



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
JUNE 12, 2024 COUNCIL MEETING
VIRTUAL MEETING BY ELECTRONIC PARTICIPATION &
IN-PERSON AT THE MUNICIPAL OFFICE –
7404 WELLINGTON RD 34, PUSLINCH

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A G E N D A ADDENDUM

DATE: Wednesday June 12, 2024

CLOSED MEETING: 12:30 P.M.

REGULAR MEETING: 9:00 A.M.

Addendum

6.17 Watson and Associates Assessment of Bill 185, Cutting Red Tape to Build More Homes Act, 2024

10.1 9:25 A.M. Presentation by NPG Planning Solutions regarding Puslinch By Design: Employment Lands Study Update

≠ Denotes resolution prepared

- 1. Call the Meeting to Order**
- 2. Roll Call**
- 3. Moment of Reflection**
- 4. Confirmation of the Agenda ≠**
- 5. Disclosure of Pecuniary Interest & the General Nature Thereof**



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6. **Consent Agenda ≠**

- 6.1 Adoption and Receipt of the Minutes of the Previous Council and Committee Meetings:
 - 6.1.1 May 22, 2024 Council Meeting Minutes
 - 6.1.2 April 9, 2024 Planning and Development Advisory Committee Meeting Minutes
 - 6.1.3 March 12, 2024 Committee of Adjustment Meeting Minutes
- 6.2 Association of Municipalities Ontario Policy Update regarding National Housing Strategy Funding, Ontario Health Teams, Enhancing Digital Security and Trust, Next Building Code
- 6.3 Association of Municipalities Ontario Policy Update regarding National Housing Strategy
- 6.4 Grand River Conservation Authority May 2024 General Meeting Summary
- 6.5 Wellington Federation of Agriculture regarding Stormwater Management Master Plans in Agricultural Areas for Wellington County
- 6.6 Enbridge Gas Inc. update related to Enbridge's Rate Rebasing Application and on Ontario's Keeping Energy Costs Down Act
- 6.7 Ministry of Municipal Affairs and Housing update related to municipal development-related charge (MDRC) exemptions
- 6.8 Minister of Citizenship and Multiculturalism Letter regarding changes made to Ontario Heritage Act
- 6.9 Office of the Solicitor General Letter regarding Community Safety and Policing Act, 2019
- 6.10 Ministry of Municipal Affairs and Housing Letter regarding *Get it Done Act, 2024*, Received Royal Assent
- 6.11 Lake of Bays Letter resolution regarding Royal Assent of Administrative Monetary Penalty System in the Building Code Act
- 6.12 Township of Centre Wellington regarding Notice of Study Commencement and Public Information Centre - Water and Wastewater Master Servicing Plan
- 6.13 Township of Alnwick Haldimand resolution regarding MFIPPA Modernization
- 6.14 County of Wellington Joint Accessibility Advisory Committee Minutes – May 2024
- 6.15 Ontario Historical Society - Heritage Organization Development Grant - Applications Now Open
- 6.16 Puslinch Optimist Club Thank You Letter
- 6.17 Watson and Associates Assessment of *Bill 185, Cutting Red Tape to Build More Homes Act, 2024*

7. **Delegations ≠**

- 7.1 Specific Interest (Items Listed on the Meeting Agenda)
 - 7.1.1 None
- 7.2 General Interest (Items Listed on the Meeting Agenda)



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- 7.2.1 **9:05 A.M.** Delegation by John McNie regarding ERO #019-8428 with respect to an aggregate pit license application for the Ed Lake property on Concession 2
- 7.2.2 **9:15 A.M.** Delegation by Gabrielle Monteith regarding Bitumen and Tar in Wetlands due to road projects on Watson Road

8. **Public Meetings**

- 8.1 June 12, 2024 at 7:00 P.M. Public Information Meeting held in-person in Council Chambers, Municipal Office (7404 Wellington Rd 34) and by electronic participation through Zoom regarding proposed Zoning By-law Amendment D14/AZI (Usman Aziz) 6707 Gore Road, Puslinch

9. **Reports ≠**

9.1 **Puslinch Fire and Rescue Services**

- 9.1.1 Report FIR-2024-004 Final Draft Community Risk Assessment ≠
(Circulated under separate cover)

9.2 **Finance Department**

- 9.2.1 None

9.3 **Administration Department**

- 9.3.1 Amended Report ADM-2024-027 - Second Draft Heritage Permit By-law ≠
- 9.3.2 Report ADM-2024-031 Proposed Township comments regarding Badger Daylighting ERO #019-8678 for Waste ECA Application ≠
(Circulated under separate cover)

9.4 **Planning and Building Department**

- 9.4.1 None

9.5 **Roads and Parks Department**

- 9.5.1 Report PW-2024-004 - Consideration for Hard Surfacing Gravel Roads ≠

9.6 **Recreation Department**

- 9.6.1 None

10. **Correspondence ≠**

- 10.1 **9:25 A.M.** Presentation by NPG Planning Solutions regarding Puslinch By Design: Employment Lands Study Update

11. **Council reports**

- 11.1 Mayor' Updates



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
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7404 WELLINGTON RD 34, PUSLINCH

11.2 Council Member Reports (verbal or written updates from members who sit on boards/committees)

12. **By-laws ≠**

12.1 First, Second and Third Reading

12.1.1 None

13. **Announcements**

14. **Closed Session – Pursuant to Section 239 and Pursuant to Section 239 Subsection 3.1 of the Municipal Act, 2001 for the purpose of:**

14.1 Council Education/Training Session for the purpose of providing training with respect to responsibilities under the Fire Protection and Prevention Act

14.2 Confidential report regarding advice that is subject to solicitor-client privilege, including communications necessary for that purpose - By-law enforcement

14.3 Confidential minutes from previous closed meetings:

14.3.1 May 22, 2024 Closed Meeting Minutes

15. **Business Arising from Closed Session**

16. **Notice of Motion**

17. **New Business**

18. **Confirmatory By-law ≠**

18.1 BL2024-042 Confirm By-law – June 12, 2024

19. **Adjournment ≠**



MINUTES

DATE: May 22, 2024

CLOSED MEETING: 12:30 P.M.

COUNCIL MEETING: 10:00 A.M.

The May 22, 2024 Council Meeting was held on the above date and called to order at 10:00 a.m. via electronic participation and in-person at 7404 Wellington Rd 34, Puslinch.

1. CALL THE MEETING TO ORDER

2. ROLL CALL

ATTENDANCE:

Councillor Sara Bailey
Councillor Russel Hurst
Councillor Jessica Goyda
Councillor John Sepulis
Mayor James Seeley

STAFF IN ATTENDANCE:

1. Glenn Schwendinger, CAO - absent
2. Mike Fowler, Director of Public Works, Parks and Facilities
3. Mary Hasan, Director of Finance/Treasurer
4. Courtenay Hoytfox, Interim CAO
5. Justine Brotherston, Interim Municipal Clerk
6. Sarah Huether, Deputy Clerk

3. MOMENT OF REFLECTION

4. CONFIRMATION OF THE AGENDA

Resolution No. 2024-177:

Moved by Councillor Sepulis and
Seconded by Councillor Bailey

That Council approves the May 22, 2024 Agenda and Addendum as circulated; and

That Council approves the additions to the agenda as follows:

Consent Item 6.1.4 Questions received from Council seeking additional information and the corresponding responses provided by staff regarding the May 22, 2024 Council agenda.

CARRIED

5. DISCLOSURE OF PECUNIARY INTEREST & THE GENERAL NATURE THEREOF:

None

6. CONSENT AGENDA

6.1 Adoption and Receipt of the Minutes of the Previous Council and Committee Meetings:

6.1.1 May 1, 2024 Council Minutes

6.1.2 March 4, 2024 Heritage Advisory Committee Minutes

6.1.3 January 15, 2024 Joint Recreation and Youth Advisory Committee Minutes

6.1.4 May 22, 2024 Council Questions and Staff Responses

6.2 Grand River Conservation Authority April 26, 2024 General Meeting Summary

6.3 Grand River Conservation Authority's Watershed-based Resource Management Strategy

6.4 Association of Municipalities Ontario Policy Update - Team Ontario Federal Infrastructure Funding Agreement Negotiation and Bill 185 Comments to Standing Committee

6.5 Watson and Associates Letter to Municipal Clients regarding Assessment of Bill 185,



- Cutting Red Tape to Build More Homes Act, 2024 and the proposed PPS, 2024
- 6.6 Watson and Associates Letter to Ministry of Municipal Affairs and Housing regarding Assessment of Bill 185 Cutting Red Tape to Build More Homes Act 2024
- 6.7 Watson and Associates Letter to Provincial Planning Policy Branch regarding Bill 185 ERO 019-8369 - Municipal Act and Planning Act
- 6.8 Watson and Associates Letter to Municipal Clients regarding Assessment of Bill 134 - Affordable Homes and Good Jobs Act
- 6.9 Township of Alnwick Haldimand Motion regarding Inter-Municipal Task Force on Housing and Homelessness
- 6.10 Municipality of Trent Hills Resolution regarding Inter-Municipal Task Force on Housing and Homelessness
- 6.11 Township of Stirling-Rawson Resolution regarding Sustainable Infrastructure Funding for Small Rural Municipalities
- 6.12 Township of Brudnell, Lyndoch and Raglan Letter of Support regarding Support of Mental Health Services of Renfrew County Hoarding Program
- 6.13 City of St. Catherines Resolution regarding Provincial Regulations Needed to Restrict Keeping of Non-native (exotic) Wild Animals
- 6.14 The Multi-Municipal Energy Working Group letter regarding Wind Turbines
- 6.15 Western Ontario Wardens Caucus regarding ERO Posting 019-8369 Proposed Planning Act, City of Toronto Act and Municipal Act changes proposed through Bill 185
- 6.16 Western Ontario Wardens Caucus regarding ERO Posting 019-8371 Proposed Changes to the Development Charges Act
- 6.17 Western Ontario Wardens Caucus regarding ERO Posting 019-8462 2024 Proposed Provincial Planning Statement
- 6.18 Puslinch Profile Feature May 2024

Resolution No. 2024-178: Moved by Councillor Hurst and
Seconded by Councillor Goyda

That the Consent Agenda items with the exception of items 6.1.1 listed for MAY 22, 2024 Council meeting be received for information.

CARRIED

Resolution No. 2024-179: Moved by Councillor Sepulis and
Seconded by Councillor Bailey

That the Consent Agenda item 6.1.1 be received for information; and

That Council direct staff to confirm with TOARC when fees are paid and to which municipality (i.e. the pit where the aggregate is extracted versus the pit where it is being processed) and report back to Council accordingly; and

That the pit operator, Dufferin Aggregates, be requested to confirm whether imported aggregate is being processed at their Mill Creek Pit and if so, that Council direct staff to follow up with the property owner (University of Guelph) to request that the processing activities cease.

CARRIED

7. DELEGATIONS:

- 7.1 Specific Interest (Items Listed on the Meeting Agenda)
 - 7.1.1 **10:05 AM** Delegation by Manan Trivedi regarding Heritage Designation of 32 Brock Road North

Resolution No. 2024-180: Moved by Councillor Sepulis and
Seconded by Councillor Goyda

That Council receive the Delegation by Delegation by Manan Trivedi regarding Heritage Designation of 32 Brock Road North for information.

CARRIED



- 7.2 General Interest (Items Not Previously Listed on the Meeting Agenda)
7.2.1 **10:15 AM** Delegation by Royal City Science regarding proposed community based development in Puslinch

Resolution No. 2024-181: Moved by Councillor Hurst and
Seconded by Councillor Goyda

That Council receive the Delegation by Royal City Science regarding the proposed community based development in Puslinch for information.

CARRIED

Resolution No. 2024-182: Moved by Councillor Sepulis and
Seconded by Councillor Bailey

Whereas Township of Puslinch Council is supportive of the Royal City Science proposal for a local Science Centre in the Township of Puslinch;

That Council direct staff to send a letter to the University of Guelph President outlining the Township's support and the ideal location being the Mill Creek pit as a preferred after use; and

That Council request that a meeting take place between the University of Guelph President, Mayor Seeley, and the Township CAO to discuss next steps including a timeline for when the University will be in a position to make a decision on the after use of the Mill Creek pit; and further,

That Council direct staff to include discussions regarding grant funding and other funding opportunities for potential studies for this project in the upcoming Township budget cycle.

CARRIED

Council recessed from 11:40 pm to 11:45 pm

Roll Call

**Councillor Goyda
Councillor Sepulis
Councillor Bailey
Councillor Hurst
Mayor Seeley**

8. PUBLIC MEETINGS:

June 12, 2024 at 7:00 P.M. Public Information Meeting held in-person in Council Chambers, Municipal Office (7404 Wellington Rd 34) and by electronic participation through Zoom regarding proposed Zoning By-law Amendment D14/AZI (Usman Aziz) 6707 Gore Road, Puslinch

9. REPORTS:

9.1 Puslinch Fire and Rescue Services

9.1.1 None

9.2 Finance Department

9.2.1 Report FIN-2024-013 - 2023 Development Charges

Resolution No. 2024-183: Moved by Councillor Hurst and



Seconded by Councillor Sepulis

THAT Report FIN-2024-013 entitled 2023 Development Charges and Cash in Lieu of Parkland be received for information.

CARRIED

9.2.2 Report FIN-2024-014- 2024 Final Tax Levy and Rates

Resolution No. 2024-184:

Moved by Councillor Hurst and
Seconded by Councillor Sepulis

THAT Report FIN-2024-014 entitled 2024 Final Tax Levy and Rates be received; and

THAT the final property tax rates as identified in Schedule B and Schedule C to Report FIN-2024-014 be approved; and

THAT the final property tax due dates be established as Friday August 30, 2024 and Thursday October 31, 2024; and

THAT Council give 3 readings to By-law No. 2024-040 being a by-law for the levy and collection of property taxes for the 2024 taxation year.

CARRIED

9.3 Administration Department

9.3.1 Report ADM-2024-026 Proposed Shooting Range By-law Development Process

Resolution No. 2024-185:

Moved by Councillor Goyda and
Seconded by Councillor Sepulis

That Report ADM-2024-026 entitled Proposed Shooting Range By-law Development Process be received; and

That Council endorse the proposed timeline, scope of work, and costing for the project as outlined throughout the report.

CARRIED

9.3.2 Amended Report ADM-2024-027 2nd Draft Heritage Permit By-law

Resolution No. 2024-186:

Moved by Councillor Goyda and
Seconded by Councillor Bailey

That Council defer the consideration of this report to the June 12, 2024 meeting.

CARRIED

9.3.2 Report ADM-2024-028 Heritage Designation By-laws for 2023 Designation Objections

Resolution No. 2024-187:

Moved by Councillor Sepulis and
Seconded by Councillor Goyda

That Council defer its decision to designate the properties 43 McClintock Dr; 4492 Watson Rd S; and 32 Brock Rd N byway of withdrawing its notice of intention to designate; and



That Council direct staff to report back on the designation process and conduct further engagement with the affected property owners to provide greater awareness of the financial incentive programs and the heritage permit process.

CARRIED

9.3.3 2:00 P.M. Report ADM-2024-029 2023 Source Protection Annual Report Pursuant to the Clean Water Act

Resolution No. 2024-188:

Moved by Councillor Hurst and
Seconded by Councillor Sepulis

That Report ADM-2024-029 regarding 2023 Source Protection Annual Reports Pursuant to the Clean Water Act be received for information.

CARRIED

9.3.4 Report ADM-2024 -030 Reporting Out Update (May 22, 2024)

Resolution No. 2024-189:

Moved by Councillor Bailey and
Seconded by Councillor Goyda

That Report ADM-2024-030 entitled Reporting Out from Council Direction Update be received for information; and

That Council direct staff to submit the following delegations requests for the AMO conference:

MECP:

- 1. Well Interference**
- 2. Liquid Soil**

Ministry of Transportation:

- 1. Highway 6 By-pass project**

Ministry of Natural Resources and Forestry:

- 1. Limiting number of new and expanding aggregate pits in Puslinch**
- 2. Non-permitted uses within ARA licensed areas**

Ministry of Finance

- 1. MPAC assessments**
- 2. OMERS manual changes**

CARRIED

9.4 Planning and Building Department

9.4.1 None

9.5 Emergency Management

9.5.1 None

9.6 Roads and Parks Department

9.6.1 Report PW-2024-004 Consideration for hard surfacing gravel roads



Resolution No. 2024-190:

Moved by Councillor Sepulis and
Seconded by Councillor Goyda

That Report PW-2024-004 be deferred to the June 12, 2024 meeting.

CARRIED

9.7 Recreation Department

9.7.1 None

10. CORRESPONDENCE:

10.1 County of Wellington Planning Committee Recommendation regarding Bill 185 - Cutting Red Tape to Build More Homes Act and the proposed Provincial Planning Statement 2024

Resolution No. 2024-191:

Moved by Councillor Hurst and
Seconded by Councillor Bailey

That Council receive correspondence item 10.1 regarding the County of Wellington Planning Committee Recommendation regarding Bill 185 - Cutting Red Tape to Build More Homes Act and the proposed Provincial Planning Statement 2024 for information.

CARRIED

10.2 11:45 A.M. County of Wellington Council approved recommendation regarding the Police Services Board 2023 Year-End Report

Resolution No. 2024-192:

Moved by Councillor Bailey and
Seconded by Councillor Hurst

That Council receive correspondence item 10.2 regarding the Police Services Board 2023 Year-End Report for information.

CARRIED

10.3 County of Wellington Notice of Public Open House and Public Meeting regarding proposed Official Plan Amendment No. 123

Resolution No. 2024-193:

Moved by Councillor Sepulis and
Seconded by Councillor Goyda

That Council receive correspondence item 10.3 regarding the County of Wellington Notice of Public Open House and Public Meeting regarding proposed Official Plan Amendment No. 123 for information.

CARRIED

10.4 William Knetsch Letter Regarding Morriston Bypass Streetscape Strategy

Resolution No. 2024-194:

Moved by Councillor Hurst and
Seconded by Councillor Sepulis

That Council receive correspondence item 10.4 regarding William Knetsch's Letter Regarding Morriston Bypass Streetscape Strategy for information.

CARRIED

10.5 11:00 A.M. Gravel Extraction Study Scope of Work



Resolution No. 2024-195:

Moved by Councillor Hurst and
Seconded by Councillor Goyda

That Council receive correspondence item 10.5 regarding the Gravel Extraction Study Scope of Work for information; and

That Council endorse the scope of work and direct staff to proceed with this study as outlined.

CARRIED

Council recessed from 1:10 pm to 1:30 pm

Roll Call

**Councillor Goyda
Councillor Sepulis
Councillor Bailey
Councillor Hurst
Mayor Seeley**

10.6 **2:15 P.M.** Township proposed comments to the County of Wellington request for feedback regarding the Housing Focused: A Housing Policy Review in Wellington County

Resolution No. 2024-196:

Moved by Councillor Sepulis and
Seconded by Councillor Hurst

That Council receive correspondence item 10.6 regarding the Township proposed comments to the County of Wellington request for feedback regarding the Housing Focused: A Housing Policy Review in Wellington County for information; and

That Council endorse the the comments, as amended, and direct staff to submit the comments to the County for consideration.

CARRIED

10.7 Ministry of Environment, Conservation and Parks notice regarding Application for Approval of Waste Disposal Site for hydrovac soil processing facility located at 6678 Wellington Rd 34

Resolution No. 2024-197:

Moved by Councillor Bailey and
Seconded by Councillor Hurst

That Council receive correspondence item 10.7 regarding the Ministry of Environment, Conservation and Parks notice regarding Application for Approval of Waste Disposal Site for hydrovac soil processing facility located at 6678 Wellington Rd 34 for information; and

That Council direct staff to prepare comments for Council's consideration at the June 12 Council meeting.

CARRIED

11. COUNCIL REPORTS:

11.1 Mayor' Updates

11.1.1 None

11.2 Council Member Reports

11.2.1 Councillor Bailey gave an update on the Wellington Guelph Drug Strategy Forum.

11.2.2 Councillor Bailey mentioned the upcoming "Coffee with a Cop" event on June 13 at the Flow State Bike Co. in Arkell.

11.2.3 Councillor Bailey remarked that the Bike Rodeo was a success.

11.2.4 Councillor Bailey provided an update that the members of the Youth Committee are attending a youth leadership conference at Canada's Wonder Land.

