Use and Drainage

As shown on Figure 1, it is proposed to construct a 827 m² fire hall including a gravel parking lot and paved entrances from Rorke Avenue.

The site is graded to accommodate the proposed building, and stormwater is conveyed via overland flow to a grassed storage area west of the fire hall building.

The existing ditch that conveyed runoff from the north has been re-routed east along the north property boundary out to the roadside ditch at Rorke Avenue. The existing west to east ditch has also been re-routed southward to avoid the new fire hall.

4 Stormwater Management

The design of the SWM facilities for this site has been conducted in accordance with:

- The Ministry of the Environment Stormwater Management Planning and Design Manual, March 2003.
- The Ministry of Transportation (MTO) Drainage Management Manual, 1995 – 1997.

To design the facilities to meet these requirements, it is essential to select the appropriate modelling methodology for the storm system design. Given the combined size of the property (0.58 Ha) the Modified Rational Method is appropriate for design of the SWM system. Detailed Stormwater Management Calculations are provided within **Appendix A**.

4.1 Stormwater Management

4.1.1 Pre-Development Runoff Coefficients

The overall runoff coefficient for the pre-development condition was calculated based on the various land types found onsite. Table 1 below identifies the various land types with their associated areas and runoff coefficient.

Table 1. Pre-Development Condition Runoff Coefficients

Description	Area [m ²]	Runoff Coefficient
Lawn	3,089	0.15
Woodland	661	0.35
Pasture	1,742	0.28
Gravel / Sand	319	0.60
	Total: 5,811	Composite: 0.24

The runoff coefficient values were taken from the *MTO Drainage Management Manual - Design Charts 1.07*. The pre-development composite runoff coefficient for the site is calculated as the weighted average of the different areas of land types.

4.1.2 Post-Development Runoff Coefficients

The overall runoff coefficient for the post-development condition was calculated based on the proposed site conditions. Table 2 below shows the various land types with their associated areas and runoff coefficient.

Table 2. Post-Development Condition Runoff Coefficients

Description	Area [m ²]	Runoff Coefficient
Lawn	2,933	0.15
Asphalt / Concrete	2,052	0.90
Building	826	0.90
	Total: 5,811	Composite: 0.52

The runoff coefficient values were taken from the *MTO Drainage Management Manual - Design Charts 1.07*. The post-development composite runoff coefficient for the site is calculated as the weighted average of the different areas of land types.

4.2 Rainfall Intensity

The Rainfall Intensity-Duration-Frequency (IDF) curves for the City of Temiskaming Shores (taken from *Ministry of Transportation IDF Curve Lookup*) were used to calculate the peak flow rates for the pre-development and post-development conditions and post-development conditions. The curves approximate the intensity of rain during a design storm. Rainfall intensities for the 2, 5, 10, 25, 50 and 100-year design storm events are presented in Table 3 below. A minimum time of concentration (t_c) of 10 minutes was used to determine the runoff.

Rainfall intensity calculation formula:

$$I = A(tc)^b$$

Where: I – Rainfall intensity (mm/h)
 A, b – IDF Storm Coefficients (Table 3)
 t_c – Time of Concentration (min)

Table 3. A, b MTO Runoff Coefficients for the City of Temiskaming Shores

Storm Event Return Period	Coefficient A	Coefficient b
2-year	19.1	-0.699
5-year	25.6	-0.699
10-year	29.9	-0.699
25-year	35.3	-0.699
50-year	39.3	-0.699
100-year	43.2	-0.699

4.3 Discharge

4.3.1 Model

The pre-development and post-development conditions were hydrologically modeled using the Modified Rational Method.

4.3.2 Model Results

Using the runoff coefficients above, and the Modified Rational Method, the following existing (pre-development) release rates and post-development uncontrolled release rates are tabulated in Table 4.

*Table 4. Model Results
Pre-Development and Uncontrolled Post-Development Release Rates*

Storm Peak Event Flow							
Catchment Area	Area [ha]	Storm Distribution [m³/s]					
		2	5	10	25	50	100
Existing (Allowable Pre-Development) Condition							
Pre-Development Entire Site (X-1)	0.58	0.026	0.034	0.040	0.052	0.063	0.072
Uncontrolled Post-Development Condition							
Post-Development (P-1)	0.39	0.038	0.051	0.060	0.078	0.095	0.108
Post-Development (P-2)	0.19	0.018	0.024	0.028	0.036	0.044	0.051
Post-Development Entire Site	0.58	0.056	0.075	0.088	0.114	0.139	0.159

Table 4 demonstrates that this Project increases the stormwater runoff rate above that of the existing allowable release rates for the site. Therefore, quantity control will be required for this project.

5 Quantity Control

The additional stormwater quantity can be controlled by surface ponding in a depressed grassed area and the use of an orifice pipe.

The release rate from the (250mm diameter) orifice pipe located in the depressed grassed area is calculated using the following equation:

$$Q = cA\sqrt{2gh}$$

Q = allowable release rate

A = orifice area = 0.049 m²

c = orifice coefficient = 0.81

g = gravitational constant = 9.81m/s²

h = high water level over center of orifice

Applying the above equation, we find that a 250mm diameter pipe will restrict flows from the site to a rate of less than the allowable release rates. The calculated site release rates are detailed in Table 5 below:

Table 5. Model Results – Site Release Rates

Site Release Rates							
Catchment Area	Area [ha]	Storm Distribution [m³/s]					
		2	5	10	25	50	100
Existing (Allowable Pre-Development) Condition							
Pre-Development for Site (X-1)	0.58	0.026	0.034	0.040	0.052	0.063	0.072
Post-Development Condition							
Post-Development (Controlled) (P-1)	0.39	0.009	0.012	0.018	0.029	0.040	0.048
Post-Development (Uncontrolled) (P-2)	0.19	0.018	0.024	0.028	0.036	0.044	0.051
Total Site Post-Development Release Rate	0.58	0.022	0.029	0.034	0.044	0.054	0.063

As shown above, the total site post-development release rates are less than the existing release rates. Note that catchment areas P-1 and P-2 do not peak at the same timestep in the model, therefore the peak post-development release rate does not equate to the sum of the individual peak flow of each catchment area.

The maximum storage requirements for each storm are provided in Appendix A. A summary of the results is provided below:

Table 6. Model Results – Site Storage Requirements

Storm Distribution (Year)	2	5	10	25	50	100
Maximum Storage Required (m^3)	18	24	28	34	39	44
Elevation Storage is Provided (m)	236.86	236.88	236.90	236.93	236.95	236.98

6 Ditch Conveyance Calculations

The ditch conveyance calculations are provided in Appendix A. The ditches have been designed to convey the peak flow rate from the 100-year design storms.

7 Sediment and Erosion Control

During construction, earth grading and excavation will create the potential for soil erosion and sedimentation. It is imperative that effective environmental and sedimentation controls are in place and maintained throughout the duration of the construction activities to ensure the

stormwater runoff's quality. Therefore, the following recommendations shall be implemented and maintained during construction to achieve acceptable stormwater runoff quality.

- Restoration of exposed surfaces with vegetative and non-vegetative material as soon as construction schedule permit.
- Installation of filter strips and silt fences or other similar facilities throughout the site, and specifically during all construction activities, in order to reduce stormwater drainage velocities and trap sediment on-site.
- Provision of a mud-mat at the construction entrances in order to control the tracking of sediment and debris onto neighboring streets.

8 Conclusion

Implementation of the designs outlined in this report will ensure that the stormwater drainage from the site complies with the requirements of the City of Temiskaming Shores. We confirm that the stormwater runoff flows from the site, as outlined in the enclosed, will be of acceptable quantity during and after construction.

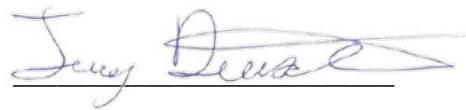
Sincerely,

EXP SERVICES INC.



Prepared by:

Calvin Caldwell, P.Eng.
Manager



Reviewed by:

Jerry Dussault, P.Eng.
Civil Engineer

Appendix A

Stormwater Management Calculations

25 Rorke Avenue, Haileybury Firehall
Weighted Runoff Coefficient Calculations

Area ID	Total Area (m²)	0.15 Lawns (2 - 7%)	0.28 Pasture	0.90 Asphalt/Concrete	0.90 Building	0.60 Gravel & Sand	0.35 Woodland		Weighted Rational Coefficient
X-1	5811	3089	1742	0	0	319	661		0.24
Pre-Development	5811	3089	1742	0	0	319	661		0.24
EX-1	31739	0	0	0	354	221	31164		0.36
EX-2	8517	0	0	0	0	0	8517		0.35
P1	3877	1897	0	1567	413	0	0		0.53
P2	1934	1036	0	485	413	0	0		0.50
Post-Development	5811	2933	0	2052	826	0	0		0.52

Pre-Development Allowable Release Rate

Area	0.58 ha
Runoff Coefficient	0.24
Time of Concentration	10 min
	Interpolated
Return Rate	2 year
Multiplier	1
Rainfall Intesity	66.8 mm/hr
Allowable Release Rate	0.026 m³/s

Return Rate	5 year
Multiplier	1
Rainfall Intesity	89.6 mm/hr
Allowable Release Rate	0.034 m³/s

Return Rate	10 year
Multiplier	1
Rainfall Intesity	104.6 mm/hr
Allowable Release Rate	0.040 m³/s

Return Rate	25 year
Multiplier	1.1
Rainfall Intesity	123.5 mm/hr
Allowable Release Rate	0.052 m³/s

Return Rate	50 year
Multiplier	1.2
Rainfall Intesity	137.5 mm/hr
Allowable Release Rate	0.063 m³/s

Return Rate	100 year
Multiplier	1.25
Rainfall Intesity	151.2 mm/hr
Allowable Release Rate	0.072 m³/s

MTO IDF Curve for the City of Temiskaming Shores

Storm (yrs)	Coeff A	Coeff B
2	19.10	-0.699
5	25.60	-0.699
10	29.90	-0.699
25	35.30	-0.699
50	39.30	-0.699
100	43.20	-0.699

Modified Rational Method
Where:

$$Q = C_i C A / 360$$

- Q - Flow Rate (m³/s)
- C_i - Peaking Coefficient
- C - Rational Method Runoff Coefficient
- I - Storm Intensity (mm/hr)
- A - Area (ha.)

Post-Development Release Rates (Entire Uncontrolled Site)		Post-Development Release Rates (P-1)		Post-Development Release Rates (P-2)		MTO IDF Curve for the City of North Bay		
						Storm (yrs)	Coeff A	Coeff B
Area	0.58 ha	Area	0.39 ha	Area	0.19 ha	2	19.10	-0.699
Runoff Coefficient	0.52	Runoff Coefficient	0.53	Runoff Coefficient	0.50	5	25.60	-0.699
Time of Concentration	10 min	Time of Concentration	10 min	Time of Concentration	10 min	10	29.90	-0.699
	Interpolated		Interpolated		Interpolated	25	35.30	-0.699
Return Rate	2 year	Return Rate	2 year	Return Rate	2 year	50	39.30	-0.699
Multiplier	1	Multiplier	1	Multiplier	1	100	43.20	-0.699
Rainfall Intesity	66.8 mm/hr	Rainfall Intesity	66.8 mm/hr	Rainfall Intesity	66.8 mm/hr			
Allowable Release Rate	0.056 m³/s	Allowable Release Rate	0.038 m³/s	Allowable Release Rate	0.018 m³/s			
Return Rate	5 year	Return Rate	5 year	Return Rate	5 year			
Multiplier	1	Multiplier	1	Multiplier	1			
Rainfall Intesity	89.6 mm/hr	Rainfall Intesity	89.6 mm/hr	Rainfall Intesity	89.6 mm/hr			
Allowable Release Rate	0.075 m³/s	Allowable Release Rate	0.051 m³/s	Allowable Release Rate	0.024 m³/s			
Return Rate	10 year	Return Rate	10 year	Return Rate	10 year	Modified Rational Method	Q = C _i C _i A / 360	
Multiplier	1	Multiplier	1	Multiplier	1			
Rainfall Intesity	104.6 mm/hr	Rainfall Intesity	104.6 mm/hr	Rainfall Intesity	104.6 mm/hr			
Allowable Release Rate	0.088 m³/s	Allowable Release Rate	0.060 m³/s	Allowable Release Rate	0.028 m³/s			
Return Rate	25 year	Return Rate	25 year	Return Rate	25 year			
Multiplier	1.1	Multiplier	1.1	Multiplier	1.1	Where:	Q -	Flow Rate (m3/s)
Rainfall Intesity	123.5 mm/hr	Rainfall Intesity	123.5 mm/hr	Rainfall Intesity	123.5 mm/hr		C _i -	Peaking Coefficient
Allowable Release Rate	0.114 m³/s	Allowable Release Rate	0.078 m³/s	Allowable Release Rate	0.036 m³/s		C -	Rational Method Runoff Coefficient
Return Rate	50 year	Return Rate	50 year	Return Rate	50 year		I -	Storm Intensity (mm/hr)
Multiplier	1.2	Multiplier	1.2	Multiplier	1.2		A -	Area (ha.)
Rainfall Intesity	137.5 mm/hr	Rainfall Intesity	137.5 mm/hr	Rainfall Intesity	137.5 mm/hr			
Allowable Release Rate	0.139 m³/s	Allowable Release Rate	0.095 m³/s	Allowable Release Rate	0.044 m³/s			
Return Rate	100 year	Return Rate	100 year	Return Rate	100 year			
Multiplier	1.25	Multiplier	1.25	Multiplier	1.25			
Rainfall Intesity	151.2 mm/hr	Rainfall Intesity	151.2 mm/hr	Rainfall Intesity	151.2 mm/hr			
Allowable Release Rate	0.159 m³/s	Allowable Release Rate	0.108 m³/s	Allowable Release Rate	0.051 m³/s			

Stage Storage Discharge Chart

Elevation	Area	Storage Vol. (m ³)	Storage Vol. (m ³)	Depth 1 (m)	Orifice Release (m ³ /s)	Total Flow (m3/s)
236.76	148	0	0			
236.77	173	1.6	2	0.00	0.0000	0.0000
236.79	181	3.5	5	0.00	0.0000	0.0000
236.81	187	3.7	9	0.00	0.0000	0.0000
236.83	194	3.8	13	0.00	0.0000	0.0000
236.85	201	4.0	17	0.00	0.0000	0.0000
236.87	208	4.1	21	0.00	0.0000	0.0000
236.89	216	4.2	25	0.01	0.0125	0.0125
236.91	223	4.4	29	0.03	0.0278	0.0278
236.93	231	4.5	34	0.05	0.0374	0.0374
236.95	237	4.7	39	0.07	0.0449	0.0449
236.97	245	4.8	43	0.09	0.0513	0.0513
236.99	253	5.0	48	0.11	0.0571	0.0571
237.01	260	5.1	53	0.13	0.0623	0.0623
237.03	266	5.3	59	0.15	0.0671	0.0671
237.05	274	5.4	64	0.17	0.0715	0.0715
237.07	281	5.6	70	0.19	0.0758	0.0758
237.09	290	5.7	75	0.21	0.0797	0.0797
237.11	297	5.9	81	0.23	0.0835	0.0835
237.13	304	6.0	87	0.25	0.0872	0.0872
237.15	312	6.2	93	0.27	0.0907	0.0907
237.17	320	6.3	100	0.29	0.0940	0.0940
237.19	327	6.5	106	0.31	0.0973	0.0973
237.21	335	6.6	113	0.33	0.1004	0.1004
237.23	342	6.8	120	0.35	0.1034	0.1034
237.28	365	17.7	137	0.40	0.1107	0.1107

Orifice Pipe	
Diameter	250 mm
Elevation	236.76 m
Orifice Constant	0.81
Orifice Centroid	236.89 m

CHECKING STORAGE RELEASE CHARACTERISTICS OF STORAGE

2 Year Post Development Controlled Flow (P-1) [Modified Rational Method]	0.038m3/sec
---	-------------

Duration of Storm	20min
-------------------	-------

Pond Rating Curve

Elevation (m)	Outflow (m3/sec)	Storage (m3)
236.76	0.000	0.00
236.87	0.012	24.92
236.99	0.057	48.33
237.03	0.067	58.72
237.07	0.076	69.67
237.28	0.111	137.27

Hydrograph Data

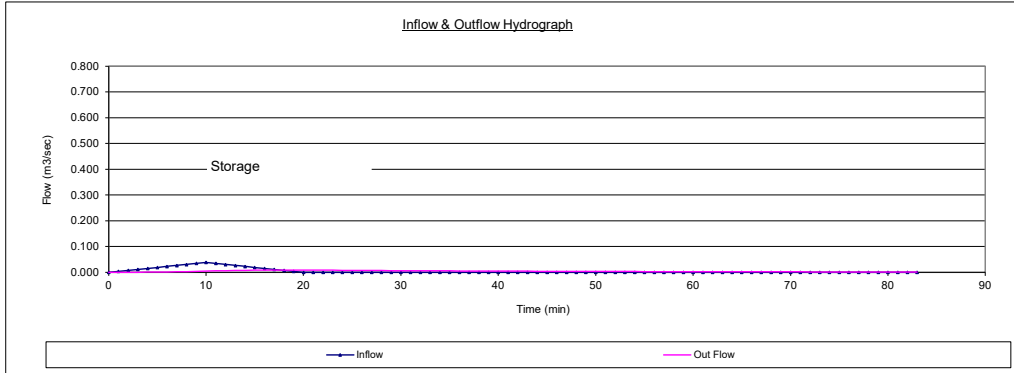
Minute	In Flow (m3/sec)	Out Flow (m3/sec)	Del_Storage (m3)	Cumulative Storage (m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.004	0.000	0	0
2	0.008	0.000	0	1
3	0.012	0.000	1	1
4	0.015	0.001	1	2
5	0.019	0.001	1	3
6	0.023	0.002	1	5
7	0.027	0.002	1	6
8	0.031	0.003	2	8
9	0.035	0.004	2	10
10	0.038	0.005	2	12
11	0.035	0.006	2	13
12	0.031	0.007	1	15
13	0.027	0.007	1	16
14	0.023	0.008	1	17
15	0.019	0.008	1	17
16	0.015	0.009	0	18
17	0.012	0.009	0	18
18	0.008	0.009	0	18
19	0.004	0.009	0	18
20	0.000	0.009	-1	17
21	0.000	0.009	-1	17
22	0.000	0.008	0	16
23	0.000	0.008	0	16
24	0.000	0.008	0	15
25	0.000	0.008	0	15
26	0.000	0.007	0	14
27	0.000	0.007	0	14
28	0.000	0.007	0	13
29	0.000	0.007	0	13
30	0.000	0.007	0	13
31	0.000	0.006	0	12
32	0.000	0.006	0	12
33	0.000	0.006	0	12
34	0.000	0.006	0	11
35	0.000	0.006	0	11
36	0.000	0.005	0	11
37	0.000	0.005	0	10
38	0.000	0.005	0	10
39	0.000	0.005	0	10
40	0.000	0.005	0	9
41	0.000	0.005	0	9
42	0.000	0.005	0	9
43	0.000	0.004	0	8
44	0.000	0.004	0	8
45	0.000	0.004	0	8
46	0.000	0.004	0	8
47	0.000	0.004	0	8
48	0.000	0.004	0	7
49	0.000	0.004	0	7
50	0.000	0.004	0	7
51	0.000	0.003	0	7
52	0.000	0.003	0	6
53	0.000	0.003	0	6
54	0.000	0.003	0	6
55	0.000	0.003	0	6
56	0.000	0.003	0	6
57	0.000	0.003	0	6
58	0.000	0.003	0	5
59	0.000	0.003	0	5
60	0.000	0.003	0	5
61	0.000	0.003	0	5
62	0.000	0.002	0	5
63	0.000	0.002	0	5
64	0.000	0.002	0	4
65	0.000	0.002	0	4
66	0.000	0.002	0	4
67	0.000	0.002	0	4
68	0.000	0.002	0	4
69	0.000	0.002	0	4
70	0.000	0.002	0	4
71	0.000	0.002	0	4
72	0.000	0.002	0	4
73	0.000	0.002	0	3
74	0.000	0.002	0	3
75	0.000	0.002	0	3
76	0.000	0.002	0	3
77	0.000	0.002	0	3
78	0.000	0.002	0	3
79	0.000	0.001	0	3
80	0.000	0.001	0	3
81	0.000	0.001	0	3
82	0.000	0.001	0	3
83	0.000	0.001	0	3

2 Year Post Development Flow (P-1 + P-2) [Modified Rational Method]	0.018m3/sec
--	-------------

Duration of Storm	20min
-------------------	-------

Hydrograph Data

Minute	In Flow (m3/sec)	Out Flow (Total Site) (m3/sec)	Del_Storage (m3)	Cumulative Storage (m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.002	0.002	0	0
2	0.004	0.004	0	0
3	0.005	0.005	0	0
4	0.007	0.007	0	0
5	0.009	0.010	0	0
6	0.011	0.012	0	0
7	0.013	0.014	0	0
8	0.014	0.017	0	0
9	0.016	0.019	0	0
10	0.018	0.022	0	0
11	0.016	0.021	0	0
12	0.014	0.020	0	0
13	0.013	0.019	0	0
14	0.011	0.018	0	0
15	0.009	0.017	0	0
16	0.007	0.016	0	0
17	0.005	0.014	0	0
18	0.004	0.013	0	0
19	0.002	0.011	0	0
20	0.000	0.009	0	0
21	0.000	0.009	0	0
22	0.000	0.009	0	0
23	0.000	0.008	0	0
24	0.000	0.008	0	0
25	0.000	0.008	0	0
26	0.000	0.008	0	0
27	0.000	0.007	0	0
28	0.000	0.007	0	0
29	0.000	0.007	0	0
30	0.000	0.007	0	0
31	0.000	0.007	0	0
32	0.000	0.006	0	0
33	0.000	0.006	0	0
34	0.000	0.006	0	0
35	0.000	0.006	0	0
36	0.000	0.006	0	0
37	0.000	0.005	0	0
38	0.000	0.005	0	0
39	0.000	0.005	0	0
40	0.000	0.005	0	0
41	0.000	0.005	0	0
42	0.000	0.005	0	0
43	0.000	0.005	0	0
44	0.000	0.004	0	0
45	0.000	0.004	0	0
46	0.000	0.004	0	0
47	0.000	0.004	0	0
48	0.000	0.004	0	0
49	0.000	0.004	0	0
50	0.000	0.004	0	0
51	0.000	0.004	0	0
52	0.000	0.003	0	0
53	0.000	0.003	0	0
54	0.000	0.003	0	0
55	0.000	0.003	0	0
56	0.000	0.003	0	0
57	0.000	0.003	0	0
58	0.000	0.003	0	0
59	0.000	0.003	0	0
60	0.000	0.003	0	0
61	0.000	0.003	0	0
62	0.000	0.003	0	0
63	0.000	0.002	0	0
64	0.000	0.002	0	0
65	0.000	0.002	0	0
66	0.000	0.002	0	0
67	0.000	0.002	0	0
68	0.000	0.002	0	0
69	0.000	0.002	0	0
70	0.000	0.002	0	0
71	0.000	0.002	0	0
72	0.000	0.002	0	0
73	0.000	0.002	0	0
74	0.000	0.002	0	0
75	0.000	0.002	0	0
76	0.000	0.002	0	0
77	0.000	0.002	0	0
78	0.000	0.002	0	0
79	0.000	0.002	0	0
80	0.000	0.001	0	0
81	0.000	0.001	0	0
82	0.000	0.001	0	0
83	0.000	0.001	0	0