11.2.5 Councillor Bailey provided an update that the fraud talks presented by Crime Stoppers is happening at Mini Lakes on Thursday May 23 at 6:30 pm and Crime Stoppers is hosting a human trafficking information session on May 30 at the Puslinch Community Centre.

11.2.6 Councillor Bailey remarked that the Fall Fair Board is hosting a chicken dinner on June 13.

Resolution No. 2024-198:

Moved by Councillor Bailey and
Seconded by Councillor Goyda

That Council receive the Council member updates for information; and

That Council direct staff to invite Jane Hopkins to provide Council with a presentation at an upcoming meeting regarding the Wellington Guelph Drug Strategy Forum.

CARRIED

12. BY-LAWS:

12.1.1 BL2024-037 Designation By-Law for property municipally known as 43 McClintock Dr – deferred

12.1.2 BL2024-038 Designation By-Law for property municipally known as 4492 Watson Rd S – deferred

12.1.3 BL2024-039 Designation By-law for property the municipally known as 32 Brock Rd N – deferred

12.1.4 BL2024-040 - 2024 Final Tax Levy and Rates

12.1.5 BL2024-006- Franchise Agreement with Enbridge Gas Inc. Third Reading

Resolution No. 2024-199:

Moved by Councillor Hurst and
Seconded by Councillor Sepulis

That the following By-law be taken as read three times and finally passed in open Council:

BL2024-040 Being a by-law to provide for the levy and collection of property taxes for the 2024 taxation year.

CARRIED

Resolution No. 2024-200:

Moved by Councillor Hurst and
Seconded by Councillor Bailey

That the following By-laws be taken as read for a third reading and finally passed in open Council:

BL2024-006 Being a by-law to authorize a franchise agreement between the Corporation of the Township of Puslinch and Enbridge Gas Inc.

CARRIED

13. ANNOUNCEMENTS:

13.1 None

14. CLOSED SESSION:

Council was in closed session from 1:35 p.m. to 2:41 p.m.

The Clerk stopped the recording and removed all public attendees from the webinar. The webinar was then 'locked' so no new participants are able to join.

Resolution No. 2024-201:

Moved by Councillor Hurst and
Seconded by Councillor Goyda



That Council shall go into closed session under Section 239 of the Municipal Act for the purpose of:

14.3 Confidential report prepared by staff regarding advice that is subject to solicitor-client privilege, including communications necessary for that purpose – Human Resource Matter;

**14.1 Adoption and receipt of the previous closed minutes
14.1.1 May 1, 2024 Closed Meeting Minutes**

CARRIED

Resolution No. 2024-202: Moved by Councillor Bailey and
Seconded by Councillor Hurst

THAT Council moves into open session at 2:41 pm

CARRIED

Council resumed into open session at 2:41 p.m.

Resolution No. 2024-203: Moved by Councillor Bailey and
Seconded by Councillor Sepulis

That Council receives the:

14.3 Confidential report prepared by staff regarding advice that is subject to solicitor-client privilege, including communications necessary for that purpose – Human Resource Matter;

**14.1 Adoption and receipt of the previous closed minutes
14.1.1 May 1, 2024 Closed Meeting Minutes; and**

That staff proceed as directed.

CARRIED

15. BUSINESS ARISING FROM CLOSED SESSION:

None

16. NOTICE OF MOTION:

None

17. NEW BUSINESS:

None

18. CONFIRMATORY BY-LAW:

(a) By-Law to confirm the proceedings of Council for the Corporation of the Township of Puslinch

Resolution No. 2024-204: Moved by Councillor Hurst and
Seconded by Councillor Goyda

That the following By-law be taken as read three times and finally passed in open Council:

By-Law 2024-041 being a by-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch at its meeting held on the 22 day of May 2024.

CARRIED

19. ADJOURNMENT:



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
MAY 22, 2024 COUNCIL MEETING
VIRTUAL MEETING BY ELECTRONIC PARTICIPATION
& IN-PERSON AT 7404 WELLINGTON RD 34, PUSLINCH

Resolution No. 2024-205:

Moved by Councillor Hurst and
Seconded by Councillor Goyda

That Council hereby adjourns at 3:33 p.m.

CARRIED

James Seeley, Mayor

Courtenay Hoytfox, Clerk



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
APRIL 9, 2024 PLANNING AND DEVELOPMENT
ADVISORY COMMITTEE MEETING
IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

MINUTES

DATE: April 9, 2024
MEETING: Following Committee of Adjustment

The April 9, 2024 Planning and Development Advisory Committee Meeting was held on the above date and called to order at 7:00 p.m. via electronic participation and in-person at 7404 Wellington Road 34, Puslinch.

1. CALL THE MEETING TO ORDER

2. ROLL CALL

ATTENDANCE:

PRESENT:

Councillor John Sepulis, Chair
Jeffrey Born
Amanda Knight
Chris Pickard

ABSENT:

Paul Sadhra

STAFF IN ATTENDANCE:

Justine Brotherston, Interim Clerk
Laura Emery, Communications & Committee Coordinator
Mehul Safiwala, Junior Planner
Asavari Jadhav, Planner, County of Wellington

3. MOMENT OF REFLECTION

4. CONFIRMATION OF THE AGENDA

Resolution No. 2024-019:

Moved by Committee Member Jeffrey Born and
Seconded by Committee Member Chris Pickard



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
APRIL 9, 2024 PLANNING AND DEVELOPMENT
ADVISORY COMMITTEE MEETING
IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

That the Committee approves the April 9, 2024 Agenda and receives the reports as circulated.

CARRIED

5. DISCLOSURE OF CONFLICT OF INTEREST:

None

6. DELEGATIONS

None

7. CONSENT AGENDA

7.1 Approval of the Minutes

7.1.1 March 12, 2024

Resolution No. 2024-020:

Moved by Committee Member Amanda Knight and
Seconded by Committee Member Chris Pickard

That the Planning and Development Advisory Committee approves the Minutes from the meeting held March 12, 2024.

CARRIED

7.2 Other Consent Items

None

8. NOTICE OF PUBLIC MEETINGS/HEARINGS

None

9. REPORTS

9.1. LAND DIVISION (CONSENTS)

9.1.1 Severance Application B12-24 (D10-ONT) – 2222703 Ontario Limited – Part Lot 1, Concession 1, municipally known as 7 Holly Trail, RR#2, City of Cambridge. #

Proposed easement over Part 1 to mutually benefit owners of 41, 43, 45, 47, 49 & 55 Holly Trail. Exclusive use of Parts 2-7 for individual waterfront access.



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
APRIL 9, 2024 PLANNING AND DEVELOPMENT
ADVISORY COMMITTEE MEETING
IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

Resolution No. 2024-021:

Moved by Committee Amanda Knight and
Seconded by Committee Member Chris Pickard

That the Committee supports Severance Application B12-24 subject to the following condition(s):

1. That the Owner satisfy all the requirements of the Township of Puslinch, financial and otherwise (including taxes paid in full and Consent Review/Condition Clearance fee) which the Township may deem to be necessary at the time of issuance of the Certificate of Consent for the property and orderly development of the subject lands. Any fees incurred by the Township for the review of this application will be the responsibility of the applicant; and further that the Township of Puslinch file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.
2. That any concerns of the Conservation Authority are adequately addressed to the satisfaction of the Township; and further that the Township of Puslinch file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.

CARRIED

9.2 ZONING BY-LAW AMENDMENT APPLICATIONS

None

10. CORRESPONDENCE

None

11. NEW BUSINESS

None

12. ADJOURNMENT

Resolution No. 2024-022

Moved by Committee Member Jeffrey Born and
Seconded by Committee Member Amanda Knight

That the Planning and Development Advisory Committee hereby adjourns at 7:09 p.m.

CARRIED.



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
MARCH 12, 2024 COMMITTEE OF ADJUSTMENT MEETING
VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN PERSON
AT 7404 WELLINGTON RD 34, PUSLINCH

MINUTES

DATE: March 12, 2024

MEETING: 7:00 p.m.

The March 12, 2024 Committee of Adjustment Meeting was held on the above date and called to order at 7:00 p.m. via electronic participation and in-person at 7404 Wellington Road 34, Puslinch.

1. CALL THE MEETING TO ORDER

2. ROLL CALL

ATTENDANCE:

PRESENT:

Councillor John Sepulis, Chair
Chris Pickard
Paul Sadhra
Amanda Knight

ABSENT:

Jeffrey Born

STAFF IN ATTENDANCE:

Lynne Banks, Secretary/Treasurer
Sarah Huether, Interim Deputy Clerk
Mehul Safiwala, Junior Planner
Zachary Prince, Senior Planner, County of Wellington

3. MOMENT OF REFLECTION

4. CONFIRMATION OF THE AGENDA

Resolution No. 2024-007:

Moved by Committee Member Chris Pickard and
Seconded by Committee Member Paul Sadhra



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
MARCH 12, 2024 COMMITTEE OF ADJUSTMENT MEETING
VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN PERSON
AT 7404 WELLINGTON RD 34, PUSLINCH

That the Committee approves the March 12, 2024 Agenda as amended and as circulated.

CARRIED.

5. DISCLOSURE OF CONFLICT OF INTEREST:

None

6. APPROVAL OF MINUTES

6.1 Approval of the Minutes

6.1.1 February 13, 2024

Resolution No. 2024-008:

Moved by Committee Member Paul Sadhra and
Seconded by Committee Member Amanda Knight

That the Committee of Adjustment approves the Minutes, as amended, from the meeting held February 13, 2024.

CARRIED.

7. APPLICATIONS FOR MINOR VARIANCE OR PERMISSION under section 45 of the Planning Act to be heard by the Committee this date:

7.1 Minor Variance Application D13-GRI – Clive and Sheri Griffiths – 4135 Sideroad 25 South, Township of Puslinch.

Requesting relief of New Comprehensive Zoning By-law # 23-2018, as amended, from Section 4.4.2, Table 4.1 to permit lot coverage of accessory building and structures to be 274 m² on a lot area of less than 1 hectare instead of 200 m² as required in Table 4.1 of the Zoning By-law.

- David Carrothers, agent for the applicant, provided an overview of the application.
- There were no questions or comments from the public.
- Amanda Knight asked if there is an ARU in the basement.
- David Carrothers advised that there is no ARU in the basement and that the basement is unfinished.



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH
MARCH 12, 2024 COMMITTEE OF ADJUSTMENT MEETING
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AT 7404 WELLINGTON RD 34, PUSLINCH

- Amanda Knight asked if the fire department is required to be notified that there are two buildings on the property.
- David Carrothers advised that it will be reviewed as part of the building permit process.
- There were no further questions or comments from the Committee.

Resolution No. 2024-009:

Moved by Committee Member Chris Pickard and
Seconded by Committee Member Paul Sadhra

**That the Minor Variance Decision as made by the Committee be approved with no conditions.
CARRIED.**

8. NEW BUSINESS

8.1 Committee of Adjustment 001-2024 – 2022-2026 Committee of Adjustment Goals and Objectives - Updated

Resolution No. 2024-010:

Moved by Committee Member Amanda Knight and
Seconded by Committee Member Chris Pickard

That Report 001-2024 be approved and the Sub-Committees will consist of Chris Pickard and Amanda Knight as the first Sub-committee and Paul Sadhra and Jeff Born will continue as the second Sub-Committee.

That staff be directed to provide training on the following topics: to be determined.

CARRIED.

9. ADJOURNMENT

Resolution No. 2024-0011:

Moved by Committee Member Chris Pickard and
Seconded by Committee Member Paul Sadhra

That the Committee of Adjustment hereby adjourns at 7:19 p.m.

CARRIED.

From: [AMO Policy](#)
To: [Admin](#)
Subject: AMO Policy Update: National Housing Strategy Funding, Ontario Health Teams, Enhancing Digital Security and Trust, Next Building Code Edition, Affordable Housing Bulletin, Housing and Planning Submissions
Date: Friday, May 17, 2024 4:40:18 PM



AMO Policy Update: National Housing Strategy Funding, Ontario Health Teams, Enhancing Digital Security and Trust, Next Building Code Edition, Affordable Housing Bulletin, Housing and Planning Submissions

National Housing Strategy

Last week, Minister Fraser wrote to municipal Social Services Commissioners and DSSAB CEOs confirming the federal government’s intention to flow National Housing Strategy funding directly to Service System Managers. AMO, OMSSA,

and NOSDA sent joint letters to [Minister Fraser](#) and to the [Premier and Minister Calandra](#), respectively, highlighting the need for collaborative tri-lateral federal-provincial-municipal discussions to stabilize National Housing Strategy funding and implementation.

AMO will continue to work with OMSSA and NOSDA to engage federal and provincial officials to ensure that the individuals and families relying on these programs are not adversely impacted.

Proposed New Regulations for Ontario Health Teams

Last month, AMO submitted [comments](#) on proposed new Ontario Health Teams (OHTs) regulations. The proposed regulations include creating a not-for-profit coordinating corporation and a primary care network as well as demonstrating home care readiness.

AMO continues to push for municipalities to have a say in health systems planning. We've asked for stronger OHT governance and for municipalities to have a seat at the table for the new non-profits. The submission also highlights the importance of ongoing funding from the province for municipalities as OHTs develop.

AMO will continue to work with the Ministry of Health and Ontario Health on the appropriate role and relationship for municipalities and OHTs.

Enhancing Digital Security and Trust

The province has recently proposed legislation to better protect children's privacy and data in provincial settings. Bill 194 also includes enabling provisions allowing the province to create regulations requiring public sector entities, including municipalities, to develop and implement cyber security programs and technical standards respecting cyber security.

AMO will look forward to working collaboratively with the province to develop effective solutions for the municipal sector on this important issue.

Next Edition of the Building Code Released

The Ministry of Municipal Affairs and Housing released the 2024 Building Code which will come into effect on January 1, 2025. The new code moves towards harmonization with the National Construction Codes with some exceptions, notably that the code does not harmonize with national energy efficiency standards and retains provincial flexibility on minimum sizes for secondary suites. The new [Building Code regulation](#) is only one page long, referencing the national building code and the [2024 Ontario Amendment](#) document for the differences in the province.

AMO will continue to advocate for the inclusion of green building standards in the Ontario Building Code.

Province Releases Affordable Housing Bulletin

The government's Affordable Residential Units bulletin clarifies how municipalities exempt affordable housing from development charges, as Bill 23 mandated. This takes effect June 1, 2024.

AMO looks forward to working with the province on key implementation issues, including:

Preventing “micro-condos” by adding minimum size requirements to the bulletin

Creating compliance tools to ensure new housing is rented and sold at an affordable price

Improving data accuracy for local home sale and rental costs, and

Providing a municipal-owner standard agreement ensuring affordability for 25 years.

AMO's Submission to Bill 185 Consultations

AMO [provided a submission](#) to the Ministries of Municipal Affairs and Housing and Energy on Bill 185 and related Environmental and Regulatory Registry postings.

A summary of the top comments is below, and you can read more about AMO's ongoing advocacy on land use planning and housing on [our compendium page](#).

Development Charges (Regulatory Registry 24-MMAH006)

Bill 185 takes significant steps towards restoring municipalities' ability to fund growth-related infrastructure by repealing the mandatory five-year phase-in of new DC rates and restoring studies as eligible DC expenses. To enable municipalities to keep pace with growth infrastructure needs, AMO continues to call on the province to reinstate the cost of land and housing services as eligible DC expenses.

Minister's Zoning Orders (Regulatory Registry 24-MMAH010)

The government's new framework requiring those requesting an MZO to provide timelines for downstream approvals, project completion, and demonstrate how infrastructure servicing will be addressed – a good start, but legislation is needed to ensure MZOs are only used with municipal collaboration and in situations of extraordinary urgency.

“Use it or Lose it” (Regulatory Registry 24-MMAH010)

AMO supports a new discretionary authority allowing municipalities to reallocate

servicing capacity from developments that have not pulled building permits within a reasonable amount of time to make better use of infrastructure capacity and incent developers to move forward with housing.

Proposed Planning Act, City of Toronto Act, and Municipal Act Changes from the proposed Bill 185 (ERO 019-8369, Regulatory Registry 24-MMAH010)

Bill 185 introduces a number of changes intended to improve the land-use planning process. Some examples include:

Removing application fee refund provisions to reflect that all development partners impact the amount of time it takes to finalize planning approvals

Limiting third-party appeals to Official Plan and Zoning By-law decisions which will maximize local planning decisions made by municipal planners

Establishing enabling legislation to facilitate the implementation of standardized housing designs – this will be critical to meeting the proposed Canada Housing Infrastructure Fund which requires provinces allow “as of right” construction from the future federal housing design catalogue

Proceeding with downloading regional planning responsibilities to lower-tier governments – AMO has expressed concern that this will misalign land-use and infrastructure planning

Exempting public universities from the Planning Act and expediting approvals for “community service facilities” including schools and long-term care homes.

Proposed policies for a new provincial planning policy instrument (ERO 019-8462)

Alongside Bill 185, the province has released a new draft version of an updated Provincial Planning Statement (PPS). The draft walks back previous proposed policies that would have permitted lot creation in prime agricultural areas through additional severances, however ambiguity remains on when severances and settlement boundary expansions may be permitted under the new framework.

The draft PPS also includes measures to encourage intensification around transit corridors, setting local targets for affordable housing based on a reinstated definition for affordable, and encouraging a mix of housing options in designated growth areas.

AMO remains concerned about the impact of downloading environmental risks to municipalities. With the diminished role of Conservation Authorities, it will be critical to ensure appropriate resources are in place to support municipalities in managing environmental protections. The draft PPS also remains vague on Indigenous consultation and consent – amendments and detailed guidance will be required to support a shared understanding of obligations and best practices to

underpin strong Indigenous-municipal relationships.

Changes Related to Newspaper Notice Requirements (ERO 019-8370)

Bill 185 responds to municipal concerns about statutory requirements for certain land-use planning notices and DC by-laws by allowing municipalities to public notice on municipal websites where no local newspaper is available. AMO will continue to encourage other ministries to coordinate changes to other public notice provisions to ensure residents maintain access to important information.

Changes to modernize leave-to-construct approvals for pipeline relocation or reconstruction projects (ERO 019-8527)

Bill 185 proposes changes that would exempt hydrocarbon pipeline relocation and reconstruction projects from seeking leave-to-consult in more circumstances, particularly where they are minor in nature and facilitate transit and housing initiatives. The changes would retain Duty to Consult requirements with Indigenous communities.

*Disclaimer: The Association of Municipalities of Ontario (AMO) is unable to provide any warranty regarding the accuracy or completeness of third-party submissions. Distribution of these items does not imply an endorsement of the views, information or services mentioned.

Association of Municipalities of Ontario

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155 University Ave Suite 800 | Toronto, ON M5H 3B7 CA

From: [AMO Policy](#)
To: [Admin](#)
Subject: AMO Policy Update - National Housing Strategy
Date: Tuesday, May 28, 2024 10:56:31 AM



AMO Policy Update - National Housing Strategy

This morning, Ministers Fraser and Calandra announced that National Housing Strategy funding will continue to flow to Ontario as [per the original agreement](#), ensuring that municipal and DSSAB investments in community housing are able to proceed as planned.

While AMO welcomes this news, recent events have highlighted the critical importance of collaborative relationships between federal, provincial and municipal governments to make progress on housing for low-income families and individuals. AMO continues to call for stronger relationships between all three orders of government to fundamentally re-think the way that community housing is funded in Ontario.

“AMO commends the federal and provincial governments for finding a way forward on National Housing Strategy implementation. The uncertainty that recent events generated for low income individuals and families, as well as municipalities making long-term investments, is destabilizing for those with limited options. There is still much to be done to get deeply affordable housing on track in Ontario that requires partnership across all three orders of government.”

-- Colin Best, AMO President, Halton Regional Councilor

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Grand River Conservation Authority

Summary of the General Membership Meeting – May 24, 2024

To GRCA/GRCF Boards and Grand River watershed municipalities - Please share as appropriate.

Action Items

The Board approved the resolutions in the following reports as presented in the agenda:

- GM-05-24-49 - Financial Summary
- GM-05-24-47 - Conformity and Housekeeping Update - GRCA's Policies for the Administration of Ontario Regulation 41/24
- GM-05-24-44 - Elora Low Level Bridge Construction
- GM-05-24-46 - Conestogo Dam Concrete Repair Tender Award

Information Items

The Board received the following reports as information:

- GM-05-24-48 - Report of the Audit Committee
- Minutes of the Ad-hoc CA Act Regulations Committee - May 2, 2024, and GM-05-24-43 - ERO Posting 019-8462 - Review of Proposed Policies for a new Provincial Planning Policy Instrument
- GM-05-24-50 - Current Watershed Conditions
- GM-05-24-C05 - Cyber Security (Closed agenda)

Correspondence

The Board received the following correspondence:

- Michael Melvin - MZO Application by the City of Waterloo

Delegations

There were no registered delegations.