CHECKING STORAGE RELEASE CHARACTERISTICS OF STORAGE

5 Year Post Development Controlled Flow (P-1) [Modified Rational Method]	0.051	m3/sec
---	-------	--------

Duration of Storm	20	min
-------------------	----	-----

Pond Rating Curve

Elevation	Outflow	Storage
(m)	(m3/sec)	(m3)
236.76	0.00	0.00
236.87	0.01	24.92
236.99	0.06	48.33
237.03	0.07	58.72
237.07	0.08	69.67
237.28	0.11	137.27

Hydrograph Data

Minute	In Flow	Out Flow	Del_Storage	Cumulative Storage
	(m3/sec)	(m3/sec)	(m3)	(m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.005	0.000	0	0
2	0.010	0.000	1	1
3	0.015	0.000	1	2
4	0.021	0.001	1	3
5	0.026	0.001	1	4
6	0.031	0.002	2	6
7	0.036	0.003	2	8
8	0.041	0.004	2	10
9	0.046	0.005	2	13
10	0.051	0.006	3	16
11	0.046	0.008	2	18
12	0.041	0.009	2	20
13	0.036	0.010	2	21
14	0.031	0.011	1	23
15	0.026	0.011	1	23
16	0.021	0.012	1	24
17	0.015	0.012	0	24
18	0.010	0.012	0	24
19	0.005	0.012	0	24
20	0.000	0.012	-1	23
21	0.000	0.011	-1	22
22	0.000	0.011	-1	22
23	0.000	0.011	-1	21
24	0.000	0.010	-1	20
25	0.000	0.010	-1	20
26	0.000	0.010	-1	19
27	0.000	0.010	-1	19
28	0.000	0.009	-1	18
29	0.000	0.009	-1	17
30	0.000	0.009	-1	17
31	0.000	0.008	-1	16
32	0.000	0.008	0	16
33	0.000	0.008	0	15
34	0.000	0.008	0	15
35	0.000	0.007	0	15
36	0.000	0.007	0	14
37	0.000	0.007	0	14
38	0.000	0.007	0	13
39	0.000	0.007	0	13
40	0.000	0.006	0	12
41	0.000	0.006	0	12
42	0.000	0.006	0	12
43	0.000	0.006	0	11
44	0.000	0.006	0	11
45	0.000	0.006	0	11
46	0.000	0.005	0	10
47	0.000	0.005	0	10
48	0.000	0.005	0	10
49	0.000	0.005	0	9
50	0.000	0.005	0	9
51	0.000	0.005	0	9
52	0.000	0.004	0	9
53	0.000	0.004	0	8
54	0.000	0.004	0	8
55	0.000	0.004	0	8
56	0.000	0.004	0	8
57	0.000	0.004	0	7
58	0.000	0.004	0	7
59	0.000	0.004	0	7
60	0.000	0.003	0	7
61	0.000	0.003	0	7
62	0.000	0.003	0	6
63	0.000	0.003	0	6
64	0.000	0.003	0	6
65	0.000	0.003	0	6
66	0.000	0.003	0	6
67	0.000	0.003	0	5
68	0.000	0.003	0	5
69	0.000	0.003	0	5
70	0.000	0.003	0	5
71	0.000	0.003	0	5
72	0.000	0.002	0	5
73	0.000	0.002	0	5
74	0.000	0.002	0	4
75	0.000	0.002	0	4
76	0.000	0.002	0	4
77	0.000	0.002	0	4
78	0.000	0.002	0	4
79	0.000	0.002	0	4
80	0.000	0.002	0	4
81	0.000	0.002	0	4
82	0.000	0.002	0	3
83	0.000	0.002	0	3

Peak

Maximum Ponding

5 Year Post Development Flow (P-2) [Modified Rational Method]	0.024	m3/sec
--	-------	--------

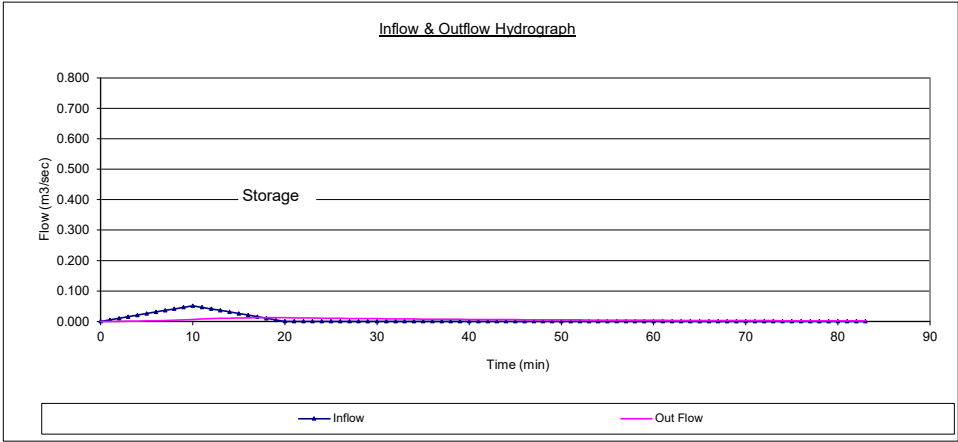
Duration of Storm	20	min
-------------------	----	-----

Hydrograph Data

Minute	In Flow	Out Flow (Total Site)	Del_Storage	Cumulative Storage
	(m3/sec)	(m3/sec)	(m3)	(m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.002	0.002	0	0
2	0.005	0.005	0	0
3	0.007	0.007	0	0
4	0.010	0.010	0	0
5	0.012	0.013	0	0
6	0.014	0.016	0	0
7	0.017	0.019	0	0
8	0.019	0.022	0	0
9	0.022	0.026	0	0
10	0.024	0.029	0	0
11	0.022	0.028	0	0
12	0.019	0.027	0	0
13	0.017	0.026	0	0
14	0.014	0.024	0	0
15	0.012	0.023	0	0
16	0.010	0.021	0	0
17	0.007	0.019	0	0
18	0.005	0.017	0	0
19	0.002	0.014	0	0
20	0.000	0.012	0	0
21	0.000	0.012	0	0
22	0.000	0.011	0	0
23	0.000	0.011	0	0
24	0.000	0.011	0	0
25	0.000	0.010	0	0
26	0.000	0.010	0	0
27	0.000	0.010	0	0
28	0.000	0.010	0	0
29	0.000	0.009	0	0
30	0.000	0.009	0	0
31	0.000	0.009	0	0
32	0.000	0.008	0	0
33	0.000	0.008	0	0
34	0.000	0.008	0	0
35	0.000	0.008	0	0
36	0.000	0.007	0	0
37	0.000	0.007	0	0
38	0.000	0.007	0	0
39	0.000	0.007	0	0
40	0.000	0.007	0	0
41	0.000	0.006	0	0
42	0.000	0.006	0	0
43	0.000	0.006	0	0
44	0.000	0.006	0	0
45	0.000	0.006	0	0
46	0.000	0.006	0	0
47	0.000	0.005	0	0
48	0.000	0.005	0	0
49	0.000	0.005	0	0
50	0.000	0.005	0	0
51	0.000	0.005	0	0
52	0.000	0.005	0	0
53	0.000	0.004	0	0
54	0.000	0.004	0	0
55	0.000	0.004	0	0
56	0.000	0.004	0	0
57	0.000	0.004	0	0
58	0.000	0.004	0	0
59	0.000	0.004	0	0
60	0.000	0.004	0	0
61	0.000	0.003	0	0
62	0.000	0.003	0	0
63	0.000	0.003	0	0
64	0.000	0.003	0	0
65	0.000	0.003	0	0
66	0.000	0.003	0	0
67	0.000	0.003	0	0
68	0.000	0.003	0	0
69	0.000	0.003	0	0
70	0.000	0.003	0	0
71	0.000	0.003	0	0
72	0.000	0.003	0	0
73	0.000	0.002	0	0
74	0.000	0.002	0	0
75	0.000	0.002	0	0
76	0.000	0.002	0	0
77	0.000	0.002	0	0
78	0.000	0.002	0	0
79	0.000	0.002	0	0
80	0.000	0.002	0	0
81	0.000	0.002	0	0
82	0.000	0.002	0	0
83	0.000	0.002	0	0

Peak

Maximum Outflow



CHECKING STORAGE RELEASE CHARACTERISTICS OF UNDER GROUND STORAGE

10 Year Post Development Controlled Flow (P-1) [Modified Rational Method]	0.060
--	-------

m3/sec

Duration of Storm	20
-------------------	----

min

Pond Rating Curve

Elevation (m)	Outflow (m3/sec)	Storage (m3)
236.76	0.00	0.00
236.87	0.01	24.92
236.99	0.06	48.33
237.03	0.07	58.72
237.07	0.08	69.67
237.28	0.11	137.27

Hydrograph Data

Minute	In Flow	Out Flow	Del_Storage	Cumulative Storage
	(m3/sec)	(m3/sec)	(m3)	(m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.006	0.000	0	0
2	0.012	0.000	1	1
3	0.018	0.001	1	2
4	0.024	0.001	1	3
5	0.030	0.002	2	5
6	0.036	0.003	2	7
7	0.042	0.004	2	10
8	0.048	0.005	3	12
9	0.054	0.006	3	15
10	0.060	0.007	3	18
11	0.054	0.009	3	21
12	0.048	0.010	2	23
13	0.042	0.012	2	25
14	0.036	0.012	1	26
15	0.030	0.015	1	27
16	0.024	0.017	0	28
17	0.018	0.018	0	28
18	0.012	0.018	0	27
19	0.006	0.017	-1	27
20	0.000	0.016	-1	26
21	0.000	0.014	-1	25
22	0.000	0.012	-1	24
23	0.000	0.012	-1	23
24	0.000	0.012	-1	23
25	0.000	0.011	-1	22
26	0.000	0.011	-1	21
27	0.000	0.011	-1	21
28	0.000	0.010	-1	20
29	0.000	0.010	-1	20
30	0.000	0.010	-1	19
31	0.000	0.009	-1	18
32	0.000	0.009	-1	18
33	0.000	0.009	-1	17
34	0.000	0.009	-1	17
35	0.000	0.008	-1	16
36	0.000	0.008	0	16
37	0.000	0.008	0	15
38	0.000	0.008	0	15
39	0.000	0.007	0	14
40	0.000	0.007	0	14
41	0.000	0.007	0	14
42	0.000	0.007	0	13
43	0.000	0.007	0	13
44	0.000	0.006	0	12
45	0.000	0.006	0	12
46	0.000	0.006	0	12
47	0.000	0.006	0	11
48	0.000	0.006	0	11
49	0.000	0.005	0	11
50	0.000	0.005	0	10
51	0.000	0.005	0	10
52	0.000	0.005	0	10
53	0.000	0.005	0	9
54	0.000	0.005	0	9
55	0.000	0.005	0	9
56	0.000	0.004	0	9
57	0.000	0.004	0	8
58	0.000	0.004	0	8
59	0.000	0.004	0	8
60	0.000	0.004	0	8
61	0.000	0.004	0	7
62	0.000	0.004	0	7
63	0.000	0.004	0	7
64	0.000	0.003	0	7
65	0.000	0.003	0	7
66	0.000	0.003	0	6
67	0.000	0.003	0	6
68	0.000	0.003	0	6
69	0.000	0.003	0	6
70	0.000	0.003	0	6
71	0.000	0.003	0	5
72	0.000	0.003	0	5
73	0.000	0.003	0	5
74	0.000	0.003	0	5
75	0.000	0.002	0	5
76	0.000	0.002	0	5
77	0.000	0.002	0	5
78	0.000	0.002	0	4
79	0.000	0.002	0	4
80	0.000	0.002	0	4
81	0.000	0.002	0	4
82	0.000	0.002	0	4
83	0.000	0.002	0	4