Source Protection Authority

The General Membership of the GRCA also acts as the Source Protection Authority Board.

Correspondence & Action Items

The SPA Board approved the resolutions in the following reports as presented in the agenda:

- Ministry of the Environment, Conservation and Parks - Long Point Source Protection Area Extension Request
- SPA-05-24-02 - Source Protection Committee Member Appointments

For full information, please refer to the [May 24 Agenda Package](#). Complete agenda packages for the General Membership and Source Water Protection Authority, and minutes of past meetings can be viewed on our [online calendar](#). The minutes of this meeting will be posted on our online calendar following approval at the next meeting of the General Membership.

You are receiving this email as a GRCA board member, GRCF board member, or a Grand River watershed member municipality. If you do not wish to receive this monthly summary, please respond to this email with the word 'unsubscribe'.

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Stormwater Management Master Plans in the Agricultural Areas for Wellington County - May 2024

BACKGROUND

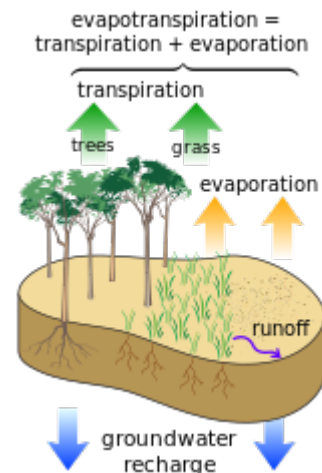
Agricultural land drainage is a tool in an integrated system of plant and animal production practices known as “sustainable agriculture”.

Sustainable agricultural practices over the long-term support:

- ✓ human food and fiber production,
- ✓ enhance environmental quality and the natural resources base upon which the agricultural economy depends,
- ✓ sustains the economic viability of farm operations,
- ✓ enhances the quality of life for farmers and society as a whole.

The aim (objective, target) of **agricultural land drainage** is the optimized agricultural production related to:

- ✓ reclamation of agricultural land
- ✓ conservation of agricultural land
- ✓ optimization of crop yield
- ✓ crop diversification
- ✓ cropping intensification
- ✓ optimization of farm operations



Tile drainage is a form of agricultural drainage system that removes excess sub-surface water from fields to allow sufficient air space within the soil, proper cultivation, and access by heavy machinery to tend and harvest crops. While surface water can be drained by pumping, open ditches, or both, tile drainage is often the most effective means of draining subsurface water. The air space created in soil increases resiliency and climate adaptation of water holding capacity and in turn flood risk mitigation.

Municipal drains have been a fixture of rural Ontario's infrastructure since the 1800's. Most municipal drains were constructed to improve the drainage of agricultural land by serving as the discharge point for private agricultural tile drainage systems. However, they also remove excess water collected by roadside ditches, residential lots, churches, schools, industrial lands, commercial lands and any other properties in rural areas. They are a vital component of the local infrastructure.

Without municipal drains many areas of the province would be subjected to regular flooding, reduced production from agricultural land and increased public health risks.

Environmental and ecological goods and services (EEG&S) are the benefits that humans derive, directly or indirectly, from the healthy functioning of environmental and ecological systems.

In the production of food and fibre, farmers manage land and resources to grow products sustainably. To do so, farmers depend on **ecological goods** including healthy soil and clean water. The environment allows marketable agricultural products to be grown. At the same time, farmers have an opportunity to manage **ecological services** like water cycling (purification, retention, aquifer recharge, flood mitigation), air quality (oxygen production, carbon sequestration, climate regulation), nutrient cycling, pollination services, provision of wildlife habitat and biodiversity, soil erosion control, and aesthetic and recreational spaces and scenic views. Farmers manage these as a public good while practicing sound farm stewardship – these efforts are rarely captured in the price farmers receive for their products.

RECOMMENDATION

- 1) Stormwater run-off analysis needs to include the potential impact on agricultural lands and activities. The consideration of discharges into municipal drains that run through and under farmland, of which the landowner has financial and environmental liability is critical.
- 2) Municipalities to recognize the Tile Drainage and Municipal Drainage Act as agricultural farmlands Stormwater Management Plans.
- 3) As the municipality develops a financial plan for the Stormwater upgrades, the Environmental and ecological goods, and services (EEG&S) of agricultural land must be considered as such that any tax levy or user fee imposed for cost recovery exempt Farmland (FT) and managed forests (TT).

Thank you for your time and consideration on this matter.

WFA Board of Directors

Justine Brotherston

From: Julie Alexander <Julie.Alexander@enbridge.com>
Sent: Friday, May 24, 2024 2:57 PM
To: Courtenay Hoytfox; Justine Brotherston
Subject: Update from Enbridge Gas
Attachments: Update Letter from Enbridge.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Mayor Seeley,

Following up on our previous outreach, today I'm reaching out to provide an update on Enbridge's Rate Rebasing application (Phase 1 and Phase 2) and on the Government of Ontario's [Keeping Energy Costs Down Act](#).

Attached please find a letter from our Vice President and Chief Customer Officer Heidi Bredenholler-Prasad with additional details. You can also find information and resources on our website at [Natural Gas Matters | Enbridge Gas](#).

Please feel free to contact me with any questions you may have.

Kind regards,
Julie

Canada's Anti-Spam Legislation (CASL) requires Enbridge Gas Inc., to provide you with an option to unsubscribe from receiving commercial electronic messages (CEM) including certain emails promoting our services. If you wish to opt-out from receiving further commercial electronic messages, please [Click here to unsubscribe](#).

May 2024

Your Worship and Members of Council,

I am writing to provide an update on the ongoing activity regarding Enbridge Gas' rate rebasing application and the Government's introduction of the Keeping Energy Costs Down Act.

Enbridge Gas raised numerous concerns with the Ontario Energy Board's (OEB) decision on Phase 1 of our rate rebasing application. We took action by appealing the decision in Divisional Court and filing a Motion to Review evidence with the OEB. Many municipalities and stakeholders across Ontario passed motions to support access to natural gas and continue to bring the issues that matter to your municipalities forward – your voices matter tremendously in this important conversation.

We commend the Government of Ontario for its definitive action in support of affordable energy and consumer choice with the introduction of Bill 165, the [Keeping Energy Costs Down Act](#). The legislation reinforces the critical role of natural gas in keeping energy costs down for Ontarians and the importance of natural gas and its associated infrastructure in achieving Ontario's energy transition in a measured and practical way. The Standing Committee on the Interior considered Bill 165 in April 2024, where interested parties, including many municipal voices, delivered presentations and provided submissions. Bill 165 received royal assent on May 16, 2024.

This legislation is an important step to addressing energy affordability, resiliency, and reliability. However, there continues to be critical barriers that must be addressed to ensure the remainder of the OEB's decision does not have significant negative impacts on Ontario's growth plans. The reduction in capital continues to put at risk thousands of planned connections in 2024 and will significantly constrain our ability to invest in energy projects that contribute to addressing Ontario's economic development, competitiveness, and emissions reductions. It is imperative that strategic investments in the energy infrastructure are backed by a supportive regulatory environment that ensures the availability of capital to meet Ontario's growing demand for affordable, reliable, and resilient energy. To that end, the Government must send a clear signal in its Natural Gas Policy Statement that for capital investments in energy infrastructure, which are required to meet Government policy goals, the OEB shall ensure cost-recovery mechanisms that provide regulatory certainty for recovery of these capital investments.

In addition, on April 26, Enbridge Gas filed evidence for Phase 2 of our rate rebasing application. Our Phase 2 application was structured to provide our customers with what they have identified is most important to them: the continued safe and dependable delivery of natural gas at a reasonable cost while simultaneously taking measured steps to advance an orderly transition to a sustainable energy future for Ontario. This is an open and public process. Interested groups or individuals can find out more information on the [OEB's website](#) under case number EB-2024-0111.

We have shared information on the role of natural gas in Ontario and facts to correct the record on numerous claims being circulated by activists that are simply untrue. We encourage municipalities and stakeholders to become familiar with the facts before voting or making decisions. You can find information and resources on our website at [Natural Gas Matters | Enbridge Gas](#) and reach out with questions at any time.

As local leaders across the province, your voice on the future of Ontario's energy system matters. Access to affordable energy supports economic development, housing growth and energy reliability. We encourage you to continue to highlight the need for natural gas and its infrastructure for Ontario today and into the future.

As always, we welcome the opportunity to discuss any of these items with you. Please reach out to your municipal advisor or find us at municipalaffairs@enbridge.com.

With thanks,



Heidi Bredenholler-Prasad
Vice President and Chief Customer Officer
Enbridge Gas Inc.

Justine Brotherston

Sent: Monday, May 27, 2024 9:29 AM
Subject: RE: Affordable Housing Bulletin

From: Waldick, Reed (MMAH) <Reed.Waldick@ontario.ca>
Sent: Monday, May 13, 2024 9:06 AM
Subject: Affordable Housing Bulletin

Good morning,

I would like to share an update related to municipal development-related charge (MDRC) exemptions and discounts for affordable residential units.

On April 10, 2024, the government introduced Ontario's Spring 2024 Red Tape Reduction Package, including the proposed Bill 185, the *Cutting Red Tape to Build More Homes Act, 2024*, as part of the province's ongoing commitment to build at least 1.5 million homes by 2031. As part of this package, the province announced it will bring into force on **June 1, 2024**, through a proclamation, the relevant provisions from the *More Homes Built Faster Act, 2022* to provide exemptions and discounts from MDRCs for affordable residential units. This will incentivize builders to create housing at a lower cost across the province.

To support implementation, a Minister's bulletin entitled, "Affordable Residential Units for the Purposes of the Development Charges Act, 1997 Bulletin" has been posted on the following webpage (<https://www.ontario.ca/page/municipal-development-and-community-benefits-charges-and-parklands#section-4>), ahead of the June 1, 2024 effective date. This bulletin sets out the market-based and income-based thresholds for affordable ownership and rental residential units by local municipality.

If you have technical questions, please feel free to contact the Municipal Finance Policy Branch at MFPB@ontario.ca.

Thanks in advance,

Reed Waldick (he/him/il)

Bilingual Municipal Advisor | Municipal Services Office - West
Conseiller en gestion municipale bilingue | Bureau des services aux municipalités - Ouest
Ministry of Municipal Affairs and Housing | Ontario Public Service
Ministère des affaires municipales et du logement | Fonction publique de l'Ontario
226-448-9847 | reed.waldick@ontario.ca



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**Ministry of
Citizenship and
Multiculturalism**

Office of the Minister

56 Wellesley St. W.
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Tel: 416-212-0036

**Ministère des
Affaires civiques et
du Multiculturalisme**

Bureau du ministre

56 rue Wellesley Ouest
14^e étage
Toronto (Ontario) M5S 2S3
Tél. : 416-212-0036



May 27, 2024

Dear Colleagues:

Thank you for writing and providing your suggestions regarding the changes made to the Ontario Heritage Act (OHA) as part of Bill 23, More Homes Built Faster Act, 2022. Our government remains committed to ensuring that heritage properties important to communities across Ontario are protected and conserved, while also supporting Ontario's future growth and our government's efforts to build 1.5 million homes.

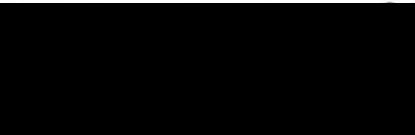
On May 27, 2024, through Bill 200, Homeowner Protection Act, 2024, the Government of Ontario proposed amendments to the OHA that, if passed, would extend the review period for legacy listed properties by an additional two years. This means that municipalities would now have until January 1, 2027, to issue a notice of intention to designate for these properties or otherwise have them removed from the register.

The newly proposed amendments are the result of feedback received from municipalities, community organizations and the public, and, if passed, will alleviate administrative pressures while still meeting the intent of the original amendments to the OHA and its regulations, aimed at increasing housing supply and supporting the growth of our province.

The ministry will continue to work closely with municipalities and communities to monitor the implementation of these changes and to advance our shared conservation goals.

Once again, thank you for sharing your feedback.

Sincerely,



Hon. Michael D. Ford
Minister of Citizenship and Multiculturalism

Solicitor General

Office of the Solicitor General

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132-2024-1621

By email

May 15, 2024

Dear Heads of Council and First Nation Chiefs:

I am pleased to share that the *Community Safety and Policing Act, 2019* (CSPA) came into force on April 1, 2024, and would like to take this opportunity to extend my gratitude to you and your communities. You have been instrumental in shaping the compositions for the newly established Ontario Provincial Police (OPP) detachment board framework.

The detachment board framework, as laid out in the CSPA and the new OPP Detachment Board Regulation, introduces a modernized approach to OPP policing by providing avenues for greater civilian governance. It ensures that each municipality and First Nation community receiving policing services from the OPP has an opportunity to represent their local perspectives, needs, and priorities.

The regulation with details of the board compositions and other board matters is available here: [O. Reg. 135/24: OPP DETACHMENT BOARDS \(ontario.ca\)](https://www.ontario.ca/regulation/135/24).

With the OPP detachment board framework now in effect, I would like to remind you of some key operational requirements.

Detachment Board Catchments

The maps that are referred in the regulation are attached for your reference. These maps have been developed to show the catchments for situations in which there are multiple boards for the same detachment. Should you have any questions related to the maps or OPP detachment board regulation, please contact Rachel Ryerson, Manager of the Public Safety Policing Policy Unit, at Rachel.Ryerson@ontario.ca.

Training and Appointments

With the new framework there are three types of appointments to the new OPP detachment boards as set out in the regulation: members who are members of a council of a municipality or band council of the First Nation; members representing the community who are neither a member of the council or band council of, nor an employee of the municipality or the First Nation; and provincial appointees. The appointment of council and community representatives are to be conducted locally, with the communities and First Nations assuming responsibility for the process for making appointments identified in the regulation.

.../2

Agency Profiles have been created on Ontario's Public Appointment Management System (PAMS), that will be used to facilitate the appointment of provincial appointees to OPP Detachment Boards ([OPP Detachment Board – Public Appointments Secretariat \(gov.on.ca\)](#)).

All board members are required to have completed mandatory roles and responsibilities training before exercising their responsibilities as detachment board members. Information regarding the roles and responsibilities training and provincial appointments have been shared with detachment leads who are the key contacts identified collectively by the communities after 2021 for each detachment who have acted as the liaison for the Ministry of the Solicitor General, municipalities and First Nations throughout this process. Should you have any additional questions regarding the training and the provincial appointments, please contact the lead for your detachment. If you need help identifying the lead for your detachment, please contact Rachel Ryerson, Manager of the Public Safety Policing Policy Unit, at Rachel.Ryerson@ontario.ca.

Police Service Advisor Support

As you may know, the Inspector General's duties under the CSPA include collaborating with detachment boards to tackle local issues and offer guidance on CSPA compliance. For any further inquiries or for more information, please reach out to the designated Police Services Advisor within the Inspectorate of Policing. If you need help identifying the Police Services Advisor for your specific region, please contact Jeeti Sahota, A/Manager, Police Services Liaison Unit, Inspectorate of Policing, at Jeeti.Sahota@ontario.ca.

I would like to thank you once again for your continued collaboration and significant support in this ongoing process.

Sincerely,



Michael Kerzner
Solicitor General

- c. Mario Di Tommaso, O.O.M., Deputy Solicitor General, Community Safety
- Commissioner Thomas Carrique, C.O.M., Ontario Provincial Police
- Colin Best, President, Association of Municipalities of Ontario
- Lisa Darling, Executive Director, Ontario Association of Police Service Boards
- Ontario Provincial Police Detachment Leads

**Ministry of
Municipal Affairs
and Housing**

Office of the Minister

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**Ministère des
Affaires municipales
et du Logement**

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234-2024-2494

May 28, 2024

Head of Council
James Seeley
Township of Puslinch
jseeley@puslinch.ca; admin@puslinch.ca

Subject: Bill 162, *Get It Done Act, 2024* Receives Royal Assent

Dear James Seeley

Further to my February 2024 letter regarding proposed amendments to the *Official Plan Adjustments Act, 2023* through Bill 162, the *Get It Done Act, 2024*, I am writing to advise you that on May 16, 2024, Bill 162 received Royal Assent.

The *Get it Done Act, 2024* amends the *Official Plan Adjustments Act, 2023* and makes changes to the legislatively approved official plans of some of the province's fastest-growing municipalities to address local needs, while continuing to support the government's goal of getting at least 1.5 million new homes built by 2031.

Amendments to the *Official Plan Adjustments Act, 2023* reinstate modifications to official plans in response to municipal feedback, while protecting the Greenbelt and safeguarding public health and safety.

The amendments made to the *Official Plan Adjustments Act, 2023*, through Bill 162 include modifications to official plans related to:

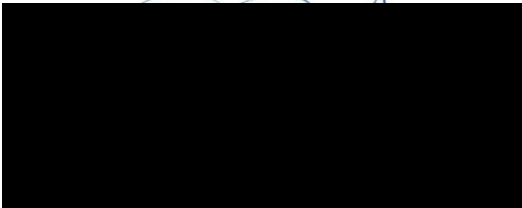
- settlement area boundary expansions;
- employment area conversions;
- alignment with provincial legislation/ regulations;
- designation or policy changes needed to enable residential development (e.g., increasing maximum building height permissions); and
- other policy changes (e.g., enhanced policies regarding provincial interests, natural heritage).

These legislative amendments reinstating modifications to municipal official plans are now in effect.

The legislative amendments follow consultation with the impacted municipalities, and where appropriate, responded to feedback received. The municipalities with official plans impacted by these changes are the cities of Barrie, Belleville, Guelph, Hamilton, Ottawa, Peterborough, the regions of Halton, Peel, Waterloo and York, and Wellington County. Modifications maintained through Bill 150 impacting these municipalities, and the Region of Niagara, continue to apply.

Ontario's success in tackling the housing supply crisis is built on our partnerships with municipalities and your commitment to build homes that makes the most sense for your communities. Ministry of Municipal Affairs and Housing staff would also be happy to meet with staff from your municipality to discuss these changes and answer any questions.

Sincerely,



Hon. Paul Calandra
Minister of Municipal Affairs and Housing

cc. CAO, Courtenay Hoytfox



T 705-635-2272
TF 1-877-566-0005
F 705-635-2132

TOWNSHIP OF LAKE OF BAYS
1012 Dwight Beach Rd
Dwight, ON P0A 1H0

May 14, 2024

Via email: minister.mah@ontario.ca

Minister of Municipal Affairs and Housing
Attention: Paul Calandra
777 Bay Street, 17th Floor
Toronto, ON M7A 2J3

Dear Mr. Calandra:

RE: Request for Royal Assent of Administrative Monetary Penalty System in the Ontario Building Code Act.

The Administrative Monetary Penalty System (AMPS) is an enforcement tool approved by the Provincial Government in August of 2009 and was originally used for parking offences to free up court time and cost.

A large number of municipalities have adopted an AMPS program and have applied AMPS to other Municipal enforcement by-laws as a replacement to the standard Part 1 Provincial Offences Act (POA) ticket system, as it provides the alleged offender with a flexible appeal system and the municipality the ability to apply unpaid penalties on to the property taxes. AMPS frees up valuable Provincial Offences Court time saving the province and the municipalities valuable resources and funds.

AMPS was written into the Building Code Act in December of 2017 however it has not received Royal Assent. AMPS has proven to be a valuable tool for education and enforcement of other Municipal by-laws. On behalf of the Council of the Corporation of the Township of Lake of Bays, we ask that AMPS receive Royal Assent. In doing so this would free up time for Building Officials to conduct their primary job (building inspections) instead of having to attend court normally a full day to hear an appeal to Part 1 ticket, at the same time providing the offender a more streamlined appeal system.

Sincerely,


Carrie Sykes, *Dipl. M.A., CMO, AOMC*,
Director of Corporate Services/Clerk.

TG/v
Copy to: MPP, Graydon Smith
Association of Ontario Municipalities
Association of Municipal Clerk and Treasurers of Ontario
All Area Municipalities

NOTICE OF STUDY COMMENCEMENT AND PUBLIC INFORMATION CENTRE

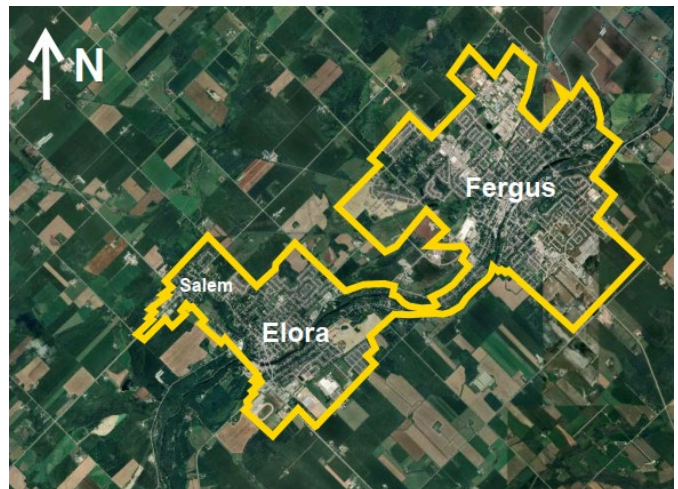
WATER AND WASTEWATER MASTER SERVICING PLAN FOR THE TOWNSHIP OF CENTRE WELLINGTON

The Township of Centre Wellington has initiated a Water and Wastewater Master Servicing Plan (MSP) to service the future growth of Fergus and Elora / Salem. The proposed study area aligns with Fergus and Elora / Salem urban boundaries, and approved planned growth areas, as illustrated in the figure below.

The Township of Centre Wellington is completing this Water and Wastewater MSP to identify high-level strategies for existing and future water and wastewater servicing.

The preferred servicing strategies will:

- Support service area growth to 2051 while considering opportunities for operational flexibility and redundancy, as well as for optimization and improvement of the existing systems;
- Provide resiliency to potential future changes to regulatory and climatic conditions;
- Balance environmental, social, technical, and economical considerations.



This project will also consider strategic opportunities to optimize and expand the Fergus Wastewater Treatment Plant (WWTP).

The project is being completed as an **Approach No. 1 Master Plan** project under the framework of the **Municipal Class Environmental Assessment** (October 2000, amended in 2007, 2011, 2015, & 2023), which is approved under the *Ontario Environmental Assessment Act*. The study will address the requirements of Phase 1 and part of Phase 2 of the Municipal Class EA process.

Consultation with the public, Indigenous Communities, regulator agencies, and stakeholder groups is a key element of a Municipal Class EA study. To facilitate this, two (2) Public Information Centres (PICs) are planned over the course of the study to gather input on potential servicing solutions and provide an opportunity to discuss concerns and issues with the project team.

The Township invites interested parties to attend and participate in PIC 1:

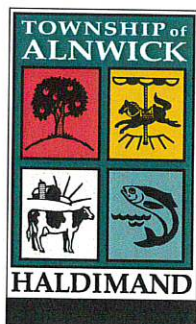
May 30, 2024 at 6:00 to 8:00 pm
CW Community Sportsplex

Presentation materials will also be available for viewing on the Township's website at:
www.connectcw.ca/WWSMP

If you have any questions or comments regarding the study, or wish to be added to the project contact list to receive notices, please contact a member of the project team:

Ryan Maiden, P.Eng.
Water and Wastewater Capital Manager
Township of Centre Wellington
1 MacDonald Square
Elora, ON N0B 1S0
519-846-9691 ext. 285
Rmaiden@centrewellington.ca

Dania Chehab, P.Eng., M.Eng.
Project Manager
R.V. Anderson Associates Limited
2001 Sheppard Avenue East, Suite 300
Toronto, ON M2J 4Z8
416-497-8600 ext. 1456
DChehab@rvanderson.com



May 13, 2024

Association of Municipal Managers, Clerks and
Treasurers of Ontario (AMCTO)
AMCTO Advocacy Team
(advocacy@amcto.com)

Dear Sir/Madam:

RE: MFIPPA Modernization

This is to advise that the Council of the Corporation of the Township of Alnwick/Haldimand at their Special Council Meeting on January 25th, 2024, passed the following resolution:

RES:20240125-11

Moved by Deputy Mayor Joan Stover, seconded by Councillor Greg Booth;

"Whereas the Municipal Freedom of Information and Protection of Privacy Act, 1990 (MFIPPA) has not been comprehensively reviewed in over 30 years; and

Whereas municipalities consider transparency an important tool for building and maintaining public trust and recognize the importance of continuously improving; and

Whereas municipal administrators need legislation that supports effective local program delivery, is responsive to current technology and reflects its original intent of open and accountable government; and

Whereas MFFIPA presents a number of challenges for municipal staff which can hinder its effectiveness and efficiency when it comes to serving the public; and

Whereas municipalities should have updated legislation that ensures municipal resources are best allocated; increases trust in public institutions through strengthening

accountability, transparency and responsiveness; and addresses the needs of the digital era; and

Whereas the Association of Municipal Managers, Clerks, and Treasurers of Ontario (AMCTO) has comprehensively reviewed MFIPPA and put forward recommendations in their submission "Looking Ahead: A Proactive Submission to Modernize the Municipal Freedom of Information and Protection of Privacy Act";

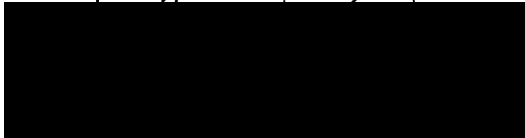
Be it resolved that the Ministry of Public Business and Service Delivery be requested to review MFIPPA and consider recommendations as outlined by AMCTO within their submission, "Looking Ahead: A Proactive Submission to Modernize the Municipal Freedom of Information and Protection of Privacy Act"; and

Further be it resolved that Council direct the Deputy Clerk to send a copy of this resolution to AMCTO's Advocacy Team, the Ministry of Public and Business Service Delivery and all Ontario municipalities."

CARRIED

We respectfully submit the resolution supporting the review and reform of MFIPPA.

Yours truly,

A large black rectangular redaction box covers the signature of Yolanda Melburn.

Yolanda Melburn, Deputy Clerk
Township of Alnwick/Haldimand
905-349-2822 ext. 32
ymelburn@ahwp.ca

Cc: Ministry of Public and Business Service Delivery
All Ontario Municipalities



Corporation of the County of Wellington
Joint Accessibility Advisory Committee
Minutes

May 2, 2024
Wellington County Museum and Archives
Nicholas Keith Room

Present: Councillor Matthew Bulmer (Chair)
Robin Fletcher
Heather Small
Gerald Townsend

Regrets: Giverny Charlebois
Bethany Parkinson
Lorri Wright

Also Present: Warden Andy Lennox

Staff: Jennifer Adams, Clerk
Nicole Cardow, Deputy Clerk
Imran Esmail, Information Management Coordinator
Don Kudo, County Engineer
Rachel Wilson, Manager of Information Management
Karren Wallace, Township of Wellington North Clerk
Justin Grainger, Town of Erin Deputy Clerk
Monika Farncombe, Township of Puslinch Legislative Assistant

1. Call to Order

At 1:30pm, the Chair called the meeting to order.

2. Declaration of Pecuniary Interest

There were no declarations of pecuniary interest.

3. Confirmation of Minutes

Minutes from the December 2023 Joint AAC will be circulated to the committee and will be confirmed at the September 2024 meeting.

4. Information Items

4.1 List of Planned Projects by Municipalities

Nicole Cardow, Deputy Clerk advised the committee that List of Planned Projects by Municipalities will be a standing item on the Joint Accessibility Advisory Committee agenda. This item can include Open Houses, Master Plans brought forward by the Wellington County local municipalities and any other large project with AODA implementations.

4.2 Schedule of Annual Reporting

Nicole Cardow, Deputy Clerk advised that the Schedule of Annual Reporting will be a standing item on the Joint Accessibility Advisory Committee and will be updated every meeting for reference from Committee members and staff.

4.3 Resource: Pathways to Recreation

Nicole Cardow, Deputy Clerk outlined the Pathways to Recreation link provided in the agenda as a great resource for staff and committee members as an overview of roles and responsibilities as it relates to new projects and growth within the municipality and the Accessibility for Ontarians with Disabilities Act (AODA).

5. Items for Review and Comment

5.1 New Wellington County Website Demo

Rachel Wilson, Manager of Information Management and Imran Esmail, Information Management Coordinator presented the committee with a presentation and walk through of the new Wellington County website. The presentation outlined new accessibility features and a streamlined look for easy access for people of all abilities. The committee was asked to provide feedback or comments through the Deputy Clerk.

5.2 Pedestrian Audible Signal Installations

1/1/24

Moved By: Robin Fletcher

Seconded By: Gerald Townsend

That the report titled Pedestrian Audible Signal Installations be received for information; and

Upon confirmation from the Administration, Finance and Human Resources Committee, the County Engineer have discussions with our member municipalities to standardize crosswalk audible signal installations, for consistency throughout the County of Wellington.

Carried

5.3 Multi Year Accessibility Plan - Township of Centre Wellington

2/2/24

Moved By: Robin Fletcher

Seconded By: Heather Small

That the Multi-Year Accessibility Plan from the Township of Centre Wellington be received for information; and

That the September Joint Accessibility Advisory Committee meeting be held at the Township of Centre Wellington Municipal Office in Elora ON.

Carried

5.4 Carberry Park - Town of Erin

3/2/24

Moved By: Gerald Townsend

Seconded By: Robin Fletcher

That the Wellington County Joint Accessibility Committee hereby receive report PR2024-01 titled Carberry Park Accessible Playground for information, and to provide any feedback the committee may have for the construction of the playground.

Carried

5.5 FADM - Verbal update

4/2/24

Moved By: Heather Small

Seconded By: Gerald Townsend

That the verbal update on the FADM by Jennifer Adams, County Clerk, be received for information; and

That the Joint Accessibility Advisory Committee confirm the direction to delete redundancies and duplications from the current FADM against the Building Code of Ontario and AODA standards and regulations; and

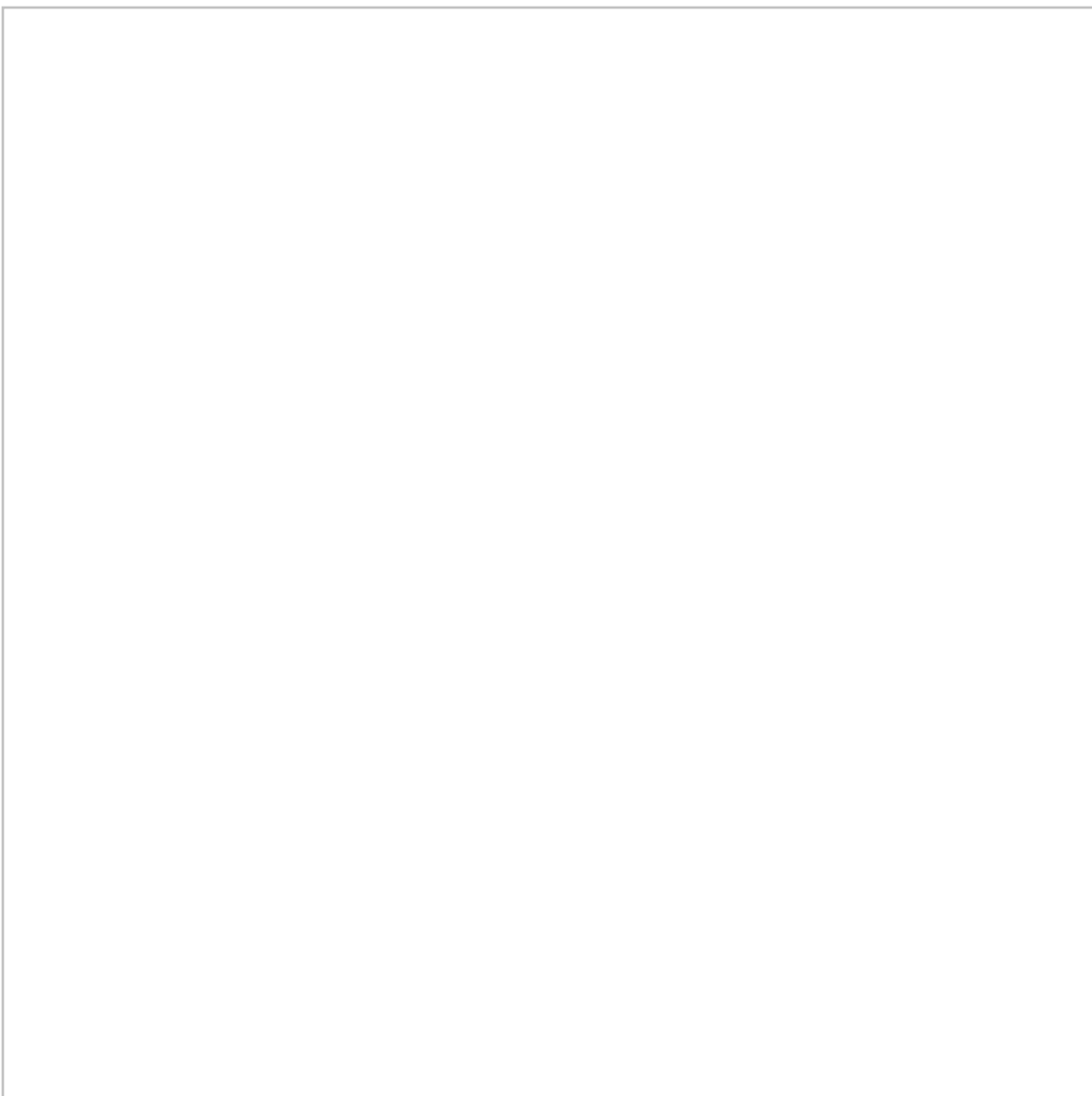
That remaining items be brought to the JAAC in September 2024 where new design standards will be discussed.

Carried

6. Adjournment

At 3:20 pm, the Chair adjourned the meeting until Thursday September 5th 2024 or at the call of the Chair.

Chair Matthew Bulmer
Accessibility Advisory Committee



Heritage Organization Development Grant: Applications Now Open

Good afternoon,

This email is to let all OHS member organizations and institutions know that the Ministry of Citizenship and Multiculturalism is now accepting applications for this year's Heritage Organization Development Grant (HODG).

Applications must be submitted online through the Transfer Payment Ontario (TPON) system on **Tuesday, July 2, 2024, no later than 5:00 p.m.** Eastern Daylight Time.

The HODG Program and Application Guidelines can be downloaded from the Central Forms Depository [HERE](#). Please review the guidelines carefully, as specific instructions for the application may change from year to year.

In order to be considered an eligible applicant to the program, your organization will need to meet the following requirements:

- *be a registered non-profit corporation or an affiliate of the Ontario Historical Society;*
- *have been in operation and incorporated for at least one year;*
- *have as its primary objective the support, encouragement and facilitation of the conservation, protection and promotion of your community's heritage;*
- *be governed by a Board of Directors;*
- *have spent in the preceding fiscal year at least \$250 on outreach activities (education or extension programmes that support activities designed to increase knowledge, awareness and promotion of your community's heritage).*

New Applicants: If you are a first-time applicant and your organization meets the above requirements, you must submit with your application a copy of your organization Constitution and By-laws.

For questions regarding your HODG application, please contact:

Shannon Khan
Culture Programs Advisor
Email: HODG-SSAHC@ontario.ca

Requests for Letters of Good Standing from the Ontario Historical Society for your applications should be sent to:

Heather Anderson

Membership Coordinator

Email: handerson@ontariohistoricalsociety.ca

Please reach out to the OHS at any point with any questions you may have, regarding HODG or any other matters concerning your organizations. And all the best with this year's applications.



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Our mailing address is:
The Ontario Historical Society
34 Parkview Ave.



Optimist
INTERNATIONAL

Optimist Club of Puslinch

May 24, 2024

Township of Puslinch
7404 Wellington Rd 34
Puslinch N0B 2J0

Attention: Mayor and Council

Dear Mayor Seeley, Councillors Sepulis, Bailey, Goyda, Hurst

On behalf of the Optimist Club of Puslinch, Thank You for the \$3000 grant for our Canada Day Celebrations.

To celebrate our country's birthday on July 1st, the Optimist Club hosts a country breakfast (bacon, eggs, pancakes with locally sourced maple syrup). After a piece of Canada Day cake the kids will have fun on the great new playground. At dusk we treat the community to a fireworks show. All aspects of Canada Day are free of charge.

With increasing costs for all aspects of these events the grant will be used to supplement our fund raising activities that will allow the Community to enjoy the events that have become "Traditions" in our Township.

Thank You for recognizing what we do for the Community we proudly call HOME.

Sincerely


/ Gregg Allan
President
Optimist Club of Puslinch

RECEIVED
MAY 27 2024
Township of Puslinch

Justine Brotherston

To: Mary Hasan
Cc: Courtenay Hoytfox
Subject: RE: Bill 185 Changes to the Development Charges Act (and various other Acts)

From: Watson & Associates Economists Ltd. <info@watsonecon.ca>
Sent: Friday, June 7, 2024 3:09 PM
Subject: Bill 185 Changes to the Development Charges Act (and various other Acts)
Importance: High

To our Municipal Clients,

In our continued efforts to keep you informed of the ongoing legislative changes regarding Bill 185, *Cutting Red Tape to Build More Homes Act (2024)*, we are writing to inform you that **the Bill has now received Royal Assent.**

The changes to the the *Development Charges Act (D.C.A.)* and to Ontario Regulation 82/98 under the D.C.A. include:

- The inclusion of studies within the eligible capital costs;
- The removal of the mandatory phase-in of charges;
- The process for minor amendments to development charge (D.C.) by-laws;
- A reduction of time for the D.C. rate freeze related to site plan and zoning by-law amendment planning applications; and
- Modernizing public notice requirements.

Additionally, please note that the Affordable Residential Unit exemptions are now in effect as of June 1, 2024 as per section 4.1 of the D.C.A, which also apply to community benefits charges and parkland dedication by-laws. Please note that exemptions for Attainable Units included within section 4.1 of the D.C.A. are not in effect until prescribed.

We have re-attached our earlier correspondence on Bill 185. There has only been one change to the initial Bill with respect to a special rule that was added for the City of Ottawa related to the freeze in D.C.s at planning application submission.

Please note the following immediate impacts of these changes:

1. The inclusion of studies within the eligible capital costs

With the re-introduction of studies as an eligible cost and the streamlined process for D.C. amendments, municipalities that passed a new D.C. by-law between November 28, 2022 and June 6, 2024 are allowed to amend their D.C. by-law to include eligible study costs without preparing a D.C. background study or undertaking the statutory public process. Municipalities have six months from the date of Royal Assent (i.e., until December 6, 2024) to make an amendment under this streamlined process.

Furthermore, the amendment would not be subject to Ontario Land Tribunal appeal. For by-laws passed after June 6, 2024, if studies have not been included in the background study and by-law, the streamlined process for D.C. amendments does not apply.

2. The removal of the mandatory phase-in

The mandatory phase-in that applied to all by-laws passed after January 1, 2022 has been removed. This will generally apply to municipalities as follows:

- For by-laws passed between January 1, 2022 and November 27, 2022, the phase-in of the charges can be removed with immediate effect.
- For by-laws passed between November 28, 2022 and June 6, 2024 that did not specifically reference the mandatory phase-in within the by-law, the phase-in of the charges can be removed with immediate effect.
- For by-laws passed between November 28, 2022 and June 6, 2024 that did include provisions for the mandatory phase-in of the charge, this policy can be removed through the streamlined amendment process within six months of Bill 185 receiving Royal Assent (i.e., by December 6, 2024).

3. A reduction of time for the D.C. rate freeze related to site plan and zoning by-law amendment planning applications

The period of time for which a charge is frozen at the rate calculated when the planning application is made has been reduced from two years between application approval and building permit issuance to 18 months. Bill 185 does not include provisions for addressing this change through the streamlined amendment process. As such, to enact this change in a municipal D.C. by-law, an amendment would be required, including the preparation of a background study and following the statutory public process.

There were additional changes made to Bill 185 at the Standing Committee with regard to the *Planning Act*. Further correspondence on these changes will follow.

If you have any questions regarding the implications of these changes for your municipality and next steps that may be required, please do not hesitate to contact us.

Yours very truly,

WATSON & ASSOCIATES ECONOMISTS LTD.