Peak

Maximum Ponding

10 Year Post Development Flow (P-2) [Modified Rational Method]	0.028
---	-------

m3/sec

Duration of Storm	20
-------------------	----

min

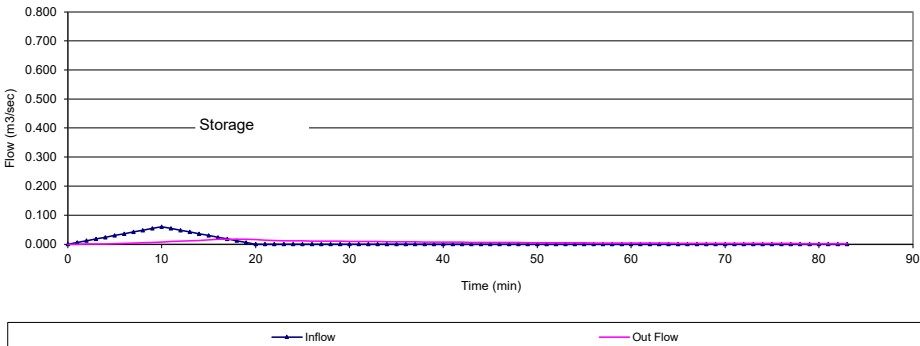
Hydrograph Data

Minute	In Flow	Out Flow (Total Site)	Del_Storage	Cumulative Storage
	(m3/sec)	(m3/sec)	(m3)	(m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.003	0.003	0	0
2	0.006	0.006	0	0
3	0.008	0.009	0	0
4	0.011	0.012	0	0
5	0.014	0.015	0	0
6	0.017	0.019	0	0
7	0.020	0.022	0	0
8	0.022	0.026	0	0
9	0.025	0.030	0	0
10	0.028	0.034	0	0
11	0.025	0.033	0	0
12	0.022	0.031	0	0
13	0.020	0.030	0	0
14	0.017	0.028	0	0
15	0.014	0.026	0	0
16	0.011	0.026	0	0
17	0.008	0.025	0	0
18	0.006	0.023	0	0
19	0.003	0.021	0	0
20	0.000	0.017	0	0
21	0.000	0.016	0	0
22	0.000	0.014	0	0
23	0.000	0.012	0	0
24	0.000	0.012	0	0
25	0.000	0.012	0	0
26	0.000	0.011	0	0
27	0.000	0.011	0	0
28	0.000	0.011	0	0
29	0.000	0.010	0	0
30	0.000	0.010	0	0
31	0.000	0.010	0	0
32	0.000	0.009	0	0
33	0.000	0.009	0	0
34	0.000	0.009	0	0
35	0.000	0.009	0	0
36	0.000	0.008	0	0
37	0.000	0.008	0	0
38	0.000	0.008	0	0
39	0.000	0.008	0	0
40	0.000	0.007	0	0
41	0.000	0.007	0	0
42	0.000	0.007	0	0
43	0.000	0.007	0	0
44	0.000	0.007	0	0
45	0.000	0.006	0	0
46	0.000	0.006	0	0
47	0.000	0.006	0	0
48	0.000	0.006	0	0
49	0.000	0.006	0	0
50	0.000	0.005	0	0
51	0.000	0.005	0	0
52	0.000	0.005	0	0
53	0.000	0.005	0	0
54	0.000	0.005	0	0
55	0.000	0.005	0	0
56	0.000	0.005	0	0
57	0.000	0.004	0	0
58	0.000	0.004	0	0
59	0.000	0.004	0	0
60	0.000	0.004	0	0
61	0.000	0.004	0	0
62	0.000	0.004	0	0
63	0.000	0.004	0	0
64	0.000	0.004	0	0
65	0.000	0.003	0	0
66	0.000	0.003	0	0
67	0.000	0.003	0	0
68	0.000	0.003	0	0
69	0.000	0.003	0	0
70	0.000	0.003	0	0
71	0.000	0.003	0	0
72	0.000	0.003	0	0
73	0.000	0.003	0	0
74	0.000	0.003	0	0
75	0.000	0.003	0	0
76	0.000	0.002	0	0
77	0.000	0.002	0	0
78	0.000	0.002	0	0
79	0.000	0.002	0	0
80	0.000	0.002	0	0
81	0.000	0.002	0	0
82	0.000	0.002	0	0
83	0.000	0.002	0	0

Peak

Maximum Outflow

Inflow & Outflow Hydrograph



CHECKING STORAGE RELEASE CHARACTERISTICS OF UNDERGROUND STORAGE

25 Year Post Development Controlled Flow (P-1) [Modified Rational Method]	0.078	m3/sec
--	-------	--------

Duration of Storm	20	min
-------------------	----	-----

Pond Rating Curve

Elevation (m)	Outflow (m3/sec)	Storage (m3)
236.76	0.00	0.00
236.87	0.01	24.92
236.99	0.06	48.33
237.03	0.07	58.72
237.07	0.08	69.67
237.28	0.11	137.27

Hydrograph Data

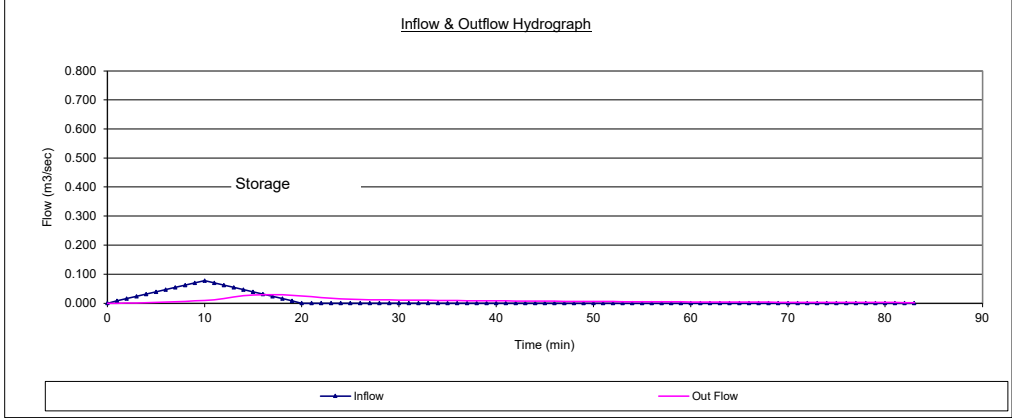
Minute	In Flow (m3/sec)	Out Flow (m3/sec)	Del_Storage (m3)	Cumulative Storage (m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.008	0.000	0	0
2	0.016	0.000	1	1
3	0.023	0.001	1	3
4	0.031	0.001	2	5
5	0.039	0.002	2	7
6	0.047	0.003	3	9
7	0.055	0.005	3	12
8	0.062	0.006	3	16
9	0.070	0.008	4	19
10	0.078	0.010	4	24
11	0.070	0.012	4	27
12	0.062	0.017	3	30
13	0.055	0.022	2	32
14	0.047	0.026	1	33
15	0.039	0.028	1	34
16	0.031	0.029	0	34
17	0.023	0.029	0	33
18	0.016	0.029	-1	33
19	0.008	0.027	-1	32
20	0.000	0.025	-2	30
21	0.000	0.022	-1	29
22	0.000	0.020	-1	28
23	0.000	0.017	-1	26
24	0.000	0.015	-1	26
25	0.000	0.014	-1	25
26	0.000	0.012	-1	24
27	0.000	0.012	-1	23
28	0.000	0.012	-1	23
29	0.000	0.011	-1	22
30	0.000	0.011	-1	21
31	0.000	0.011	-1	21
32	0.000	0.010	-1	20
33	0.000	0.010	-1	19
34	0.000	0.010	-1	19
35	0.000	0.009	-1	18
36	0.000	0.009	-1	18
37	0.000	0.009	-1	17
38	0.000	0.009	-1	17
39	0.000	0.008	0	16
40	0.000	0.008	0	16
41	0.000	0.008	0	15
42	0.000	0.008	0	15
43	0.000	0.007	0	14
44	0.000	0.007	0	14
45	0.000	0.007	0	13
46	0.000	0.007	0	13
47	0.000	0.007	0	13
48	0.000	0.006	0	12
49	0.000	0.006	0	12
50	0.000	0.006	0	12
51	0.000	0.006	0	11
52	0.000	0.006	0	11
53	0.000	0.005	0	11
54	0.000	0.005	0	10
55	0.000	0.005	0	10
56	0.000	0.005	0	10
57	0.000	0.005	0	9
58	0.000	0.005	0	9
59	0.000	0.005	0	9
60	0.000	0.004	0	9
61	0.000	0.004	0	8
62	0.000	0.004	0	8
63	0.000	0.004	0	8
64	0.000	0.004	0	8
65	0.000	0.004	0	7
66	0.000	0.004	0	7
67	0.000	0.004	0	7
68	0.000	0.003	0	7
69	0.000	0.003	0	6
70	0.000	0.003	0	6
71	0.000	0.003	0	6
72	0.000	0.003	0	6
73	0.000	0.003	0	6
74	0.000	0.003	0	6
75	0.000	0.003	0	5
76	0.000	0.003	0	5
77	0.000	0.003	0	5
78	0.000	0.003	0	5
79	0.000	0.002	0	5
80	0.000	0.002	0	5
81	0.000	0.002	0	4
82	0.000	0.002	0	4
83	0.000	0.002	0	4

25 Year Post Development Flow (P-2) [Modified Rational Method]	0.036	m3/sec
---	-------	--------

Duration of Storm	20	min
-------------------	----	-----

Hydrograph Data

Minute	In Flow (m3/sec)	Out Flow (Total Site) (m3/sec)	Del_Storage (m3)	Cumulative Storage (m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.004	0.004	0	0
2	0.007	0.007	0	0
3	0.011	0.011	0	0
4	0.015	0.015	0	0
5	0.018	0.020	0	0
6	0.022	0.024	0	0
7	0.025	0.029	0	0
8	0.029	0.034	0	0
9	0.033	0.039	0	0
10	0.036	0.044	0	0
11	0.033	0.042	0	0
12	0.029	0.041	0	0
13	0.025	0.042	0	0
14	0.022	0.044	0	0
15	0.018	0.044	0	0
16	0.015	0.043	0	0
17	0.011	0.040	0	0
18	0.007	0.037	0	0
19	0.004	0.032	0	0
20	0.000	0.027	0	0
21	0.000	0.025	0	0
22	0.000	0.022	0	0
23	0.000	0.020	0	0
24	0.000	0.017	0	0
25	0.000	0.015	0	0
26	0.000	0.014	0	0
27	0.000	0.012	0	0
28	0.000	0.012	0	0
29	0.000	0.012	0	0
30	0.000	0.011	0	0
31	0.000	0.011	0	0
32	0.000	0.011	0	0
33	0.000	0.010	0	0
34	0.000	0.010	0	0
35	0.000	0.010	0	0
36	0.000	0.009	0	0
37	0.000	0.009	0	0
38	0.000	0.009	0	0
39	0.000	0.009	0	0
40	0.000	0.008	0	0
41	0.000	0.008	0	0
42	0.000	0.008	0	0
43	0.000	0.008	0	0
44	0.000	0.007	0	0
45	0.000	0.007	0	0
46	0.000	0.007	0	0
47	0.000	0.007	0	0
48	0.000	0.007	0	0
49	0.000	0.006	0	0
50	0.000	0.006	0	0
51	0.000	0.006	0	0
52	0.000	0.006	0	0
53	0.000	0.006	0	0
54	0.000	0.005	0	0
55	0.000	0.005	0	0
56	0.000	0.005	0	0
57	0.000	0.005	0	0
58	0.000	0.005	0	0
59	0.000	0.005	0	0
60	0.000	0.005	0	0
61	0.000	0.004	0	0
62	0.000	0.004	0	0
63	0.000	0.004	0	0
64	0.000	0.004	0	0
65	0.000	0.004	0	0
66	0.000	0.004	0	0
67	0.000	0.004	0	0
68	0.000	0.004	0	0
69	0.000	0.003	0	0
70	0.000	0.003	0	0
71	0.000	0.003	0	0
72	0.000	0.003	0	0
73	0.000	0.003	0	0
74	0.000	0.003	0	0
75	0.000	0.003	0	0
76	0.000	0.003	0	0
77	0.000	0.003	0	0
78	0.000	0.003	0	0
79	0.000	0.003	0	0
80	0.000	0.002	0	0
81	0.000	0.002	0	0
82	0.000	0.002	0	0
83	0.000	0.002	0	0