Andrew Grunda, MBA, CPA, CMA, Principal
Jamie Cook, MCIP, RPP, PLE, Managing Partner
Jack Ammendolia, BES, PLE, Managing Partner
Peter Simcisko, BA (Hons), MBE, Managing Partner
Sean-Michael Stephen, MBA, Managing Partner
Daryl Abbs, MBE, PLE, Managing Partner

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If you no longer wish to receive municipal finance and planning related information from Watson & Associates Economists Ltd., please reply to this email with the subject line UNSUBSCRIBE.

Watson & Associates Economists Ltd.

April 11, 2024

To Our Municipal Clients:

Re: Assessment of Bill 185, *Cutting Red Tape to Build More Homes Act, 2024*

On behalf of our many municipal clients, we are writing to inform you of the Ontario Legislature's proposed changes to the *Development Charges Act* (D.C.A.) under Bill 185 (*Cutting Red Tape to Build More Homes Act*) and to Ontario Regulation 82/98 under the D.C.A. These proposed changes are with respect to:

- The definition of eligible capital costs (to include certain studies);
- The removal of the mandatory phase-in of charges;
- The process for minor amendments to development charge (D.C.) by-laws;
- A reduction of time for the D.C. rate freeze related to site plan and zoning by-law amendment planning applications;
- Modernizing public notice requirements; and
- Implementation of the Affordable Residential Unit exemptions.

Further details with respect to these proposed changes are provided below.

With respect to changes to the *Planning Act* arising from Bill 185, Watson will be preparing a subsequent letter summarizing the changes.

1. Revised Definition of Capital Costs

On November 28, 2022, the Province enacted Bill 23, *More Homes Built Faster Act*, which included a number of discounts, exemptions, and reductions to D.C.s. As part of this legislation, the definition of capital costs (subsection 5 (3) of the D.C.A.) was amended to remove studies, including D.C. background studies.

Bill 185 proposes to reverse the capital cost amendments of the *More Homes Built Faster Act* (Bill 23) by reinstating studies as an eligible capital cost. The following paragraphs are proposed to be added to subsection 5 (3) of the D.C.A.:

5. *Costs to undertake studies in connection with any of the matters referred to in paragraphs 1 to 4.*
6. *Costs of the development charge background study required under section 10.*



The proposed amendment will allow municipalities to fund studies, consistent with by-laws passed prior to the *More Homes Built Faster Act* (Bill 23). This will allow for the funding of master plans, D.C. background studies, and similar studies that inform the capital costs of the D.C. background study.

2. Removal of the Mandatory Phase-in

The *More Homes Built Faster Act* (Bill 23) required the phase-in of charges imposed in a D.C. by-law over a five-year term. D.C. by-laws passed after January 1, 2022, were required to phase-in the calculated charges as follows:

- Year 1 of the by-law – 80% of the charges could be imposed;
- Year 2 of the by-law – 85% of the charges could be imposed;
- Year 3 of the by-law – 90% of the charges could be imposed;
- Year 4 of the by-law – 95% of the charges could be imposed; and
- Years 5 to 10 of the by-law – 100% of the charges could be imposed.

Bill 185 proposes to remove the mandatory phase-in of the charges. It is proposed that this change would be effective for D.C. by-laws passed after Bill 185 comes into effect.

For site plan and zoning by-law amendment applications that were made prior to Bill 185 receiving Royal Assent, the charges payable will be the charges that were in place on the day the planning application was made (i.e., including the applicable mandatory phase-in).

Note, the Bill also proposes to allow minor amendments to D.C. by-laws that include these phase-in provisions. As provided in further detail below, these amendments would not require the preparation of a D.C. background study or undertake the statutory public process, and the amendments would not be subject to Ontario Land Tribunal appeal. This provision will only be available for a period of six months after Bill 185 takes effect.

3. Process for Minor Amendments to D.C. By-laws

Section 19 of the D.C.A. requires that a municipality must follow sections 10 through 18 of the D.C.A. (with necessary modifications) when amending D.C. by-laws. Sections 10 through 18 of the D.C.A. generally require the following:

- Completion of a D.C. background study, including the requirement to post the background study 60 days prior to passage of the D.C. by-law;
- Passage of a D.C. by-law within one year of the completion of the D.C. background study;
- A public meeting, including notice requirements; and
- The ability to appeal the by-law to the Ontario Land Tribunal.



Bill 185 proposes to allow municipalities to undertake minor amendments to D.C. by-laws for the following purposes without adherence to the requirements noted above (with the exception of the notice requirements):

1. To repeal a provision of the D.C. by-law specifying the date the by-law expires or to amend the provision to extend the expiry date (subject to the 10-year limitations provided in the D.C.A.);
2. To impose D.C.s for studies, including the D.C. background study; and
3. To remove the provisions related to the mandatory phase-in of D.C.s as discussed in section 2 of this letter.

Minor amendments related to items 2 and 3 noted above may be undertaken only if the D.C. by-law being amended was passed after November 28, 2022, and before Bill 185 takes effect. Moreover, the amending by-law must be passed within six months of Bill 185 taking effect.

Notice requirements for these minor amending by-laws are similar to the typical notice requirements, with the exception of the requirement to identify the last day for appealing the by-law (as these provisions do not apply).

4. Reduction of D.C. Rate Freeze Timeframe

Bill 108, *More Homes, More Choices Act, 2019*, which received Royal Assent on June 6, 2019, provided several changes to the D.C.A. including the requirement to freeze the D.C.s imposed on certain developments. This applied to developments that were subject to a site plan and/or a zoning by-law amendment application. The D.C. rate for these developments is “frozen” at the rates that were in effect at the time the site plan and/or a zoning by-law amendment application was submitted (subject to applicable interest). Once the application is approved by the municipality, if the date the D.C. is payable^[1] is more than two years from the approval date, the D.C. rate freeze would no longer apply.

Bill 185 proposes to reduce the two-year timeframe to 18 months and move this timeframe from being identified in O. Reg. 82/98 to being identified in the D.C.A. Transition provisions are included that require the two-year D.C. “freeze” for site plan and zoning by-law amendment applications that were approved prior to Bill 185 receiving Royal Assent to remain in effect.

^[1] In the case of Rental Housing and Institutional development, once the application is approved by the municipality, if the date the first building permit is issued is more than two years after the date of approval, the D.C. rate freeze would no longer apply.



Note that the streamlined process for minor amending by-laws does not appear to include the ability to amend D.C. by-laws to meet this legislative change.

5. Other Proposed Changes

Along with the proposed legislative changes outlined in Bill 185, the Province has identified related proposed regulatory changes regarding modernization of the public notice requirements. In addition, the Province has noted that implementation of the Affordable Residential Unit exemption will occur on June 1, 2024.

5.1 Modernizing Public Notice Requirements

The D.C.A. sets out the requirements for municipalities to give notice of public meetings and of by-law passage. These requirements are prescribed in sections 9 and 10 of O. Reg. 82/98 and include giving notice in a newspaper of sufficiently general circulation in the area to which the by-law would apply. The proposed regulatory changes would modernize public notice requirements by allowing municipalities to provide notice on a municipal website if a local newspaper is not available.

5.2 Implementing the Affordable Residential Unit Exemption

The More Homes Built Faster Act (Bill 23) identified an exemption for Affordable Residential Units. This exemption was subsequently revised through Bill 134, *Affordable Homes and Good Jobs Act, 2023*, which received Royal Assent on December 4, 2023. The exemption is summarized as follows:

- Affordable Rental: Where the rent is no greater than the lesser of the income based affordable rent^[1] set out in the Affordable Residential Units Bulletin and the average market rent identified in the Affordable Residential Units Bulletin.
- Affordable Owned Unit: Where the price of the residential unit is no greater than the lesser of the income-based affordable purchase price^[2] set out in the Affordable Residential Units Bulletin and 90% of the average purchase price identified in the Affordable Residential Units Bulletin.

^[1] Based on the 60th percentile of gross annual incomes for renter households in the applicable local municipality and where the rent is equal to 30% of the income of the household.

^[2] Based on the 60th percentile of gross annual incomes for households in the applicable local municipality and where the purchase price would result in annual accommodation costs equal to 30 per cent of the income of the household.



The Provincial Backgrounder has indicated that this exemption will come into force on June 1, 2024, and that the Affordable Residential Units Bulletin will be posted on Ontario.ca.

Note, no commentary has been provided on the Attainable Unit exemption at this time.

6. Summary Comments on the Proposed Amendments

Many of these changes to the D.C.A. appear positive for municipalities by assisting in ensuring that growth pays for growth to the extent possible. This is achieved by allowing for the inclusion of growth-related studies that will allow municipalities to appropriately plan for additional development. Furthermore, the removal of the mandatory phase-in provisions ensures discounts to D.C.s are not provided to development and redevelopment that municipalities do not aim to incentivize. The reduction in the D.C. rate freeze timeline helps to ensure development that is not proceeding quickly does not receive D.C. discounts. Additionally, the ability to make minor amendments to D.C. by-laws to align with the legislative changes without onerous administrative requirements will assist municipalities in aligning policies with the amended legislation quickly. Modernizing the public notice requirements further assists municipalities in areas where there is no local newspaper.

With respect to the implementation of the Affordable Residential Unit exemption on June 1, 2024, as stated in previous correspondence, while it is an admirable goal to create additional affordable housing units, further D.C., community benefits charge, and parkland exemptions will continue to provide further financial burdens on municipalities to fund these exemptions.

Watson will be providing a submission through the Environmental Registry of Ontario on these legislative changes. Watson will also be seeking an opportunity to speak as a delegation to the Standing Committee, if possible, to provide our comments on behalf of our municipal clients. We will continue to monitor the progress of Bill 185 through the legislature and will continue to keep our clients informed of any changes. If you have any questions, please do not hesitate to contact us.

Yours very truly,

WATSON & ASSOCIATES ECONOMISTS LTD.

Daryl Abbs, MBE, PLE, Managing Partner
Andrew Grunda, MBA, CPA, CMA, Principal
Jamie Cook, MCIP, RPP, PLE, Managing Partner
Peter Simcisko, BA (Hons), MBE, Managing Partner
Sean-Michael Stephen, MBA, Managing Partner
Jack Ammendolia, BES, PLE, Managing Partner

Delegate Request - Entry #11506

Type of Meeting

Council

Meeting Date

June 12, 2024

How many delegates are requesting to make this presentation?

One (1)

Type of Delegation

This is a request to delegate on a general topic

Type of Presentation

This request is to present a verbal delegation

Type of Attendance

In person

Name of Delegate

John McNie

Mailing Address of Delegate

[Redacted]

Phone Number of Delegate

[Redacted]

Email Address of Delegate

[Redacted]

Purpose of delegation (state position taken on issue, if applicable)

Provide details on ERO #019-8428 (now closed) discussed at two previous Council meetings in April and May, with respect to an aggregate pit license application for the Ed Lake property on Concession 2.

A formal presentation is being submitted to accompany the delegation

No

The delegation will require the use of audio-visual equipment (power point presentation)

No

Acknowledgement

I (we) have read, understand and acknowledge the Rules and Procedures relating to Delegations as prescribed by the Procedural By-law 2022-046.

[Township of Puslinch](#)



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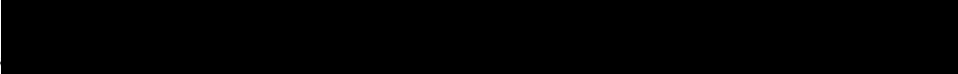
Delegate Request

Meeting Date: June 12 / 2024

Applicant Information

Applicant Name: Gabrielle Monkerth

Mailing Address: 

Email Address: 

Telephone Number: 

Purpose of delegation (state position taken on issue, if applicable):

Bitumen and Tar in Wetlands
close to Road projects.

culverts.

I am submitting a formal presentation to accompany my delegation:

Yes: No:

I will require the following audio-visual equipment:

PowerPoint:

Note: delegations are permitted to speak for 10 minutes. Your form or letter must be received 24 hours before the preparation of the Council agenda. This usually means at least one week prior to the Council meeting.

Personal Information collected on this form is collected under the authority of the Municipal Act and will be used only for the purposes of sending correspondence relating to matters before Council and for creating a record that is available to the general public in a hard copy format and on the internet in an electronic format in accordance with the Municipal Freedom of Information and Protection of Privacy Act. Questions regarding the collection of this information may be directed to the Township Clerk's office.

The Township of Puslinch is committed to providing accessible formats and communication supports for people with a disability. If another format would work better for you, please contact the Township Clerk's office for assistance.

Dear Puslinch council,

This information regarding the Watson rd 2024 project was sent in November 2023 to the Township without followup .

This is a letter to address concerns with the new project going forward on Watson road at a cost of 1.1 million dollars. I am bringing forward what happened with the south Watson road improvement project.

The construction company decided to "improve" the sandy gravel shoulders where the turtles nest with a hot black gravel mix. I am guessing it was tar or bitumen both of which contain PAHs. This was unfortunate because it took away any nesting sites for the turtles. Then in the winter the road grader scraped all this material into the surrounding wetland. See pictures. I am sure as residents of Puslinch we all want the most healthy environment possible and would like to support the wetlands which function as a filter for the water we and our ecosystem depend on to stay healthy.

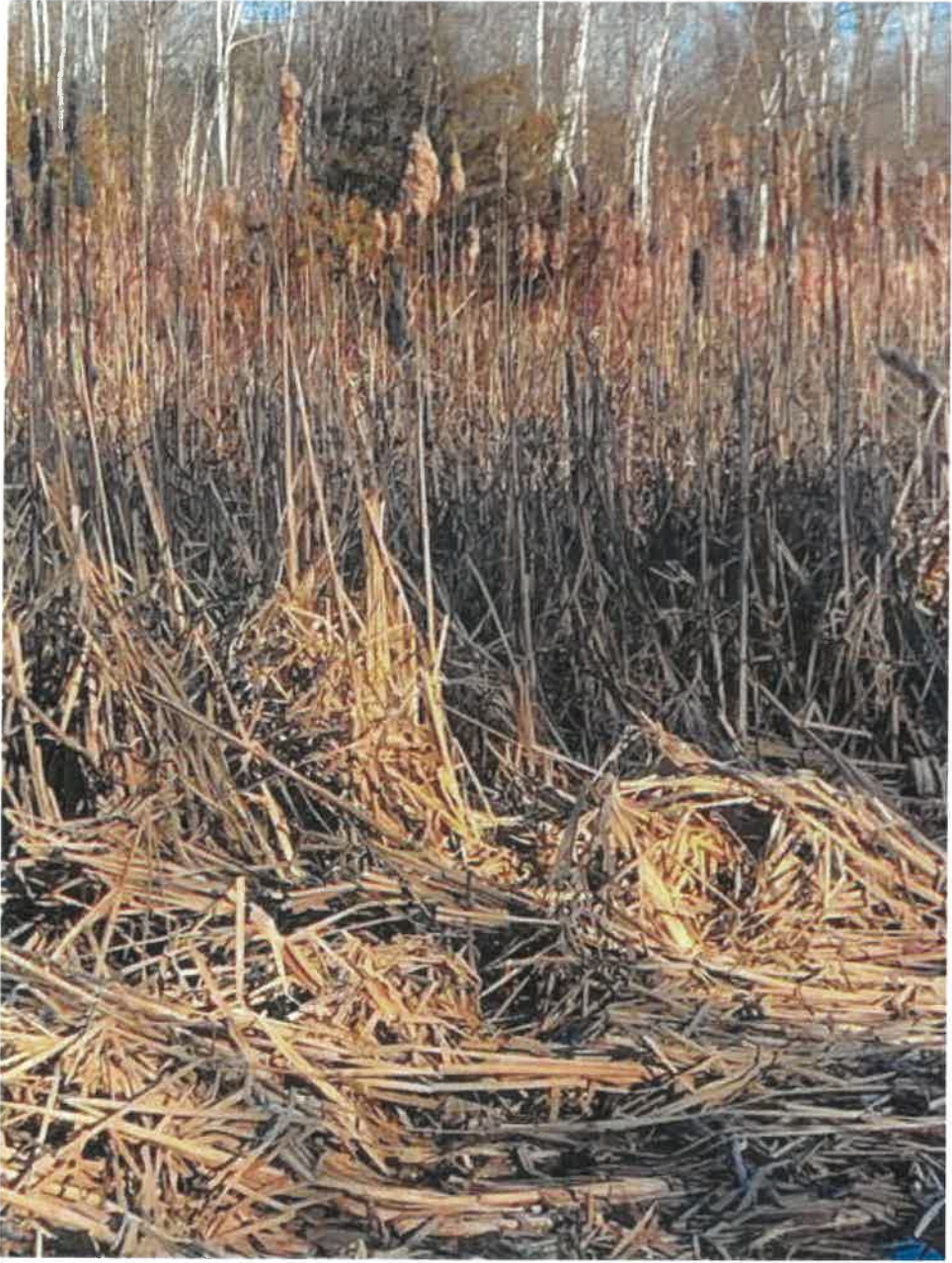
. Even though the solubility of PAHs in water is low, PAHs can stick to the solids and settle to the bottom and contaminate sediments (ATSDR, 1995). As a result of PAH exposure, skin, lung, and colon cancers and also reproductive, immune, and neurological disorders have been observed in long- and short-term laboratory animal studies (Ramesh et al., 2011; Wu et al., 2011). For instance, fish kills have been observed due to contaminated runoff discharged from the coal-tar coated asphalt pavements (Rivas, 2000).

Another unfortunate aspect of the south road construction project was the lost opportunity to add at minimal cost a culvert with a suitable design between two key wetlands that has ongoing extremely high road mortality. A consulting company designed a plan for this area and when brought forward we were told that the culvert was not in the budget . We would like to ensure that coal tar/bitumen does not end up on the shoulders of the upcoming Watson road project. We would also like to bring forward the opportunity to complete an environmental plan to protect turtles in the provincially significant wetland that this project will be impacting..

Contact
Gabrielle Monteith



More pictures and consultant report that was sent in November available to be presented at next Council meeting if 10 minutes available.







Township of Puslinch COMMUNITY RISK ASSESSMENT



Presented to:



TOWNSHIP OF

PUSLINCH



Presented by:

Behr Integrated Solutions Inc.

Unit 4, 545 Trillium Drive

Kitchener ON N2R 1J4

www.behrintegrated.com



PREFACE

This Community Risk Assessment will serve as a foundational document to inform and direct the development of a municipal Fire Master Plan for the Township of Puslinch to address the strengths, threats and vulnerabilities that are unique to the township, to protect lives, the environment and property.

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ACRONYMS

Acronym	Definition
CEMP	Community Emergency Management Program
CI	Critical Infrastructure
CO	Carbon Monoxide
CRA	Community Risk Assessment
FPPA	Fire Protection and Prevention Act
HIRA	Hazard Identification and Risk Assessment
MPAC	Municipal Property Assessment Corporation
MVC	Motor Vehicle Collision
MW	Megawatt
NBC	National Building Code
NFPA	National Fire Protection Association
OBC	Ontario Building Code
OFC	Ontario Fire Code
OFM	Office of the Fire Marshal
PFRS	Puslinch Fire and Rescue Services
PPE	Personal Protective Equipment

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EXECUTIVE SUMMARY

Introduction

A Community Risk Assessment (CRA) is a process used to identify, evaluate, and prioritize potential hazards, vulnerabilities, and risks to the public within a specific community or geographic area. Under the Fire Protection and Prevention Act, 1997 (FPPA), **Ontario Regulation 378/18: Community Risk Assessments (O. Reg. 378/18)**, every municipality must complete and review a CRA “to inform decisions about the provisions of fire protection services¹” in the interest of public safety. It involves gathering information, analyzing data, and engaging with stakeholders to understand the potential threats and vulnerabilities that could lead to various types of emergencies or disasters. The goal of a CRA is to inform emergency management and response agencies to enhance community resiliency and reduce the impact of potential future emergencies.

Community Risk Assessment Process

The Office of the Fire Marshal (OFM) has developed a guideline (OFM-TG-02-2019) to assist municipalities during the process of conducting a CRA. As per O.Reg. 378/18, there are nine mandatory profiles that must be examined:

1. **Geographic Profile:** Physical features of the community
2. **Building Stock Profile:** Types, numbers, uses and ages of buildings in the community
3. **Critical Infrastructure Profile:** Facilities and services that meet vital needs, sustain economy, and protect public security
4. **Demographic Profile:** Composition of the community’s population
5. **Public Safety and Response Profile:** Organized agencies and organizations within and external to the community that can respond to certain types of incidents
6. **Community Services Profile:** Community agencies, organizations and associations that can provide supportive services
7. **Hazard Profile:** Natural, human-caused, and technological hazards in the community
8. **Economic Profile:** Economic sectors that are critical to financial stability of the community
9. **Past Loss and Event History Profile:** Past emergency responses in the community

Each profile is considered and where applicable, taken through the core six-step process of a CRA development as outlined in the table below.

¹ Ontario Regulation 378/18: Community Risk Assessments, Mandatory Use, Section 1 (b)

No.	Step	Description
1	Data Collection	Gather relevant data about the community, including demographics, geography, infrastructure, land use, historical disaster data, socio-economic factors, and stakeholder input.
2	Hazard Identification	Identify the various hazards that could affect the community. Hazards include natural, human-made and technological events.
3	Vulnerability Analysis	Assess the community's vulnerabilities in relation to each identified hazard. Consider factors such as population density, housing quality, socio-economic status, access to community resources and community protection agencies.
4	Risk Assessment	Combine information about hazards and vulnerabilities to assess the overall risk to the community by quantifying the likelihood and potential impact of various hazards occurring and affecting vulnerable areas.
5	Risk Ranking and Risk Treatment	Assign each risk a ranking score and potential treatment options to accept, avoid, mitigate, or transfer the risk.

The results of the five-step process will provide a series of identified risks and key findings. Identified risks are factors which may highlight a need for future consideration during the development of a Fire Master Plan (FMP) when examining emergency service levels, while key findings may be noted as strengths in the community's current response model and/or trends to be monitored.

The identified risks and key findings of the Township of Puslinch's CRA are summarized in the next section and a full analysis of the risk assessment process is outlined in Section 11 of this report.

Summary of Identified Risks and Key Findings

The following identified risks and key findings are drawn from analyses presented throughout the report. They are grouped based on the nine mandatory profiles and in the order in which they appear in the report.

As per the OFM technical guidelines, the risk treatments presented in this report are a generalized basis for further consideration and in-depth analysis during the development of a FMP, which will serve to account for feasibility of risk treatments, cost, and execution.

Table 1: Summary of Identified Risks

Identified Risk	Probability Level	Consequence Level	Risk Level	Rationale
The road network predominately Hwy 401 bisecting the township, is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires.	Almost Certain	Moderate	High	<ul style="list-style-type: none"> Approximately 658 emergency calls responded to between 2018 and 2022 pertain to motor-vehicle related incidents, this represents 96.5% of rescue calls and approximately 32.2% of all calls responded to by PFRS during that period
There are several rail lines within the Township of Puslinch that present a risk related primarily to the movement of goods.	Possible	Major	Moderate	<ul style="list-style-type: none"> Guelph Junction Railway, CN and CP Rail operate various lines running through the municipality, which includes farmland and over water surfaces. The containers transported include dangerous goods.
There is an increased risk of ice and water rescue at Puslinch Lake, Mountsberg Reservoir and Mill Creek due to recreational activity on the water.	Unlikely	Moderate	Moderate	<ul style="list-style-type: none"> Waterfront activities increase the risk of an incident both on the water and onshore. PFRS reported a total of 2 water and/or ice rescues in the past 5 years.
Group C occupancies represent 82.88% of all occupancies. Residential occupancies are the highest occupancies linked to fire deaths and fire injuries across the province	Almost Certain	Moderate	High	<ul style="list-style-type: none"> The majority of the township’s existing property stock is comprised of Group C - Residential Occupancies (82.88%) 70.21% of structure fires loss over the five-year period from January 1, 2018, to December 31, 2022, occurred within Group C - Residential Occupancies. In Ontario a high majority of fire deaths and injuries occur in Group C residential occupancies

Identified Risk	Probability Level	Consequence Level	Risk Level	Rationale
Data provided by the 2021 census indicates that 38.39% of the township's residential building stock was built prior to the introduction of the 1981 OFC.	Almost Certain	Moderate	High	<ul style="list-style-type: none"> 38.39% of the townships' building stock was built prior to 1981, preceding the adoption of the 1981 OFC. There were 11 incidents (or 18.03%) where a smoke alarm was present but did not operate. There were 15 incidents (24.59%) where a smoke alarm presence was undetermined.
There are several properties within Puslinch that have a potentially high fuel load and therefore an increased high fire risk.	Likely	Major	High	<ul style="list-style-type: none"> There are 106 industrial occupancies (3.49% of property stock) - several with known high fuel load concerns There have been 7 industrial fires over the past 5 years resulting in over \$2.7M fire loss (32.63% of the total fire loss)
The Township of Puslinch currently has 1 registered vulnerable occupancy.	Possible	Major	Moderate	<ul style="list-style-type: none"> The majority of the township's existing property stock is comprised of Group C - Residential Occupancies (82.88%) 70.21% of structure fires loss over the five-year period from January 1, 2018, to December 31, 2022, occurred within Group C - Residential Occupancies. In Ontario a high majority of fire deaths and injuries occur in Group C residential occupancies Vulnerable occupants may have limit mobility and require assistance to evacuate in the event of an emergency

Identified Risk	Probability Level	Consequence Level	Risk Level	Rationale
There are 109 Properties Designated or Listed Under Part IV, Section 29 of the Ontario Heritage Act and 102 under Section 27 and 102 under Section 27.	Likely	Moderate	Moderate	<ul style="list-style-type: none"> 109 Properties Designated or listed Under Part IV, Section 29 of the Ontario Heritage Act and 102 under Section 27 and 102 under Section 27 These building are built prior to the adoption of the OBC or OFC
There were 658 emergency calls responded to between 2018 and 2022 pertain to motor-vehicle related incidents, this represents 96.5% of rescue calls and approximately 32.2% of all calls responded to by PFRS during that period.	Almost Certain	Moderate	High	<ul style="list-style-type: none"> 658 emergency calls responded to between 2018 and 2022 pertain to motor-vehicle related incidents, this represents 96.5% of rescue Over 80% of the labour force commutes to a different census division within the province. This is 58.32% more than that of the provincial commuters (23.50%). a large proportion (49.18%) of the labour force begins their commute between the hours of 7 and 9 AM
There is no municipal water infrastructure to provide water supply for firefighting operations.	Almost Certain	Moderate	High	<ul style="list-style-type: none"> Water supply is essential for fire suppression operations No municipal water infrastructure requires alternative sources including tanker shuttles and water bodies such as reservoirs, rivers and lakes There are 152 water reservoir tanks and 13 private hydrants available

Identified Risk	Probability Level	Consequence Level	Risk Level	Rationale
The percentage of the population aged 65 years and older in Puslinch represents 22.92% of the total population. An additional 17.76% of the township's population falls between the age group of 55 and 64, who are aging towards the senior's demographic of 65 years of age and older.	Almost Certain	Moderate	High	<ul style="list-style-type: none"> Canada's aging population has been recognized as one of the most significant demographic trends. Seniors (those 65 years and over) are considered to represent one of the highest fire risk groups across the province based on residential fire death rate (fire deaths per million of population). The percentage of the population aged 65 years and older in Puslinch represents 22.92% of the total population 17.76% of the township's population falls between the age group of 55 and 64, who are aging towards the senior's demographic of 65 years of age and older
Nearly 81.1% of the labour force population commutes to a different census division within the province. This is 57.60% more than that of the provincial commuters (23.50%).	Likely	Moderate	Moderate	<ul style="list-style-type: none"> 81.1% of the labour force commutes to a different census division (1845 people) 49.18% of the labour force begins their commute between the hours of 7 and 9 AM, and therefore the risk of Motor Vehicle Collision (MVC) calls is likely to be greatest during this time
For the period from January 1st, 2018, to December 31st, 2022, the township experienced a total of 47 structure fires of which 70.21% occurred in Group C-Residential Occupancies.	Almost Certain	Moderate	High	<ul style="list-style-type: none"> Fires were responsible for 76.16% of the total fire loss for this period. Over this period, Puslinch experienced similar rates of fires in Group C-Residential Occupancies than that of the province Provincially, civilian fire related injuries, and civilian fire related fatalities occurred in residential occupancies.

Identified Risk	Probability Level	Consequence Level	Risk Level	Rationale
For the period from January 1st, 2018, to December 31st, 2022, group F- Industrial occupancies accounted for 14.89% of the structure fires and 32.63%% of the total structure fire loss.	Likely	Major	High	<ul style="list-style-type: none"> Group F industrial accounts for only 3.49% of the property stock but 14.89 % of the structure fires and 32.63% of fire loss. The township’s percentage of loss is nearly 3 times higher than that of the province.
For the period from January 1st, 2018, to December 31st, 2022, group A – Assembly occupancies accounted for 10.64% of the structure fires and 26.12%% of the total structure fire loss.	Likely	Moderate	Moderate	<ul style="list-style-type: none"> The township’s percentage of fires is more than 3 times higher Fire loss is nearly 7 times higher than that of the province. Assembly occupancies only represent 1.75% of all occupancies in the township

Table 2: Summary of Key Findings

No.	Profile	Key Finding
1	Geography	With Highway 401 bisecting the township, there is an elevated risk of a dangerous goods release that could impact the public and environment.
2	Geography	Bridges, with restrictions or closures, have the potential to reduce the connectivity of the townships road network resulting in the potential for delays in emergency response times.
3	Geography	Bridges, with restrictions or closures, have the potential to reduce the connectivity of the townships road network resulting in the potential for delays in emergency response times.
4	Geography	Grade level rail crossings could create a physical barrier to the connectivity of the township's road network that can potentially result in delays in emergency response times.
5	Building Stock	Data indicates that 61.61% of residential dwellings were constructed post 1980, which increase the possibility of light weight truss construction in these homes.
6	Building Stock	There are two occupancies over 200,000 square feet including a food processing plant and a cold storage company.
7	Critical Infrastructure	The most pertinent risk arising from utilities relates to fallen hydro lines. Between 2018 and 2022 PFRS responded to 36 calls for fallen hydro lines which is 36.7% of all public hazard calls.
8	Critical Infrastructure	There are two registered private airports in the township. There is potential risks related to airplane incidents.
9	Critical Infrastructure	The municipality has identified private and public water reservoir tanks, pump houses and private hydrants throughout the township so to assist with structural firefighting water supply
10	Demographics	The 2021 Census data indicates that children aged 14 and under, represent 14.04% of the township's total population. This represents an important demographic for the purposes of public education. There is only one public elementary school in the township and limits some access to this age group through the school system.
11	Demographics	The number of residential occupants greater than 2 people is 44.23% which is slightly higher than the provincial average (40.80%)

No.	Profile	Key Finding
12	Hazard	<p>The county's 2020 risk assessment identifies the hazards listed below that could impact the delivery of fire protection services:</p> <ul style="list-style-type: none"> • HAZMAT Transportation • Tornado-High Wind • Winter weather • HAZMAT Fixed Site • Cyber Attack • Infectious Disease • Roads and Highways • Rail • Fire Explosion
13	Economic	<p>There are 6 major employers identified that contribute to the economic vitality of the community. If a fire were to occur at one of these facilities it could have an impact on the financial well-being of the township</p>
14	Past Loss & Event History	<p>Over the five-year period from January 1st, 2018, to December 31st, 2022, in 36.07% of incidents, there was a smoke alarm present on the floor of origin and operated. This is lower than that of the province at 44.68%.</p>
15		<p>There was a 32.03% increase in the call volume from 2021 to 2022 primarily related to vehicle collisions and medicals. These trends should be monitored.</p>
16	Past Loss & Event History	<p>Over the five-year period from January 1st, 2018, to December 31st, 2022, 37.66% of the total emergency calls that PFRS responded to were rescue incidents.</p>
17	Past Loss & Event History	<p>Over the five-year period from January 1st, 2018, to December 31st, 2022, 61.70% of the reported fires had an ignition source undetermined which is 35.90% higher than that of the province.</p>
18	Past Loss & Event History	<p>The township has nearly triple the provincial rate of fires that were deemed undetermined.</p>

SECTION 1 INTRODUCTION

1.1 Background

This Community Risk Assessment (CRA) has been developed for the Township of Puslinch to comply with **Ontario Regulation 378/18: Community Risk Assessments (O. Reg. 378/18)**. O. Reg. 378/18 was made under the authority of the Fire Protection and Prevention Act, 1997 (FPPA) and came into effect on July 1, 2019.

It requires all municipalities in Ontario to develop a CRA prior to July 1st, 2024. This regulation also requires municipalities to **“use its community risk assessment to inform decisions about the provisions of fire protection services”**². At this time, this CRA will inform the Fire Master Plan being developed as a companion document for the Township of Puslinch. This CRA is formatted to become a stand-alone document in the future to assist the municipality in sustaining compliance with O. Reg. 378/18 that includes conducting a review of the CRA when necessary, and annually.

In addition to this CRA, the FPPA requires that municipalities must provide fire protection programs that **“must include public education with respect to fire safety and certain components of fire prevention and provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances”**³. The recent introduction of O. Reg. 378/18 is now a core component of developing an in-depth analysis of a community’s fire related risks through a comprehensive analysis of nine mandatory profiles.

The FPPA also assigns duties to the Office of the Fire Marshal (OFM) to **“advise municipalities in the interpretation and enforcement of this Act and the regulations”**⁴. The OFM has developed Technical Guideline-02-2019 (TG-02-2019) to assist municipalities and fire departments in the process to develop a CRA and to utilize the completed CRA to inform the municipality’s decisions about complying with the FPPA.

At a minimum, the regulation outlines a standard set of information profiles that must be considered when conducting a community risk assessment. The Guideline provides suggestions as to how to record and analyze the data/information and provides sample worksheets to assist municipalities. A leading practice in Ontario would see the Township of Puslinch’s Community Risk Assessment report maintained as a living document by the Puslinch Fire Services. This would include regular (e.g. annual) review and updates to the CRA’s data and information.

² Ontario Regulation 378/18, Community Risk Assessments, Mandatory Use, Section 1(b)

³ Fire Protection and Prevention Act, 1997 Part II Responsibility for Fire Protection Services, Section 2.1 (a) (b)

⁴ Fire Protection and Prevention Act, 1997, Part III Fire Marshal, Section 9.2 (b)

The methodology and analysis utilized to develop this CRA has been directly informed by TG-02-2019 that recognizes the value of understanding the fire risk within a community, and the importance of developing fire risk reduction and mitigation strategies in addition to providing fire suppression services.

1.2 Purpose

The primary purpose of this CRA is twofold:

1. To develop a Community Risk Assessment for the Township of Puslinch to identify the fire related risks within the community and comply with O. Reg. 378/18; and
2. To utilize the risk conclusions of the Community Risk Assessment to inform comprehensive analyses of the existing, and future fire protection needs of the Township of Puslinch.

1.3 Methodology

In addition to TG-02-2019, the methodology applied to develop this CRA has been informed by other current industry standards and best practices. These include:

1. OFM Comprehensive Fire Safety Effectiveness Model: Fire Risk Sub-Model
2. OFM Public Fire Safety Guideline (PFSG) 04-40A-03: Simplified Risk Assessment
3. NFPA 1300, Standard on Community Risk Assessment and Community Risk Reduction Plan Development (2020 Edition)
4. NFPA 1730, Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations (2019 Edition)
5. Vision 20/20 Community Risk Assessment: A Guide for Conducting a Community Risk Assessment (Version 1.5, 2016)
6. Vision 20/20 Community Risk Reduction Planning: A Guide for Developing a Community Risk Reduction Plan

As required by O. Reg. 378/18, this CRA includes a comprehensive analysis of the nine mandatory profiles including:

- i. Geographic Profile
- ii. Building Stock Profile
- iii. Critical Infrastructure Profile
- iv. Demographic Profile
- v. Public Safety and Response Profile
- vi. Community Services Profile
- vii. Hazard Profile
- viii. Economic Profile
- ix. Past Loss and Event History Profile

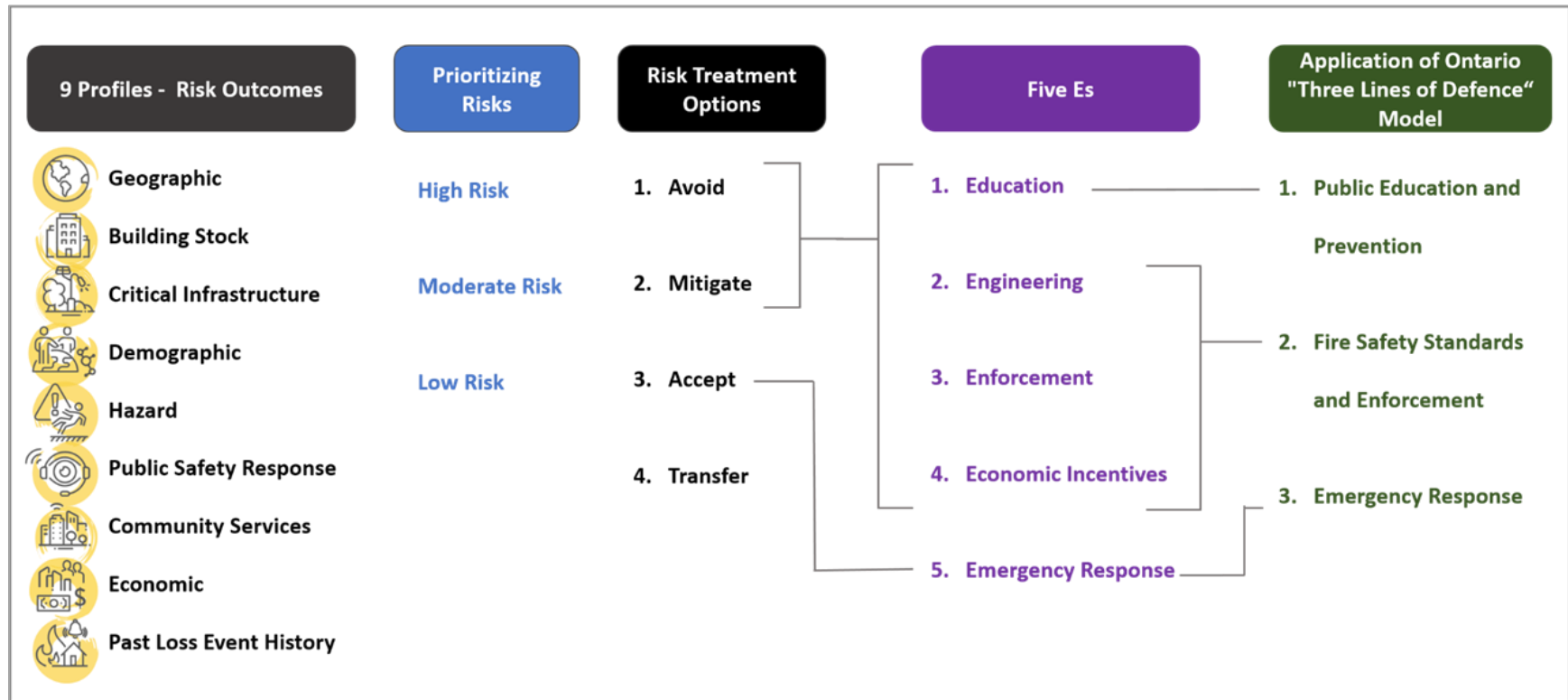
Within each of the nine profiles, there are several sub-topics examined. These sub-topics are illustrated in Figure 1. These profiles are based on an analysis of several sources of information, including data provided by the Township of Puslinch, Puslinch Fire and Rescue Services (PFRS), Statistics Canada, the OFM, and desktop research.

The mandatory profile analyses result in a series of risk related conclusions that will be used to inform service levels or other strategies in alignment with the three lines of defense through a risk treatment process. These are referred to as a '**key finding**' or an '**identified risk.**' Those findings referred to as an 'Identified Risk' are taken through a risk assignment process to assist with risk prioritization as referred to within TG-02- 2019. In specific circumstances, being those that involve additional jurisdictional or legislative considerations, a risk-related conclusion is referred to as a Special Consideration. All risk-related conclusions will be taken through a risk treatment process and aligned with the three lines of defense in order to inform decision making. Figure 2 illustrates the risk treatment process.

Figure 1: Community Risk Profiles and Sub-topics



Figure 2: Risk Treatment Process



The analysis presented within this CRA has been informed by a wide range of data sources. Where applicable, all numerical data has been rounded to the nearest 1/100 (hundredth) decimal point to provide consistency in the analysis. As a result, the numerical totals presented within each analysis, although stated as reflecting 100%, may actually show a minor variance based on the use of only the nearest 1/100 (hundredth) decimal points.