CHECKING STORAGE RELEASE CHARACTERISTICS OF UNDERGROUND STORAGE

50 Year Post Development Controlled Flow (P-1) [Modified Rational Method]	0.095	m3/sec
--	-------	--------

Duration of Storm	20	min
-------------------	----	-----

Pond Rating Curve

Elevation (m)	Outflow (m3/sec)	Storage (m3)
236.76	0.00	0.00
236.87	0.01	24.92
236.99	0.06	48.33
237.03	0.07	58.72
237.07	0.08	69.67
237.28	0.11	137.27

Hydrograph Data

Minute	In Flow	Out Flow	Del_Storage	Cumulative Storage
	(m3/sec)	(m3/sec)	(m3)	(m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.009	0.000	1	1
2	0.019	0.000	1	2
3	0.028	0.001	2	3
4	0.038	0.002	2	6
5	0.047	0.003	3	8
6	0.057	0.004	3	11
7	0.066	0.006	4	15
8	0.076	0.007	4	19
9	0.085	0.010	5	24
10	0.095	0.012	5	29
11	0.085	0.019	4	33
12	0.076	0.027	3	35
13	0.066	0.033	2	38
14	0.057	0.036	1	39
15	0.047	0.039	1	39
16	0.038	0.040	0	39
17	0.028	0.040	-1	38
18	0.019	0.038	-1	37
19	0.009	0.036	-2	36
20	0.000	0.033	-2	34
21	0.000	0.029	-2	32
22	0.000	0.026	-2	30
23	0.000	0.023	-1	29
24	0.000	0.020	-1	28
25	0.000	0.018	-1	27
26	0.000	0.016	-1	26
27	0.000	0.014	-1	25
28	0.000	0.012	-1	24
29	0.000	0.012	-1	23
30	0.000	0.012	-1	23
31	0.000	0.011	-1	22
32	0.000	0.011	-1	21
33	0.000	0.011	-1	21
34	0.000	0.010	-1	20
35	0.000	0.010	-1	20
36	0.000	0.010	-1	19
37	0.000	0.009	-1	18
38	0.000	0.009	-1	18
39	0.000	0.009	-1	17
40	0.000	0.009	-1	17
41	0.000	0.008	-1	16
42	0.000	0.008	0	16
43	0.000	0.008	0	15
44	0.000	0.008	0	15
45	0.000	0.007	0	14
46	0.000	0.007	0	14
47	0.000	0.007	0	14
48	0.000	0.007	0	13
49	0.000	0.007	0	13
50	0.000	0.006	0	12
51	0.000	0.006	0	12
52	0.000	0.006	0	12
53	0.000	0.006	0	11
54	0.000	0.006	0	11
55	0.000	0.005	0	11
56	0.000	0.005	0	10
57	0.000	0.005	0	10
58	0.000	0.005	0	10
59	0.000	0.005	0	9
60	0.000	0.005	0	9
61	0.000	0.005	0	9
62	0.000	0.004	0	9
63	0.000	0.004	0	8
64	0.000	0.004	0	8
65	0.000	0.004	0	8
66	0.000	0.004	0	8
67	0.000	0.004	0	7
68	0.000	0.004	0	7
69	0.000	0.004	0	7
70	0.000	0.003	0	7
71	0.000	0.003	0	7
72	0.000	0.003	0	6
73	0.000	0.003	0	6
74	0.000	0.003	0	6
75	0.000	0.003	0	6
76	0.000	0.003	0	6
77	0.000	0.003	0	5
78	0.000	0.003	0	5
79	0.000	0.003	0	5
80	0.000	0.003	0	5
81	0.000	0.002	0	5
82	0.000	0.002	0	5
83	0.000	0.002	0	5

Peak

Maximum Ponding

50 Year Post Development Flow (P-2) [Modified Rational Method]	0.044	m3/sec
---	-------	--------

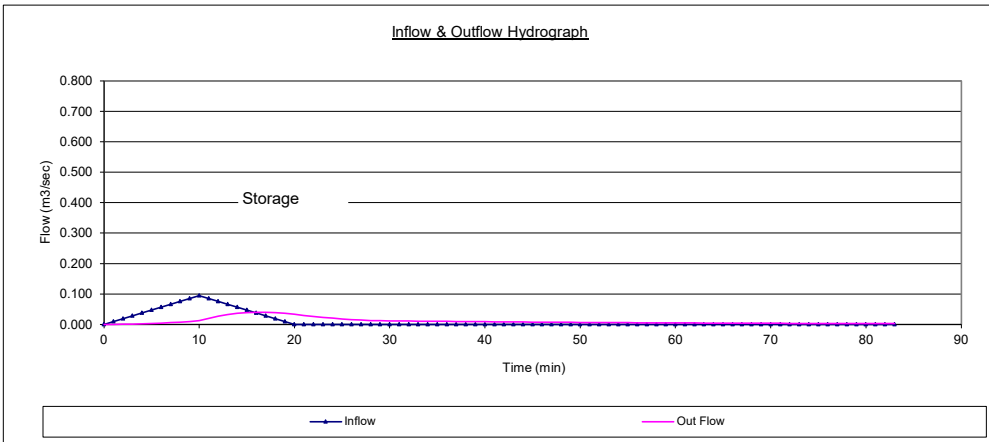
Duration of Storm	20	min
-------------------	----	-----

Hydrograph Data

Minute	In Flow	Out Flow (Total Site)	Del_Storage	Cumulative Storage
	(m3/sec)	(m3/sec)	(m3)	(m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.004	0.004	0	0
2	0.009	0.009	0	0
3	0.013	0.014	0	0
4	0.018	0.019	0	0
5	0.022	0.012	0	0
6	0.027	0.029	0	0
7	0.031	0.035	0	0
8	0.035	0.041	0	0
9	0.040	0.047	0	0
10	0.044	0.054	0	0
11	0.040	0.052	0	0
12	0.035	0.055	0	0
13	0.031	0.058	0	0
14	0.027	0.059	0	0
15	0.022	0.059	0	0
16	0.018	0.056	0	0
17	0.013	0.053	0	0
18	0.009	0.048	0	0
19	0.004	0.043	0	0
20	0.000	0.036	0	0
21	0.000	0.033	0	0
22	0.000	0.029	0	0
23	0.000	0.026	0	0
24	0.000	0.023	0	0
25	0.000	0.020	0	0
26	0.000	0.018	0	0
27	0.000	0.016	0	0
28	0.000	0.014	0	0
29	0.000	0.012	0	0
30	0.000	0.012	0	0
31	0.000	0.012	0	0
32	0.000	0.011	0	0
33	0.000	0.011	0	0
34	0.000	0.011	0	0
35	0.000	0.010	0	0
36	0.000	0.010	0	0
37	0.000	0.010	0	0
38	0.000	0.009	0	0
39	0.000	0.009	0	0
40	0.000	0.009	0	0
41	0.000	0.009	0	0
42	0.000	0.008	0	0
43	0.000	0.008	0	0
44	0.000	0.008	0	0
45	0.000	0.008	0	0
46	0.000	0.007	0	0
47	0.000	0.007	0	0
48	0.000	0.007	0	0
49	0.000	0.007	0	0
50	0.000	0.007	0	0
51	0.000	0.006	0	0
52	0.000	0.006	0	0
53	0.000	0.006	0	0
54	0.000	0.006	0	0
55	0.000	0.006	0	0
56	0.000	0.005	0	0
57	0.000	0.005	0	0
58	0.000	0.005	0	0
59	0.000	0.005	0	0
60	0.000	0.005	0	0
61	0.000	0.005	0	0
62	0.000	0.005	0	0
63	0.000	0.004	0	0
64	0.000	0.004	0	0
65	0.000	0.004	0	0
66	0.000	0.004	0	0
67	0.000	0.004	0	0
68	0.000	0.004	0	0
69	0.000	0.004	0	0
70	0.000	0.004	0	0
71	0.000	0.003	0	0
72	0.000	0.003	0	0
73	0.000	0.003	0	0
74	0.000	0.003	0	0
75	0.000	0.003	0	0
76	0.000	0.003	0	0
77	0.000	0.003	0	0
78	0.000	0.003	0	0
79	0.000	0.003	0	0
80	0.000	0.003	0	0
81	0.000	0.003	0	0
82	0.000	0.002	0	0
83	0.000	0.002	0	0

Peak

Maximum Outflow



CHECKING STORAGE RELEASE CHARACTERISTICS OF UNDERGROUND STORAGE

100 Year Post Development Controlled Flow (P-1) [Modified Rational Method]	0.108	m3/sec
---	-------	--------

Duration of Storm	20	min
-------------------	----	-----

Pond Rating Curve

Elevation (m)	Outflow (m3/sec)	Storage (m3)
236.76	0.00	0.00
236.87	0.01	24.92
236.99	0.06	48.33
237.03	0.07	58.72
237.07	0.08	69.67
237.28	0.11	137.27

Hydrograph Data

Minute	In Flow	Out Flow	Del_Storage	Cumulative Storage
	(m3/sec)	(m3/sec)	(m3)	(m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.011	0.000	1	1
2	0.022	0.000	1	2
3	0.033	0.001	2	4
4	0.043	0.002	2	6
5	0.054	0.003	3	9
6	0.065	0.005	4	13
7	0.076	0.006	4	17
8	0.087	0.009	5	22
9	0.098	0.011	5	27
10	0.108	0.017	6	33
11	0.098	0.027	4	37
12	0.087	0.035	3	40
13	0.076	0.041	2	42
14	0.065	0.045	1	43
15	0.054	0.047	0	44
16	0.043	0.048	0	43
17	0.033	0.048	-1	42
18	0.022	0.046	-1	41
19	0.011	0.043	-2	39
20	0.000	0.039	-2	37
21	0.000	0.035	-2	35
22	0.000	0.031	-2	33
23	0.000	0.027	-2	31
24	0.000	0.024	-1	30
25	0.000	0.021	-1	28
26	0.000	0.019	-1	27
27	0.000	0.017	-1	26
28	0.000	0.015	-1	25
29	0.000	0.013	-1	25
30	0.000	0.012	-1	24
31	0.000	0.012	-1	23
32	0.000	0.012	-1	22
33	0.000	0.011	-1	22
34	0.000	0.011	-1	21
35	0.000	0.011	-1	20
36	0.000	0.010	-1	20
37	0.000	0.010	-1	19
38	0.000	0.010	-1	19
39	0.000	0.009	-1	18
40	0.000	0.009	-1	18
41	0.000	0.009	-1	17
42	0.000	0.009	-1	17
43	0.000	0.008	0	16
44	0.000	0.008	0	16
45	0.000	0.008	0	15
46	0.000	0.008	0	15
47	0.000	0.007	0	14
48	0.000	0.007	0	14
49	0.000	0.007	0	13
50	0.000	0.007	0	13
51	0.000	0.006	0	13
52	0.000	0.006	0	12
53	0.000	0.006	0	12
54	0.000	0.006	0	11
55	0.000	0.006	0	11
56	0.000	0.006	0	11
57	0.000	0.005	0	10
58	0.000	0.005	0	10
59	0.000	0.005	0	10
60	0.000	0.005	0	10
61	0.000	0.005	0	9
62	0.000	0.005	0	9
63	0.000	0.004	0	9
64	0.000	0.004	0	8
65	0.000	0.004	0	8
66	0.000	0.004	0	8
67	0.000	0.004	0	8
68	0.000	0.004	0	7
69	0.000	0.004	0	7
70	0.000	0.004	0	7
71	0.000	0.004	0	7
72	0.000	0.003	0	7
73	0.000	0.003	0	6
74	0.000	0.003	0	6
75	0.000	0.003	0	6
76	0.000	0.003	0	6
77	0.000	0.003	0	6
78	0.000	0.003	0	6
79	0.000	0.003	0	5
80	0.000	0.003	0	5
81	0.000	0.003	0	5
82	0.000	0.003	0	5
83	0.000	0.002	0	5