SECTION 2

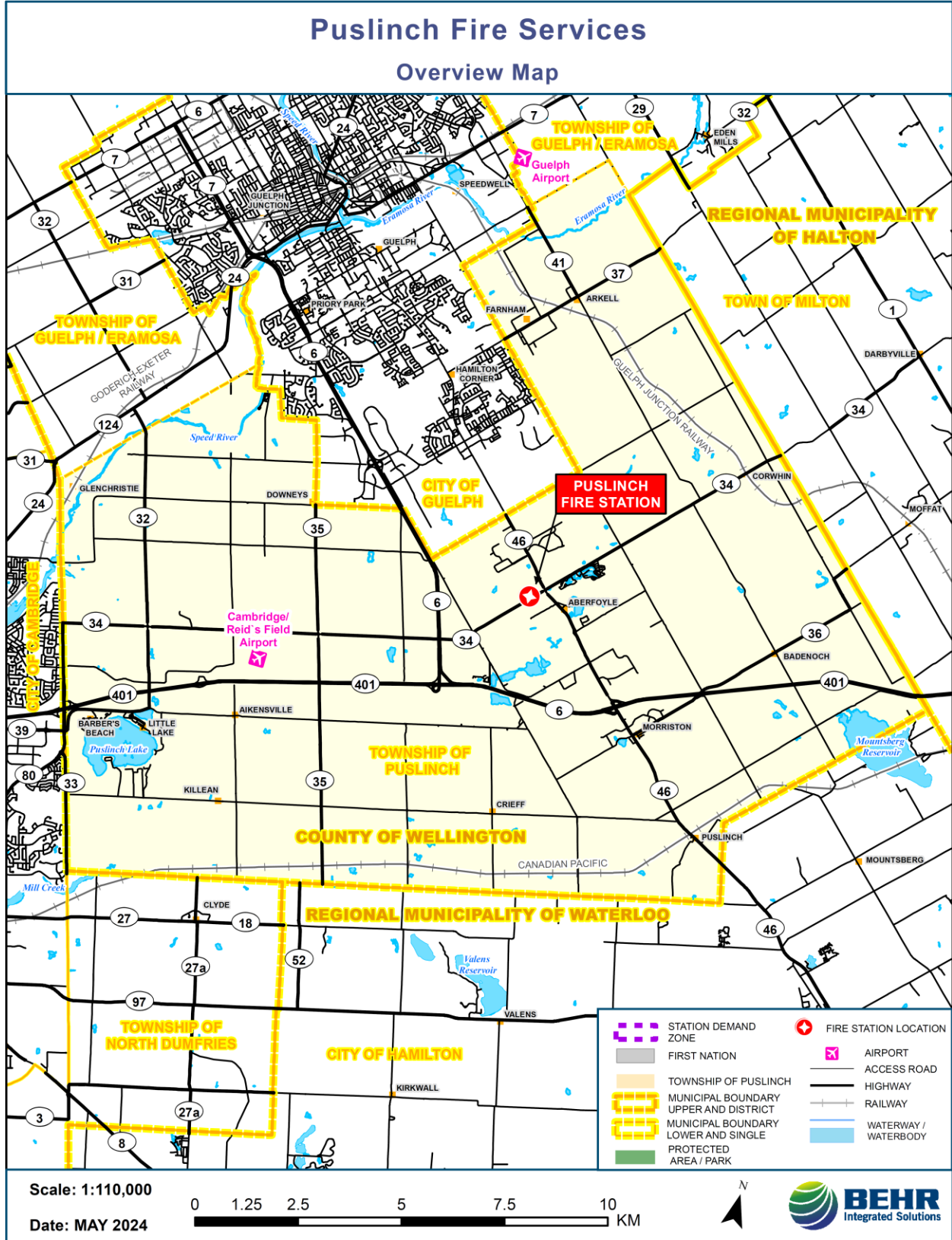
GEOGRAPHIC PROFILE

The geographic profile of a community is an assessment of the physical features of a community, such as highways, waterways, railways, bridges, landforms, quarries, and wildland-urban interfaces, that may present inherent risks to the community and affect emergency services' access to incidents and response capabilities. This section contains a detailed analysis of these geographical features for the Township of Puslinch to assist in determining the type and level of fire protection services needed for the community and any potential impacts these features may pose on service delivery.

2.1 Geographic Overview

The Township of Puslinch, ON, spans an area of 214.62 km², characterized by rural landscapes featuring fertile farmland, spring water and aggregate mining. According to the 2021 census, it has a population of 7,944 people, resulting in a population density of around 37 individuals per km². The municipality comprises 12 rural hamlets, including Aberfoyle, Aikensville, Arkell, Badenoch, Crieff, Glenn Christie, Killean, Paddock's Corners, Morriston, Corwhin, Downey, Puslinch, and Puslinch Lake. The Township of Puslinch is uniquely situated between three major urban centres: the City of Guelph, the City of Cambridge and the City of Hamilton. Its location near the Greater Toronto Area ensures extensive connectivity, facilitated by several highways, notably Highway 401, a major east-west route passing through the central part of the township and Highway 6, running north-south through its core. Situated 75 km from downtown Toronto, 60 km from Pearson International Airport, and 35 km from downtown Kitchener, Puslinch serves as the southern boundary for the City of Guelph and the eastern boundary for the City of Cambridge.

Map 1: Township of Puslinch Overview Map



2.1.1 Road Network

Road networks and transportation systems provide fire services with access throughout a community when responding to emergency calls. The road network is how fire apparatus travel through a municipality; therefore, it is valuable to consider areas where there may be a lack of connectivity due to road network design, as well as other natural barriers (e.g. rivers, lakes, etc.) or human-made barriers (e.g. rail lines, traffic calming measures, etc.). Road networks can also contribute to vehicle congestion, causing delays in emergency response travel times. Where possible, the township's transportation planning processes should include PFRS as a stakeholder to provide consideration for emergency services' needs and challenges relating to the road network, traffic congestion, and traffic calming and related topics.

Roads are also important from a risk and emergency response perspective because motor vehicle-related incidents are often a common source of emergency call volume within a municipality.

The Township of Puslinch oversees a network of local roads totaling 179.10 kilometers, comprising of hot mix asphalt and gravel road surfaces. Of this total:

- 128 kilometers (71.50%) consist of asphalt roads
- 51.10 kilometers (28.50%) are gravel roads.

According to the township's Road Management Plan (2023), 88% of the paved roadways are in fair or greater condition, with 12% in poor condition. The gravel roadways have 83% in fair or better with 17% in poor condition. The township takes a lifecycle management approach to road maintenance and improvements and employs strategic rehabilitation as needed rather than wait for roads to deteriorate to the point of requiring replacement.

Wellington County has responsibility for County Roads.

The province oversees Hwy 401 and Hwy 6 bisecting the township east/west and north/south respectively.

The network of essential highways links the township to neighboring regions, Kitchener, Guelph, Hamilton and Toronto. Highway 401 serves as a primary route, supported by highway 6. Since all provincial highways are designated dangerous goods routes, traffic carrying various hazardous materials passes through the township regularly, highlighting the importance of safe transportation.

Although unlikely, an incident involving a dangerous goods release is possible along these highways. Incidents involving roads and highways, as well as incidents involving dangerous goods was listed as a moderate threat on the township's 2020 Hazard Identification and Risk Assessment.

2.1.2 Bridges and Culverts

Bridges must be considered when conducting a CRA, as they can create physical barriers to emergency responses and negatively impact response times. An apparatus may face restrictions from crossing, such as load limitations, or roadway connectivity may be disrupted if a bridge is out of service for maintenance or repairs. Additionally, incidents occurring on a bridge pose increased risks, including spills, congestion, and difficulty accessing the scene. Such incidents may also necessitate specialized skills and equipment for slope rope rescue operations.

According to the township's Asset Management Plan (2019), there are 7 bridges (excluding pedestrian bridges) and 16 culverts. Among the bridges, 4 (57.1%) are considered to be in good or fair condition, while 3 (42.9%) are in poor condition. As for the culvert system, 7 (43.75%) considered good, 3 (18.75%) fair, and 6 (37.50%) in poor condition.

2.1.3 Rail

At-grade rail crossings, intersections where a road crosses a rail line at the same level, can cause delays in emergency response by obstructing roadway access and pose a threat of dangerous collisions with motor vehicles. Moreover, the physical barriers created by rail infrastructure, such as rail yards or the placement of tracks, grade separations, and level crossings, can significantly impact emergency services travel times and overall response times throughout a community. Additionally, the frequency of trains passing through a community and the nature of goods they transport pose varying degrees of risk, including the potential for derailments and releases of hazardous materials.

The Guelph Junction Railway, owned by the City of Guelph, operates 38.6 km of track that runs from near Campbellville, ON, extending north to Guelph's northwest industrial park. Passing through the Northeastern region of Puslinch, it traverses primarily rural farming lands, intersecting with the local road network at various level crossings. This railway is used to transport industrial products such as grain, plastics and lumber and interconnects with the Canadian Pacific and Canadian National railways.

Running along the southern border of Puslinch, the Canadian Pacific Railway operates through predominantly rural farmlands, featuring multiple level crossings. Notably, it passes over the Mountsberg Reservoir within the Mountsberg Conservation Area in the township's southeastern section, which falls within the City of Hamilton's jurisdiction. These railways transport large containers of dangerous goods, although the likelihood of a derailment and subsequent release of hazardous materials is low, such an incident could have significant repercussions, necessitating a specialized emergency response.

The transportation of dangerous goods along these routes, especially through populated areas, poses risks to public safety. Moreover, the rail crossing over the Mountsberg Reservoir raises concerns about potential environmental impacts and contamination of waterways and surrounding ecosystems. Establishing information-sharing practices between railway operators and emergency responders can enhance awareness of the types and frequencies of dangerous goods being transported through the region.

The Canadian National Railway operates in a small area in the Northwest section of the Township (northwest of the Speed River). These tracks are utilized for local rail use for switching of freight cars to local industries in Preston area.

2.2 Waterways and Marinas

Waterways in the township, including Puslinch Lake, Mountsberg Reservoir, and Mill Creek, present natural hazards such as flooding, ice jams, and erosion, necessitating swift evacuations and rescue responses. Responders require specialized technical rescue training and equipment to handle emergencies, especially in water bodies used for recreational activities, which see heightened activity during the summer season. Puslinch Lake, the largest kettle lake in North America, sees many recreational activities in the summer months including boating, fishing, and swimming.

Waterfront activities increase the risk of an incident both on the water and along the shorelines. PFRS reported a total of 2 water and/or ice rescues over the period of January 2018 – December 2022.

2.3 Geographic Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	
Identified Risk	The road network predominately Hwy 401 bisecting the township, is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires.
Identified Risk	There are several rail lines within the Township of Puslinch that present a risk related primarily to the movement of goods.
Identified Risk	There is an increased risk of ice and water rescue at Puslinch Lake, Mountsberg Reservoir and Mill Creek due to recreational activity on the water.
Key Finding	
Key Finding	With Highway 401 bisecting the township, there is an elevated risk of a dangerous goods release that could impact the public and environment.
Key Finding	Bridges, with restrictions or closures, have the potential to reduce the connectivity of the townships road network resulting in the potential for delays in emergency response times.
Key Finding	There are risks associated with the potential for interactions between rail traffic and vehicular traffic or pedestrian traffic within the township.
Key Finding	Grade level rail crossings could create a physical barrier to the connectivity of the township’s road network that can potentially result in delays in emergency response times.

SECTION 3 BUILDING STOCK PROFILE

As referenced in **O. Reg. 378/18**, the building stock profile assessment includes an analysis of the types and uses of the building stock within the township. Important considerations include the number, type, and use of buildings, as well as any building-related risks known to the fire service. There are potential fire risks associated with different types or uses of buildings, depending on the presence or absence of fire safety systems and equipment at the time of construction and maintenance thereafter. This section examines these building characteristics within the township.

3.1 Ontario Building Code Occupancy Classifications

OFM TG-02-2019 encourages fire services to consider the potential fire-related risks associated with different building occupancy types and uses. This involves assessing the prevalence of each occupancy classification within a community and the presence of fire and life safety systems and equipment. The Ontario Building Code (OBC) categorizes buildings by major occupancy classification, providing a recognized definition and baseline for developing a community risk assessment, as outlined in TG-02-2019.

The OBC consists of six major building occupancy classifications (groups), further defined by division within each group. The OBC major classification groups and divisions are detailed in Table 3.

Table 3: OBC Major Occupancy Classifications

Group	Division	Description of Major Occupancies
A	1	Assembly occupancies intended for the production and viewing of the performing arts
A	2	Assembly occupancies not elsewhere classified in Group A
A	3	Assembly occupancies of the arena type
A	4	Assembly occupancies in which occupants are gathered in the open air
B	1	Detention occupancies
B	2	Care and treatment occupancies
B	3	Care occupancies
C	All divisions	Residential occupancies
D	All divisions	Business and personal services occupancies
E	All divisions	Mercantile occupancies
F	1	High-hazard industrial occupancies
F	2	Medium-hazard industrial occupancies
F	3	Low-hazard industrial occupancies

Table Source: Ontario Building Code⁵

⁵ Ontario Regulation 332/12: Building Code, Part III Fire Protection, Occupant Safety and Accessibility, Section 3.1.2.1

3.2 OFM Fire Risk Model Occupancy Classification

The Fire Risk Sub-model developed by the OFM utilizes major group classifications (i.e., Group A, B, C, D, E, F) without the detailed division classifications found in the OBC. This approach enables comparative assessment of buildings within a community by major occupancy groups, ensuring consistent and recognized definitions for each major occupancy type. Moreover, it allows for further analysis of specific occupancy groups. Occupancies within a group can be individually assessed, subject to any site-specific hazards or concerns, and included within the broader scope of the CRA as needed.

The OFM Fire Risk Sub-Model OBC classifications, definitions, associated fire-related risks, and potential proactive measures to mitigate risk within these occupancy types are presented in Table 4.

Table 4: OFM Fire Risk Sub-Model Major Building Classifications

OBC Occupancy Classification	OFM Fire Risk Sub-Model Major Building Classifications	OFM Definitions	OFM Fire Related Risks	Proactive Measures for Reducing Risk
Group A	Assembly Occupancies	An assembly occupancy is defined as one that is used by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes or for the consumption of food or drink.	Assembly buildings are often occupied by a large number of people and may contain high quantities of combustible furnishings and decorations. Occupants are generally unfamiliar with the building’s exit locations and may not know how to react in the event of an emergency. Low light conditions are inherent to some of these occupancies and can contribute to occupant confusion during an evacuation. Numerous examples exist of disastrous events that have occurred throughout the world, resulting in multiple fire fatalities in these occupancies. Therefore, these facilities warrant special attention. Accordingly, it is paramount to ensure that maximum occupant load limits are not exceeded, detection is available, an approved fire safety plan is in place and adequate unobstructed exits/means of egress are readily available.	<ul style="list-style-type: none"> • Regular fire prevention inspection cycles • Automatic fire detection and monitoring systems • Approved fire safety plan and staff training • Pre-planning by fire suppression staff

OBC Occupancy Classification	OFM Fire Risk Sub-Model Major Building Classifications	OFM Definitions	OFM Fire Related Risks	Proactive Measures for Reducing Risk
Group B	Care or Detention Occupancies	<p>A care or detention occupancy means the occupancy or use of a building or part thereof by persons who:</p> <ul style="list-style-type: none"> • Are dependent on others to release security devices to permit egress; • Receive special care and treatment; or, • Receive supervisory care. 	<p>In addition to the presence of vulnerable occupants, these occupancies may contain quantities of various flammable/combustible liquids and gases, oxidizers and combustible furnishings that will impact the intensity of the fire if one should occur. The evacuation or relocation of patients, residents, or inmates to an area of refuge during an emergency poses additional challenges in these facilities. It is essential to ensure that properly trained staff is available and prepared to quickly respond according to the facility's approved fire safety plan.</p>	<ul style="list-style-type: none"> • Regular fire prevention inspection cycles • Automatic fire detection and monitoring systems • Approved Fire Safety Plan and staff training • Pre-planning by fire suppression staff
Group C	Residential Occupancies	<p>A residential occupancy is defined as one that is used by persons for whom sleeping accommodation is provided but who are not harboured or detained to receive medical care or treatment or are not involuntarily detained.</p>	<p>In Ontario, residential occupancies account for 70% of all structural fires and 90% of all fire deaths. Residential units that are located in multi-unit buildings, including secondary units in a house, pose additional risks due to egress and firefighting accessibility challenges.</p>	<ul style="list-style-type: none"> • Home smoke alarm programs • Public education programming including home escape planning • Retro-fit and compliance inspection cycles for OFC compliance • Pre-planning by fire suppression staff • Fire Drills as required by the OFC

OBC Occupancy Classification	OFM Fire Risk Sub-Model Major Building Classifications	OFM Definitions	OFM Fire Related Risks	Proactive Measures for Reducing Risk
Group D	Business & Personal Services	A business and personal services occupancy is defined as one that is used for the transaction of business or the rendering or receiving of professional or personal services.	Many office buildings are occupied by a large number of people during business hours and contain high combustible content in the form of furnishings, paper, books, computers, and other office equipment/supplies. Those that are located in a high-rise building pose additional risks due to egress and firefighting challenges.	<ul style="list-style-type: none"> • Regular fire prevention inspection cycles to maintain OFC compliance • Targeted fire prevention inspections for OFC retrofit compliance • Staff training in fire prevention and evacuation procedures • Public education programs • Pre-planning by fire suppression staff
Group E	Mercantile	A mercantile occupancy is defined as one that is used for the displaying or selling of retail goods, wares, or merchandise.	Larger mercantile occupancies such as department stores are generally occupied by a large number of people and contain high quantities of combustibles in the form of merchandise, furnishings and decorations. Customers may be unfamiliar with the building's exit locations and not know how to react in the event of an emergency. Additional hazards will be present in "big box" type stores that sell and store large volumes of combustible materials in bulk. These stores generally have similar properties to industrial warehouses with the additional hazard of higher number of occupants.	<ul style="list-style-type: none"> • Regular fire prevention inspection cycles • Automatic fire detection and monitoring systems • Approved Fire Safety Plan and staff training • Pre-planning by fire suppression staff

OBC Occupancy Classification	OFM Fire Risk Sub-Model Major Building Classifications	OFM Definitions	OFM Fire Related Risks	Proactive Measures for Reducing Risk
Group F	High/Medium/Low Hazard Industrial	<p>An industrial occupancy is defined as one for the assembling, fabricating, manufacturing, processing, repairing, or storing of goods and materials. This category is divided into:</p> <ul style="list-style-type: none"> • low hazard (F3) • medium hazard (F2) • high hazard (F1) based on its combustible content and the potential for rapid fire growth. 	<p>These occupancies constitute a special fire hazard due to high levels of combustible, flammable or explosive content and the possible presence of oxidizing chemicals and gases. Processing and other activities that involve various ignition sources often occur in these occupancies. The lack of security during non-operational hours also makes them susceptible to incendiary type fires. Industrial fires generally involve large quantities of combustible materials and potentially result in large financial losses (e.g. building, contents) and significant damage to the community's environment and economic well-being (e.g. loss of jobs).</p>	<ul style="list-style-type: none"> • Regular fire prevention inspection cycles • Staff training in fire prevention and evacuation • Public education • Pre-planning by fire suppression staff • Installation of early detection systems (e.g., fire alarm systems, heat detectors) • Installation of automatic sprinkler systems • Approved Fire Safety Plans • Preplanning by fire suppression staff • Fire extinguisher training

3.2.1 Township of Puslinch Existing Major Building Stock Classification Summary

Analysis of the township's major building occupancy types was conducted using data from the 2021 census⁶. Table 5 provides a summary of the township's existing major building occupancy classifications.

The majority of the township's existing property stock is comprised of Group C - Residential Occupancies (82.88%), and 82.29% of those are single-detached homes. The second largest occupancy type within the township is Other (farm) 11.06% of the township's property stock (336 farm buildings)..