Peak

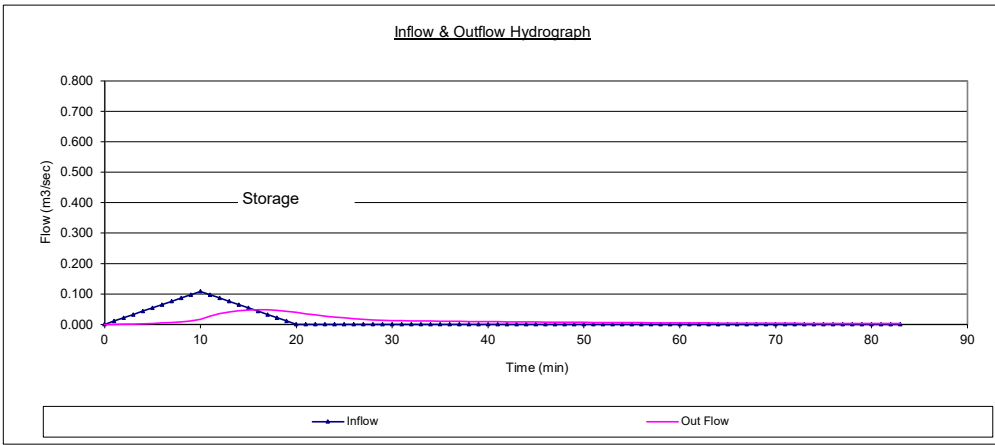
Maximum Ponding

Hydrograph Data

Minute	In Flow	Out Flow (Total Site)	Del_Storage	Cumulative Storage
	(m3/sec)	(m3/sec)	(m3)	(m3)
(1)	(2)	(4)	(5)	(6)
0	0.000	0.000	0	0
1	0.005	0.005	0	0
2	0.010	0.010	0	0
3	0.015	0.015	0	0
4	0.020	0.021	0	0
5	0.025	0.012	0	0
6	0.030	0.034	0	0
7	0.035	0.040	0	0
8	0.040	0.047	0	0
9	0.046	0.054	0	0
10	0.051	0.061	0	0
11	0.046	0.013	0	0
12	0.040	0.013	0	0
13	0.035	0.013	0	0
14	0.030	0.013	0	0
15	0.025	0.013	0	0
16	0.020	0.013	0	0
17	0.015	0.063	0	0
18	0.010	0.058	0	0
19	0.005	0.051	0	0
20	0.000	0.043	0	0
21	0.000	0.039	0	0
22	0.000	0.035	0	0
23	0.000	0.031	0	0
24	0.000	0.027	0	0
25	0.000	0.024	0	0
26	0.000	0.021	0	0
27	0.000	0.019	0	0
28	0.000	0.017	0	0
29	0.000	0.015	0	0
30	0.000	0.013	0	0
31	0.000	0.012	0	0
32	0.000	0.012	0	0
33	0.000	0.012	0	0
34	0.000	0.011	0	0
35	0.000	0.011	0	0
36	0.000	0.011	0	0
37	0.000	0.010	0	0
38	0.000	0.010	0	0
39	0.000	0.010	0	0
40	0.000	0.009	0	0
41	0.000	0.009	0	0
42	0.000	0.009	0	0
43	0.000	0.009	0	0
44	0.000	0.008	0	0
45	0.000	0.008	0	0
46	0.000	0.008	0	0
47	0.000	0.008	0	0
48	0.000	0.007	0	0
49	0.000	0.007	0	0
50	0.000	0.007	0	0
51	0.000	0.007	0	0
52	0.000	0.006	0	0
53	0.000	0.006	0	0
54	0.000	0.006	0	0
55	0.000	0.006	0	0
56	0.000	0.006	0	0
57	0.000	0.006	0	0
58	0.000	0.005	0	0
59	0.000	0.005	0	0
60	0.000	0.005	0	0
61	0.000	0.005	0	0
62	0.000	0.005	0	0
63	0.000	0.005	0	0
64	0.000	0.004	0	0
65	0.000	0.004	0	0
66	0.000	0.004	0	0
67	0.000	0.004	0	0
68	0.000	0.004	0	0
69	0.000	0.004	0	0
70	0.000	0.004	0	0
71	0.000	0.004	0	0
72	0.000	0.004	0	0
73	0.000	0.003	0	0
74	0.000	0.003	0	0
75	0.000	0.003	0	0
76	0.000	0.003	0	0
77	0.000	0.003	0	0
78	0.000	0.003	0	0
79	0.000	0.003	0	0
80	0.000	0.003	0	0
81	0.000	0.003	0	0
82	0.000	0.003	0	0
83	0.000	0.003	0	0

Peak

Maximum Outflow



South Property Line West to East Ditch

Area	3.17 ha
Runoff Coefficient	0.36
Time of Concentration	72 min
	Interpolated
Return Rate	2 year
Coefficient	1
Rainfall Intesity	16.8 mm/hr
Allowable Release Rate	0.053 m ³ /s

Return Rate	5 year
Coefficient	1
Rainfall Intesity	22.5 mm/hr
Allowable Release Rate	0.071 m ³ /s

Return Rate	10 year
Coefficient	1
Rainfall Intesity	26.3 mm/hr
Allowable Release Rate	0.083 m ³ /s

Return Rate	25 year
Coefficient	1.1
Rainfall Intesity	31.1 mm/hr
Allowable Release Rate	0.108 m ³ /s

Return Rate	50 year
Coefficient	1.2
Rainfall Intesity	34.6 mm/hr
Allowable Release Rate	0.131 m ³ /s

Return Rate	100 year
Coefficient	1.25
Rainfall Intesity	38.0 mm/hr
Allowable Release Rate	0.150 m ³ /s

North Property Line West to East Ditch

Area	0.85 ha
Runoff Coefficient	0.35
Time of Concentration	65 min
	Interpolated
Return Rate	2 year
Coefficient	1
Rainfall Intesity	18.1 mm/hr
Allowable Release Rate	0.015 m ³ /s

Return Rate	5 year
Coefficient	1
Rainfall Intesity	24.2 mm/hr
Allowable Release Rate	0.020 m ³ /s

Return Rate	10 year
Coefficient	1
Rainfall Intesity	28.3 mm/hr
Allowable Release Rate	0.023 m ³ /s

Return Rate	25 year
Coefficient	1.1
Rainfall Intesity	33.4 mm/hr
Allowable Release Rate	0.030 m ³ /s

Return Rate	50 year
Coefficient	1.2
Rainfall Intesity	37.2 mm/hr
Allowable Release Rate	0.037 m ³ /s

Return Rate	100 year
Coefficient	1.25
Rainfall Intesity	40.8 mm/hr
Allowable Release Rate	0.042 m ³ /s

MTO IDF Curve for the City of Temiskaming Shores

Storm (yrs)	Coeff A	Coeff B
2	19.10	-0.699
5	25.60	-0.699
10	29.90	-0.699
25	35.30	-0.699
50	39.30	-0.699
100	43.20	-0.699

Modified Rational Method

$$Q = C_i C A I / 360$$

Where:	Q -	Flow Rate (m3/s)
	Ci -	Peaking Coefficient
	C -	Rational Method Runoff Coefficient
	I -	Storm Intensity (mm/hr)
	A -	Area (ha.)

**Haileybury Firehall
Required Ditch Dimensions**

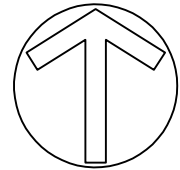
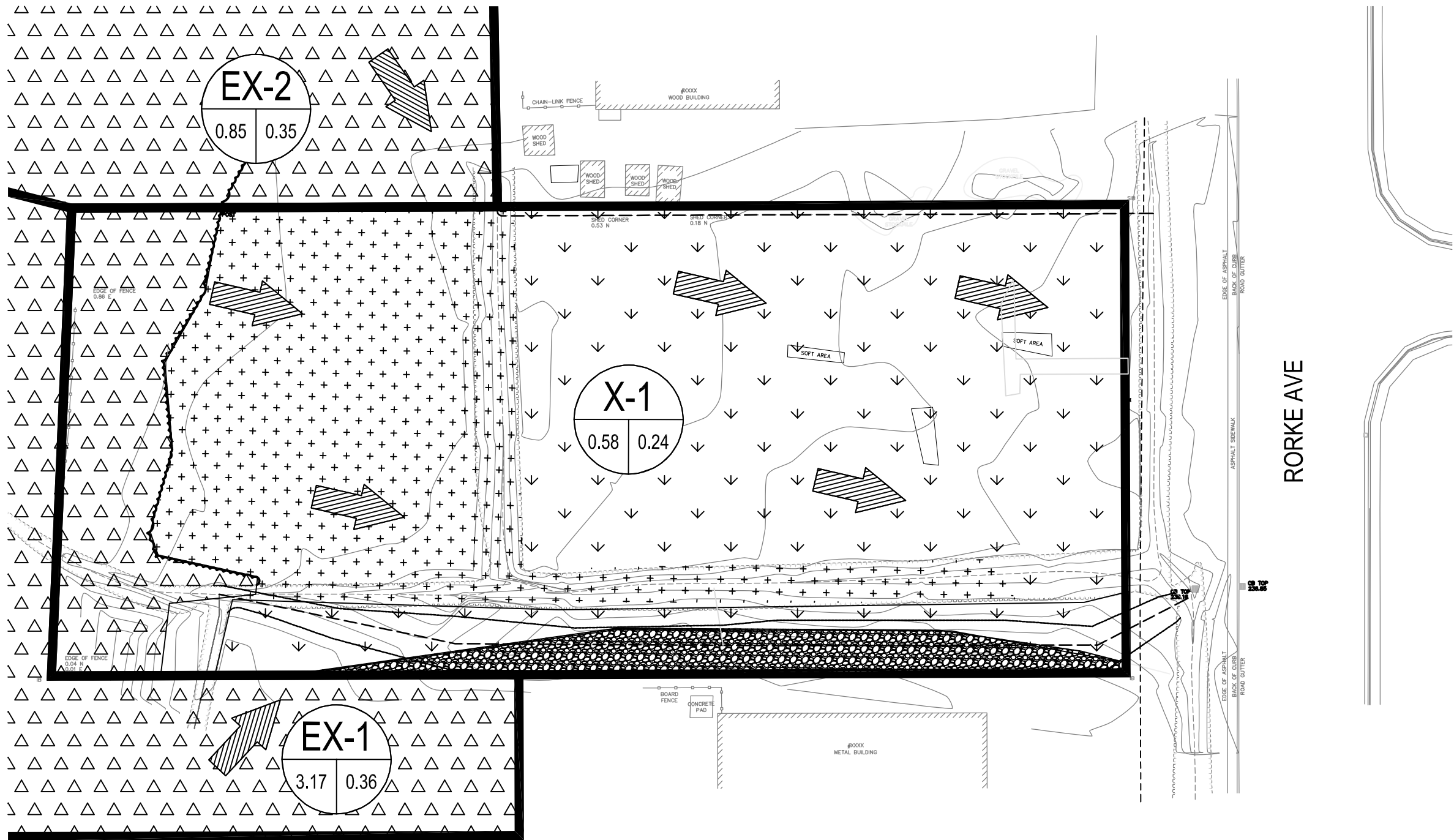
South Property Line - West to East	
Left Bank Slope	40.00 %
Right Bank Slope	33.00 %
Bottom Width	0.0 m
Longitudinal Slope	0.50 %
Required Flow	150 L/s
Manning's "n"	0.035
Assumed Depth of Flow	0.31 m
Left Bank Length	0.78 m
Right Bank Length	0.94 m
Wetted Area	0.27 sq.m.
Wetted Perimeter	1.83 m
Hydraulic Radius	0.15
Velocity	0.56 m/s
Flow Passing	150 L/s

North Property Line - West to East	
Left Bank Slope	50.00 %
Right Bank Slope	50.00 %
Bottom Width	0.0 m
Longitudinal Slope	0.30 %
Required Flow	42 L/s
Manning's "n"	0.035
Assumed Depth of Flow	0.24 m
Left Bank Length	0.49 m
Right Bank Length	0.49 m
Wetted Area	0.12 sq.m.
Wetted Perimeter	1.09 m
Hydraulic Radius	0.11
Velocity	0.36 m/s
Flow Passing	42 L/s

Appendix B

Pre-Development Stormwater Management Catchment Area Plan

\\exp\data\NTB\21014052-0060 Execution\65 Drawings\2 - Design Drawings\NTB-4052 BASE July 23, 2021 SWM.dwg 2021-07-23



Catchment Area
Area (ha) — 0.02 0.67
Runoff Coefficient —

Grass
Pavement / Concrete
Gravel
Woods
Pasture

OVERLAND FLOW ROUTE

NO.	DESCRIPTION	DATE	BY	APPROVED

CAUTION: DO NOT SCALE DRAWINGS.

THIS REPRODUCTION MAY BE AT A SIZE DIFFERENT THAN ORIGINALLY DRAWN. EXP ASSUMES NO RESPONSIBILITY FOR INCORRECT SCALING. UNAUTHORIZED REPRODUCTION OR REUSE IS STRICTLY PROHIBITED. NOT PUBLISHED - ALL RIGHTS RESERVED. EXP EXPRESSLY DISCLAIMS RESPONSIBILITY ARISING FROM UNAUTHORIZED USE OF THESE DRAWINGS AND NOTES. AUTHORIZATION MUST BE IN WRITING.

© EXP, 2019

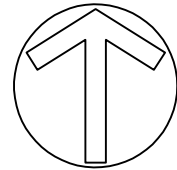
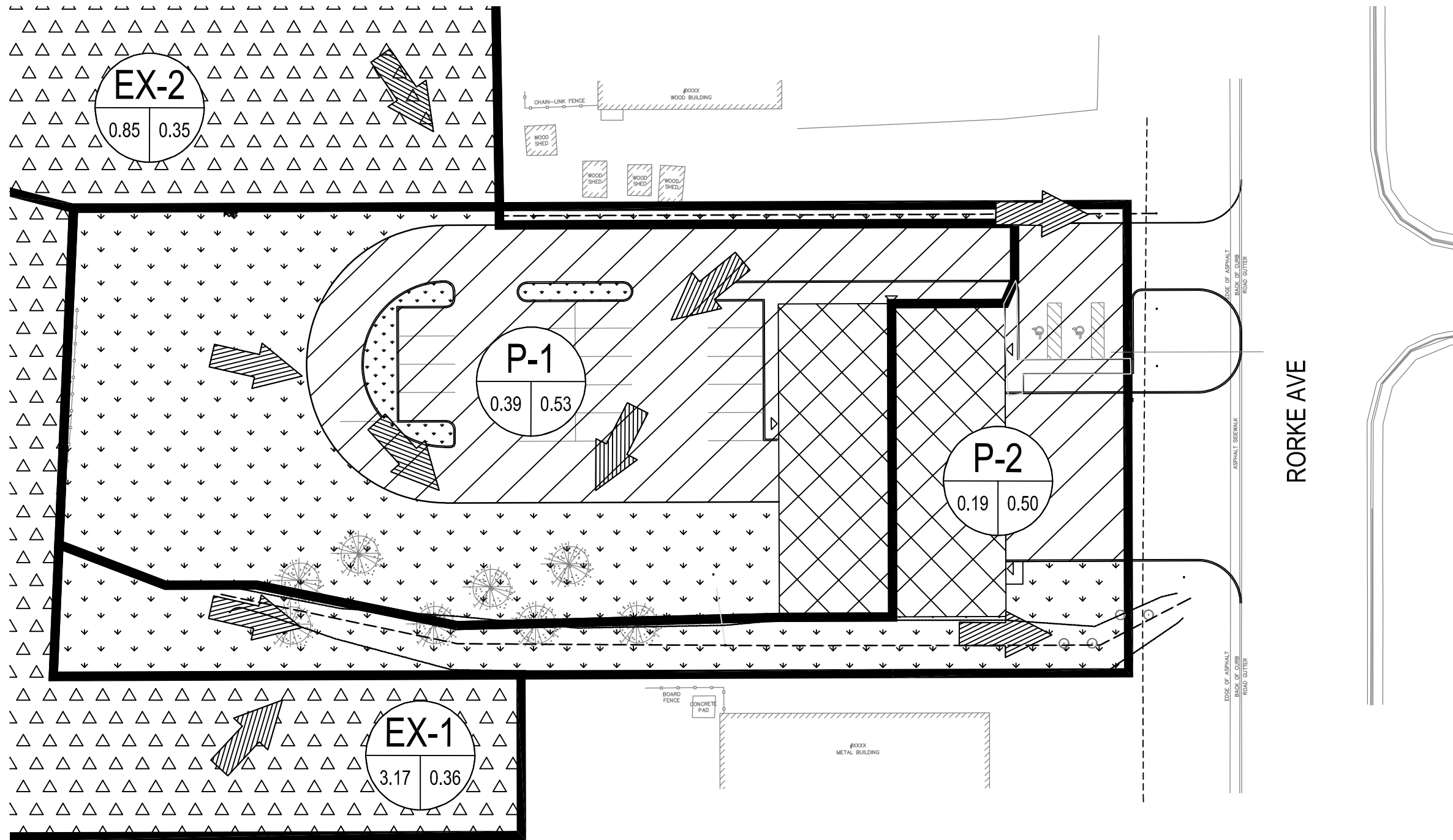
TITLE:	PRE-DEVELOPMENT STORMWATER MANAGEMENT CATCHMENT AREA PLAN		
PROJECT:	HAILEYBURY FIRE HALL, 25 RORKE AVENUE HAILEYBURY, ON		
CLIENT:	CGV BUILDERS		

EXP Services Inc. T: +1.705.474.2720 F: +1.705.474.1815 757 Main Street East North Bay, ON P1B 1C2 Canada www.exp.com			• BUILDINGS • EARTH & ENVIRONMENT • ENERGY • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY	
DRAWN: EB		DESIGN: CLC		SCALE: 1:500
PROJECT No.: NTB-21014052			SWM1	

Appendix C

Post-Development Stormwater Management Catchment Area Plan

\\exp\data\NTB\21014052-0060 Execution\65 Drawings\2 - Design Drawings\NTB-4052 BASE July 23, 2021 SWM.dwg 2021-07-23



Catchment Area

Area (ha)

Runoff Coefficient

P-1

0.02

0.67

Grass

Pavement / Concrete

Gravel

Woods

Pasture

OVERLAND FLOW ROUTE

NO.	DESCRIPTION	DATE	BY	APPROVED

CAUTION: DO NOT SCALE DRAWINGS.

THIS REPRODUCTION MAY BE AT A SIZE DIFFERENT THAN ORIGINALLY DRAWN. EXP ASSUMES NO RESPONSIBILITY FOR INCORRECT SCALING. UNAUTHORIZED REPRODUCTION OR REUSE IS STRICTLY PROHIBITED. NOT PUBLISHED - ALL RIGHTS RESERVED. EXP EXPRESSLY DISCLAIMS RESPONSIBILITY ARISING FROM UNAUTHORIZED USE OF THESE DRAWINGS AND NOTES. AUTHORIZATION MUST BE IN WRITING.

© EXP, 2019

TITLE:

PROJECT:

CLIENT:

POST-DEVELOPMENT STORMWATER
MANAGEMENT CATCHMENT AREA PLAN

HAILEYBURY FIRE HALL, 25 RORKE AVENUE
HAILEYBURY, ON

CGV BUILDERS

EXP Services Inc.
t: +1.705.474.2720 | f: +1.705.474.1815
757 Main Street East
North Bay, ON P1B 1C2
Canada
www.exp.com

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY

• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY

exp.

DRAWN: EB

DESIGN: CLC

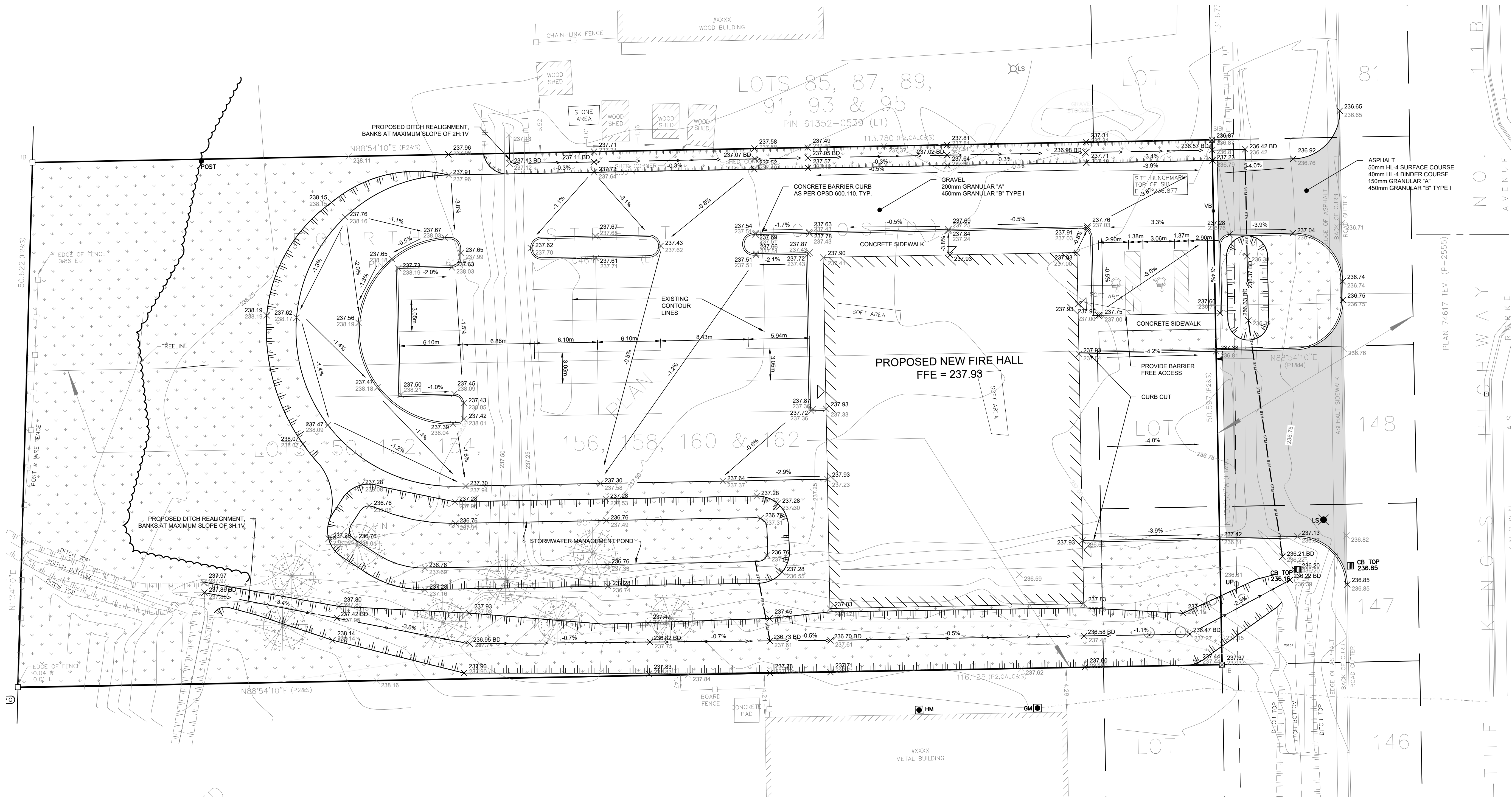
SCALE: 1:500

PROJECT No.: NTB-21014052

SWM2

Appendix D

Site Grading Plan – C201
Site Servicing Plan – C202



1 SITE GRADING PLAN
C201 1:200

EXP Services Inc.
Infrastructure Services - North Bay
757 Main Street East
North Bay, Ontario, Canada
P1B 1G2
PH 705 474 2700
FX 705 474 6515
www.exp.com

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

CAUTION: DO NOT SCALE DRAWINGS.
THIS REPRODUCTION MAY BE AT A SIZE DIFFERENT THAN ORIGINALLY DRAWN. EXP ASSUMES NO RESPONSIBILITY FOR INCORRECT SCALING. UNAUTHORIZED REPRODUCTION OR REUSE IS STRICTLY PROHIBITED. NOT PUBLISHED - ALL RIGHTS RESERVED. EXP EXPRESSLY DISCLAIMS RESPONSIBILITY ARISING FROM UNAUTHORIZED USE OF THESE DRAWINGS AND NOTES. AUTHORIZATION MUST BE IN WRITING.
© EXP 2021

LEGEND

— SAN —	PROPERTY LINE
— SAN —	EX. EDGE OF PAVEMENT
— SAN —	EX. SANITARY SEWER
— STM —	PROPOSED SANITARY SEWER
— STM —	EX. STORM SEWER
— STM —	PROPOSED STORM SEWER
— W —	EX. WATER MAIN
— SAN —	HEAVY DUTY STYROFOAM SEWER PIPE INSULATION
— GAS —	EX. GAS LINE
— HYD —	EX. HYDRO LINE
●	EXISTING/PROPOSED SANITARY MANHOLE
□	EXISTING/PROPOSED STORM DITCH INLET
□	EXISTING/PROPOSED STORM MANHOLE CATCH BASIN
□	EXISTING/PROPOSED STORM CATCH BASIN
⊗	EXISTING WATER VALVE
⊗	EXISTING FIRE HYDRANT
—1.2%	PROPOSED SLOPE
×225.52	PROPOSED ELEVATION
×225.52	EXISTING ELEVATION

0 1 2 5 10 15m

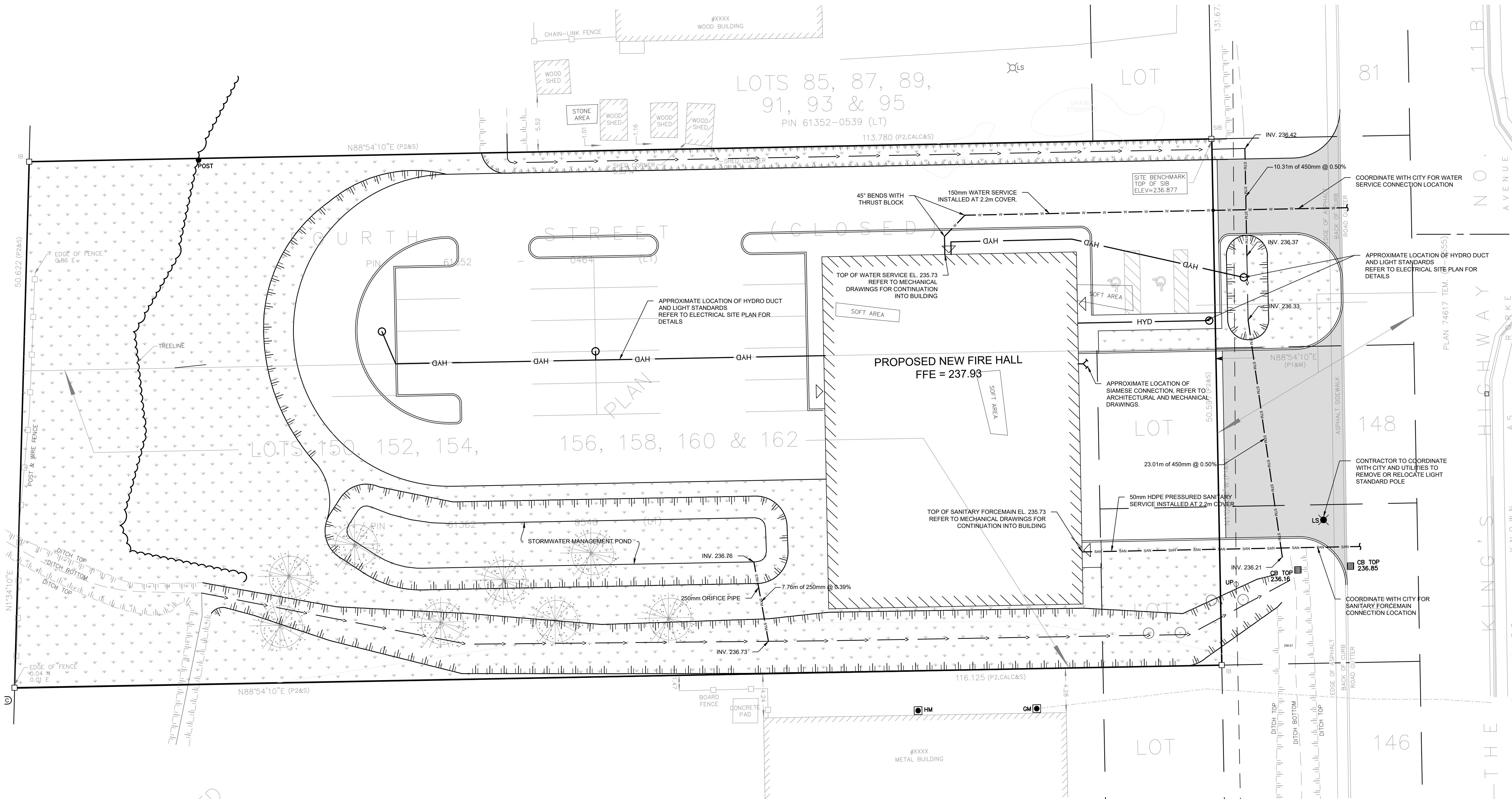
ISSUED FOR SPCA	
No.	Revision
By:	CLC
Date:	7/23/2021

ISSUED FOR SPCA

Professional Seal

Drawn By: EB
Checked By: JUD
Approved By: CLC
Date Printed: 7/23/2021
File Name: NTB-4052 BASE July 23, 2021
Project Title
HAILEYBURY FIRE HALL
HAILEYBURY, ON
Dwg. Title
SITE GRADING PLAN
Project No.
NTB-21014052
Dwg. No.
C201
Rev. No.
A

\\expdata\NTB-21014052-0060 Executions\Drawings\2 - Design Drawings



1 SITE SERVING PLAN
C202 1:200

EXP Services Inc.
Infrastructure Services - North Bay
757 Main Street East
North Bay, Ontario, Canada
P1B 1C2
Ph: 705 474 2700
Fax: 705 474 6515
www.exp.com

exp.

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

CAUTION: DO NOT SCALE DRAWINGS.
THIS REPRODUCTION MAY BE AT A SIZE DIFFERENT THAN ORIGINALLY DRAWN. EXP ASSUMES NO RESPONSIBILITY FOR INCORRECT SCALING. UNAUTHORIZED REPRODUCTION OR REUSE IS STRICTLY PROHIBITED. NOT PUBLISHED - ALL RIGHTS RESERVED. EXP EXPRESSLY DISCLAIMS RESPONSIBILITY ARISING FROM UNAUTHORIZED USE OF THESE DRAWINGS AND NOTES. AUTHORIZATION MUST BE IN WRITING.
© EXP, 2021

LEGEND

— SAN —	PROPERTY LINE	— EX. EDGE OF PAVEMENT
— SAN —	EX. SANITARY SEWER	— EX. SANITARY SEWER
— STM —	PROPOSED SANITARY SEWER	— EX. STORM SEWER
— STM —	EX. STORM SEWER	— EX. STORM SEWER
— W —	PROPOSED STORM SEWER	— EX. WATER MAIN
— W —	EX. WATER MAIN	— EX. HEAVY DUTY STYROFOAM SEWER PIPE INSULATION
— SAN —	HEAVY DUTY STYROFOAM SEWER PIPE INSULATION	— EX. GAS LINE
— GAS —	EX. GAS LINE	— EX. HYDRO LINE
— HYD —	EX. HYDRO LINE	— EXISTING/PROPOSED SANITARY MANHOLE
●	EXISTING/PROPOSED SANITARY MANHOLE	— EXISTING/PROPOSED STORM DITCH INLET
□	EXISTING/PROPOSED STORM DITCH INLET	— EXISTING/PROPOSED STORM MANHOLE CATCH BASIN
□	EXISTING/PROPOSED STORM MANHOLE CATCH BASIN	— EXISTING/PROPOSED STORM CATCH BASIN
□	EXISTING/PROPOSED STORM CATCH BASIN	— EXISTING WATER VALVE
⊗	EXISTING WATER VALVE	— EXISTING FIRE HYDRANT
⊗	EXISTING FIRE HYDRANT	— PROPOSED SLOPE
-1.2%	PROPOSED SLOPE	— PROPOSED ELEVATION
225.52	PROPOSED ELEVATION	— EXISTING ELEVATION
225.52	EXISTING ELEVATION	

0 1 2 5 10 15m

ISSUED FOR SPCA		CLC	7/23/2021
No.	Revision	By:	Date

ISSUED FOR SPCA

Professional Seal

Drawn By: EB
Checked By: JUD
Approved By: CLC
Date Printed: 7/23/2021
File Name: NTB-4052 BASE July 23, 2021
Project Title
HAILEYBURY FIRE HALL
HAILEYBURY, ON
Dwg. Title
SITE SERVICING PLAN
Project No.
NTB-21014052
Dwg. No.
C202
Rev. No.
A

\\expdata\NTB-21014052-0060_Execution\Drawings\2 - Design Drawings

The Corporation of the City of Temiskaming Shores
By-law No. 2021-176
Being a by-law to confirm certain proceedings of Council of The
Corporation of the City of Temiskaming Shores for its Regular
meeting held on November 16, 2021

Whereas under Section 8 of the Municipal Act, 2001, S.O. 2001, c.25, as amended, the powers of a municipality shall be interpreted broadly to enable it to govern its affairs as it considers appropriate and to enhance the municipality's ability to respond to municipal issues; and

Whereas under Section 9 of the Municipal Act, 2001, S.O. 2001, c.25, as amended, a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act; and

Whereas under Section 10 (1) of the Municipal Act, 2001, S.O. 2001, c.25, as amended, a single-tier municipality may provide any service or thing that the municipality considers necessary or desirable for the public; and

Whereas it is the desire of the Council of The Corporation of the City of Temiskaming Shores to confirm proceedings and By-laws.

Now therefore the Council of The Corporation of the City of Temiskaming Shores hereby enacts the following as a by-law:

1. That the actions of the Council at its Regular meeting held on **November 16, 2021**, with respect to each recommendation, by-law and resolution and other action passed and taken or direction given by Council at its said meeting, is, except where the prior approval of the Ontario Municipal Board is required, hereby adopted, ratified and confirmed.
2. That the Mayor, or in his absence the presiding officer of Council, and the proper officials of the municipality are hereby authorized and directed to do all things necessary to give effect to the said action or to obtain approvals where required, and except where otherwise provided, the Mayor, or in his absence the presiding officer, and the Clerk are hereby directed to execute all documents required by statute to be executed by them, as may be necessary in that behalf and to affix the corporate seal of the municipality to all such documents.

Read a first, second and third time and finally passed this 16th day of November, 2021.

Mayor

Clerk