Table 5: Existing Major Building Classification Summary

OBC Occupancy Classification	OFM Fire Risk Sub-Model Major Building Classifications	Number of Occupancies	Percentage of Occupancies
Group A	Assembly Occupancies	53	1.75
Group B	Care or Detention Occupancies	1	0.03
Group C	Residential Occupancies - Total	2517	82.88
Group C	Single-detached	2499	82.29
Group C	Semi-detached	14	0.46
Group C	Row	1	0.03
Group C	Apartment < 5 Storeys	3	0.10
Group C	Apartment > 5 Storeys	0	0.00
Group D	Business & Personal Services	13	0.43
Group E	Mercantile	11	0.36
Group F (all divisions)	Industrial Occupancies	106	3.49
Division F1*	High Hazard	0	0.00
Division F2*	Medium Hazard	102	3.36
Division F3*	Low Hazard	4	0.13
Other	Not classified in OBC- Farm	336	11.06
Other	Not classified in OBC - Government	0	0.00
Total		3037	100

*Source for breakdown is MPAC. Numbers may differ from stats Canada.

⁶ Government of Canada, Statistics Canada. (2023, November 15). Profile table, Census Profile, 2021 Census of Population - Puslinch, Township (TP) [Census subdivision], Ontario. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=Puslinch&DGUIDlist=2021A00053523001&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0>

Consistent with most other municipalities in Canada, Group C - Residential Occupancies represent the most prominent type of building occupancy type. Standard incident reporting from the OFM⁷ indicates in the Township, 70.21% of structure fires loss over the five-year period from January 1, 2018, to December 31, 2022, occurred within Group C - Residential Occupancies. It is important to note that provincially 89.68% of the civilian fire related injuries, and 94.07% of the civilian fire related fatalities occurred in Group C – Residential. In the Township there were a total of 2 fire related injuries reported over that same period and 1 was in a residential occupancy. Building Age and Construction

The OBC was adopted in 1975, and the Ontario Fire Code (OFC) was adopted in 1981. Together, these two codes have provided the foundation for eliminating many inconsistencies in building construction and maintenance that existed before their adoption. They ensure uniform building construction and maintenance standards for all new building projects and provide specific fire and life safety measures based on the building's use.

Examples of fire and life safety issues addressed by the codes include:

- Occupancy
- Exits/means of egress (including signs and lighting)
- Fire alarm and detection equipment
- Fire service access
- Inspection, testing, and maintenance

In many cases, the age and construction of a building can be directly associated with whether it was constructed before or after the introduction of these codes. For instance, during the late 19th and early 20th centuries, balloon frame construction was common, allowing exterior walls to extend continuously from the main floor to the roof, often through multiple stories. This construction method facilitated unobstructed fire and smoke spread from the basement to the roof, resulting in rapid fire propagation without occupants' or firefighters' knowledge. The OBC implemented requirements to change this construction method and introduced additional measures to mitigate fire spread through wall cavities.

Similarly, the new codes recognize modern construction techniques such as lightweight wood frame construction, including the use of wood trusses and laminated veneer lumber. While these techniques and materials enhance construction efficiency and cost-effectiveness, they pose different challenges to firefighters compared to historical methods. For example, lightweight wood frame construction relies on structural components working together, so if one component fails due to exposure to high heat or fire, the entire roof system may fail. Lightweight construction is discussed further, later in this section.

Table 6 lists fire growth rates measured by the time it takes for a fire to reach one-megawatt (MW). Fire growth rate varies depending on the flammability of materials and contents within the building, introducing variances into the presented growth rates.

⁷ Puslinch SIR- Municipal Fires: Overview Property Class, Injuries, Cause, Ignition Source (2018-2022)

Table 6: Time to Reach 1 MW Fire Growth Rates in the Absence of Fire Suppression⁸

Fire Growth Rate	Time in Seconds (Minutes) to Reach 1 MW	Time in Seconds (Minutes) to Reach 2 MW
Slow	600 seconds (10 minutes)	848 seconds (14.13 minutes)
Medium	300 seconds (5 minutes)	424 seconds (7.07 minutes)
Fast	150 seconds (2.5 minutes)	212 seconds (3.53 minutes)

The impact of increasing fire growth rates is directly related to the time lapse from ignition to flashover, where combustible items within a given space reach a temperature high enough for them to auto-ignite. Figure 3 (below) illustrates the exponential increase in fire temperature over time and the potential for property loss and loss of life.

Figure 3: Fire Propagation Curve

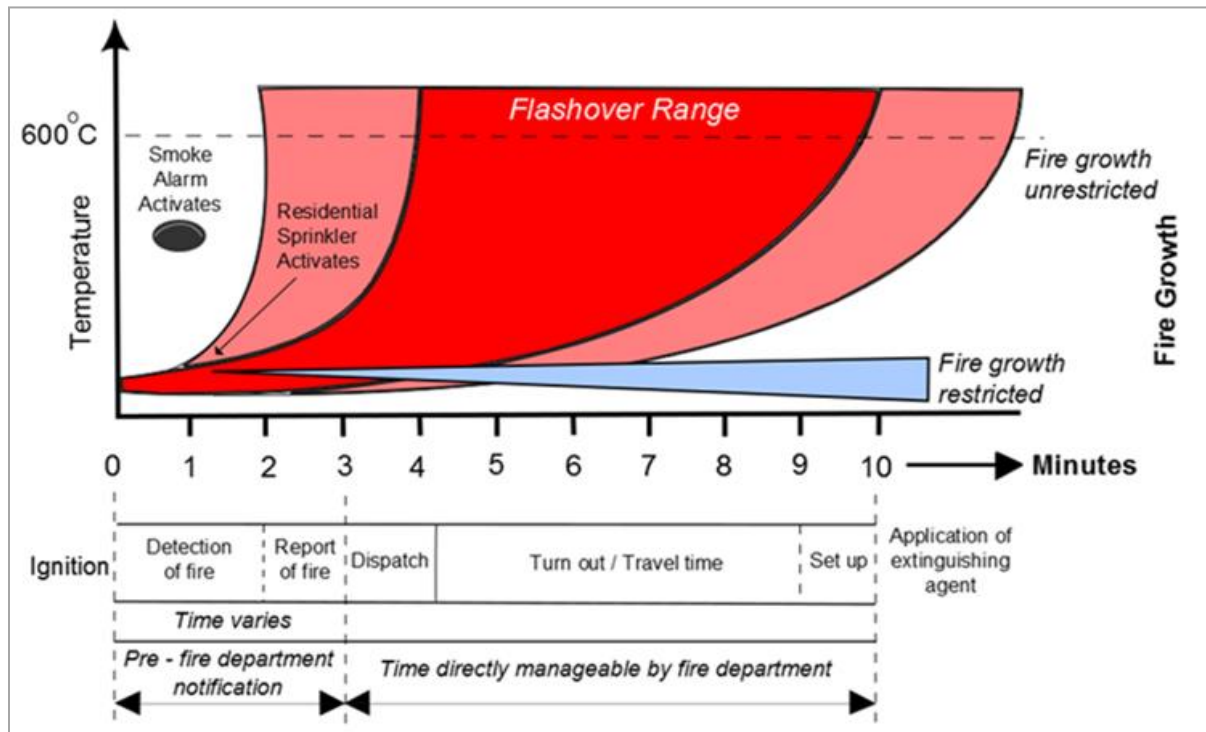


Figure Source: Fire Underwriters Survey "Alternative Water Supplies for Public Fire Protection: An Informative Reference Guide for Use in Fire Insurance Grading" (May 2009) and NFPA "Fire Protection Handbook" (2001)

Understanding building construction and materials is crucial for firefighters to determine the appropriate fire attack strategies and safety measures needed. Therefore, knowledge of a building's age may directly correlate with the construction methods and materials used, making building age and construction a vital component of this CRA.

⁸ Office of the Fire Marshal and Emergency Management. (2017, May). Operational Planning: An Official Guide to Matching Resource Deployment and Risk Workbook.

Table 7 provides a summary of the age of the building stock within the township prior to the adoption of the new codes (OBC and OFC). This analysis suggests that 38.39% of the township's building stock was constructed before 1981, preceding the adoption of the 1981 OFC. While this represents a significant fire risk within the community, it is comparatively lower (10.85%) than the provincial average.⁹

Table 7: Period of Construction of all Dwellings – Township of Puslinch and Province of Ontario¹⁰

Period of Construction	Puslinch Dwellings	Puslinch % of Dwellings	Ontario Total Number of Dwellings	Ontario % of Dwellings
Prior to 1960	565	19.72	1,247,430	22.72
1961-1980	535	18.67	1,456,110	26.52
1981-1990	285	9.95	711,940	12.97
Total prior to 1991	1,385	48.34	3,415,480	62.20
1991-2000	495	17.28	644,080	11.73
2001-2005	315	10.99	385,045	7.01
2006-2010	250	8.73	348,760	6.35
2011-2015	170	5.93	328,735	5.99
2016-2021	250	8.73	369,095	6.72
Total 1991-2021	1,480	51.66	2,075,715	37.80
Total Dwellings*	2,865	100.00	5,491,200	100.00

**Total occupied private dwellings 25% sample data*

3.2.2 Lightweight Construction

As of February 25, 2022, the OFM has directed that available information documenting the presence and location of truss and lightweight construction systems, referred to as lightweight construction, must inform pre-planning activities by fire departments. Buildings with lightweight construction pose a safety risk to responding firefighters due to their susceptibility to premature failure and rapid collapse under fire conditions. Pre-plans provide responding fire departments with awareness of the presence of lightweight construction, enabling proactive fire response strategies to protect the safety of firefighters.

⁹ Ibid

¹⁰ Government of Canada, Statistics Canada. (2023, November 15). Profile table, Census Profile, 2021 Census of Population - Puslinch, Township (TP) [Census subdivision], Ontario. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=Puslinch&DGUIDlist=2021A00053523001&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0>

The use of lightweight truss construction in residential homes became predominate in the 1980's. It should be considered that all residential dwellings (single detached) should be considered to be built with lightweight construction. The township should ensure to identify all buildings with lightweight construction, primarily those constructed using wood framing. It is anticipated that the township will collect and document information on buildings with lightweight construction to update the CRA during the annual review and updating process. Furthermore, it is expected that the PFRS will integrate this information into their pre-planning program.

3.3 Building Density and Exposure

NFPA 1730 - Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations (2019 Edition) highlights building density as a crucial factor for understanding potential fire risk, particularly in core areas like downtown districts. Closely spaced buildings, typical of historic downtown core areas and newer infill construction, may pose a higher risk of fire spreading to adjacent exposed buildings. In densely built-up areas with minimal building setbacks, a fire originating in one building could extend to neighboring structures due to their proximity. Moreover, the close proximity of buildings can impede firefighting operations by limiting access for firefighters and equipment.

The adoption of the OBC and the OFC has required spatial separations and the use of fire-retardant materials and construction methods to mitigate fire risks. Basic firefighting practices prioritize the protection of exposures as a primary function and consideration during fire and emergency service responses. As mentioned earlier, older developments as well as new infill projects may present increased exposure risks due to higher building density.

Table 8 below illustrates a comparison of the township's existing Group C – residential building stock with that of the province, based on the 2021 Statistics Canada Census.

Table 8: Group C Residential Building Stock Comparison

Dwelling Type	Puslinch	%	Ontario	%
Single Detached	2,680	94.20	2,942,990	53.59
Semi-Detached	10	0.35	303,260	5.52
Row House	10	0.35	505,265	9.20
Apartment or flat in a duplex	20	0.70	181,030	3.30
Apartment < 5 Storeys	90	3.16	548,785	9.99
Apartment > 5 Storeys	0	0.00	984,665	17.93
Other single-attached house	5	0.18	10,220	0.19
Moveable dwelling	30	1.05	14,985	0.27
Total	2,845	100.00	5,491,200	100.00

Table Source: 2021 Census, Statistics Canada¹¹

This analysis highlights that the township has a higher percentage of single detached houses (94.20%) compared to that of the province at 53.59%. Puslinch currently has a much lower percentage of mid- and low-rise occupancies as compared to the province, however as described in the next section, the planned growth for this township will see a 25.54% increase in population by 2041.¹²

3.4 Building Growth

A snapshot of development in the Township of Puslinch over the next decade, according to the County of Wellington 2024 Official Plan, projects a population growth of 9,565 or 16.94% by 2036. This growth is identified in the communities of Aberfoyle and Mossiston to be minor, with the majority occurring outside these urban centres. Specifically, growth outside these urban centres represents 90% of the population growth and 89% of total household growth.

This additional growth does not appear significant enough to impact the overall community risk to the Township.

¹¹ Government of Canada, Statistics Canada. (2023, November 15). Profile table, Census Profile, 2021 Census of Population - Puslinch, Township (TP) [Census subdivision], Ontario. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=Puslinch&DGUIDlist=2021A00053523001&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0>

¹² 2019 Puslinch Development Charges Study

3.5 Building Height and Area

3.5.1 Building Height

The building height is a characteristic that can make firefighting operations difficult. Several factors contribute to these challenges, including density and the number of occupancies, vertical stacking that allows for vertical air movement, and the movement of smoke, heat, and fire upwards. Additionally, access for firefighting on upper floors, including suppression activities, rescue, and evacuation, can be problematic.

It is important to note that terms like "high rise," "tall buildings," and "high buildings" have various meanings. For the purposes of developing this Community Risk Assessment (CRA), the Ontario Building Code (OBC) and Ontario Fire Code (OFC) definitions have been used. These codes define a high-rise as a building 18 metres (59 feet) above grade or six storeys.

Currently, the township does not have buildings defined by the OBC as high-rise buildings. However, if future growth indicates plans for such buildings, the fire service must be involved early in the planning stages.

3.5.2 Building Area

Building area can pose comparable challenges to those present in taller buildings. Horizontal travel distances, rather than vertical, can lead to extended response times for firefighters attempting rescue or fire suppression activities. Large buildings, such as industrial plants, warehouses, department stores, and big box stores, often contain significant volumes of combustible materials. Many of these occupancies also use high rack storage, making fires within these systems difficult to access and increasing the risk of collapse, which can endanger firefighter safety.

As part of the data collection process, township staff provided building footprint data for the Township of Puslinch. The information presented in Table 9 indicates that the majority of the building stock (56.57%) has a total building area (footprint) of 2,500 square feet or less. This summary also shows that 0.23% (7 buildings) have an area greater than 50,000 square feet, or approximately 4,655 square metres. Notably, there are two buildings over 200,000 square feet: a food processing plant at 101 Wellington Road and a cold storage company at 7468-7474 McLean Road.

Table 9: Building Area

Building Size	# of Buildings	% of all Buildings
0-2,499	1718	56.57
2,500-4,999	1067	35.13
5,000-9,999	179	5.89
10,000-19,999	40	1.32
20,000-49,999	26	0.86
>50,000	7	0.23
Total	3037	100

3.6 Potential High-Fire Risk Occupancies

Potential high-fire risk occupancy is another factor to consider within a township's building stock. High fire risk can be associated with a combination of factors, including building density (exposure), building age, and construction. Fuel load refers to the quantity and type of combustible content and materials within a building, encompassing combustible contents, interior finishes, and structural materials. Combustible content typically poses the greatest potential fire loss risk, as higher fuel loads increase the likelihood of ignition and severity of fires.

In many communities, large amounts of fuel load can be concentrated within a single occupancy, such as a building supply business, a large multi-unit residential building, or a historic downtown core. This section of the CRA will primarily focus on fuel load for industrial occupancies.

3.6.1 Fuel Load Concerns

Buildings with potential fuel load concerns are identified in Table 10. These include buildings housing materials such as oxidizers and flammable and combustible liquids and chemicals.

Table 10: Potential High Fire Risk Occupancies

Facility Name/ Organization	Address	Risk Description
HP Polymers	32 Kerr Crescent	Flammable liquid manufacturer
Patene Building Supplies Ltd.	24 Kerr Crescent	High fire load, building materials
Royal Canin	100 Beiber Road	Large, manned facility
Maple Leaf	McLean Road	Large warehouse, large ammonia storage
Blue Triton	101 Brock road south	Large warehouse, large manufacturer
Mammoet	7504 McLean Road	Expensive inventory

In addition to ensuring compliance with the requirements of the OBC and the OFC, fire services can implement operational strategies to address fuel load concerns. These strategies include regular fire inspection cycles and pre-planning of buildings of this nature, which provide an operational advantage in the event of a fire.

3.7 Occupancies with Potential High-Fire Safety Risk

Fire risk affects individuals differently, and some people are more vulnerable to fire injury or fatality than others. These vulnerable individuals may be unable to self-evacuate during a fire or require assistance in their evacuation efforts. Identifying the location and number of vulnerable individuals or occupancies within the community offers insight into the magnitude of this demographic within a community.

3.7.1 Registered Vulnerable Occupancies

From an occupancy perspective, vulnerable occupancies house individuals who may require assistance to evacuate during an emergency due to cognitive or physical limitations, presenting a potential high-life safety risk. The OFM defines vulnerable occupancy as any care occupancy, care and treatment occupancy, or retirement home regulated under the Retirement Homes Act. These occupancies accommodate individuals such as seniors or people requiring specialized care.

It is essential to note that not all vulnerable individuals reside in vulnerable occupancies. For example, some seniors who are vulnerable due to physical limitations may live independently or in subsidized housing, making them a key demographic to reach.

Ontario Regulation 150/13: Fire Code, which amends Ontario Regulation 213/07: Fire Code, identifies vulnerable occupancies as care, care and treatment, and retirement homes. This encompasses hospitals, certain group homes, seniors' residences, and long-term care facilities. The regulation mandates the fire service to conduct annual inspections, approve and witness fire drill scenarios, and submit specific information regarding the occupancy to the OFM. A list of vulnerable occupancies is presented in Table 11.

Table 11: Vulnerable Occupancies

Property Name	Occupancy Type	Location
Morrison Park Nursing Home	Care Occupancy	7363 Calfass Road

3.7.2 Other High-Fire Life Safety Risk Occupancies

From a risk perspective, it's valuable for a fire service to identify additional potential high fire life-safety risk considerations. This includes day care facilities and schools, where children, due to their age and potential cognitive or physical limitations, may face challenges in self-evacuation during emergencies. For the purposes of this CRA, potential high life-safety risk occupancy considerations encompass schools and licensed day care facilities. It's worth noting that many schools also offer before and after-school childcare services for children aged 4-12, as well as childcare centers for infants to pre-school-aged children.

Conducting pre-planning activities for all occupancies with vulnerable occupants would be beneficial for the PFRS. Pre-planning activities increase fire service personnel's familiarity with buildings of special interest and help reduce the risk faced by vulnerable individuals or vulnerable occupancies. These activities may include:

- Regularly scheduled fire safety inspections
- Approving and witnessing fire drill scenarios
- Providing public education on fire safety issues
- Conducting pre-planning exercises to increase fire service personnel's familiarity with the facility
- Reviewing fire safety plans for accuracy and encouraging facility owners to update facilities as needed

- Providing staff training
- Encouraging fire drills

3.8 Historic or Culturally Significant Buildings

An understanding of the location of historic or culturally significant buildings or facilities is an important consideration within the building stock profile of a Community Risk Assessment. Such buildings or facilities may be keystone features of the community, providing a sense of heritage, place, and pride, and contributing to the overall importance of the community. Regular fire inspections of these buildings are essential, especially if they serve as tourism destinations, as fire incidents could have significant economic impacts.

Historic areas can present a high fire risk due to their age and the materials used to construct the buildings, as well as exposure cycles. Strategies to enforce continued compliance with the OFC are considered best practices for achieving the legislative responsibilities of the township and providing an effective fire protection program to address fuel load risks.

The Township of Puslinch regulates numerous heritage properties through its municipal heritage register under the Ontario Heritage Act. This register encompasses properties designated for preservation under Section 29, Part IV, as well as those recognized by the Council for their cultural heritage significance under Section 27, Part IV. Properties listed under Section 27 require Council approval prior to demolition. Puslinch has identified 1 Designated Heritage Property and has listed 108 properties designated under Section 29 and 102 under Section 27. Among the notable heritage buildings is David Morlock House, which is the only officially designated heritage property. The list of properties designated under Section 29 of the Ontario Heritage Act is detailed in Appendix C: Heritage Properties.

Table 12: Designated Heritage Properties

No.	Property Name	Address	Year of Construction
1	David Morlock House	82 Queen ST Morriston Puslinch	1910

A fire department can help reduce the risk of fire within heritage properties through several measures, including:

1. Regularly scheduled fire safety inspections to ensure compliance with fire safety regulations
2. Enforcement of the Ontario Fire Code to address any violations and ensure proper fire safety measures are in place
3. Regular review of fire safety plans for accuracy and effectiveness in mitigating fire risks
4. Encouraging facility owners to upgrade facilities as needed to improve fire safety standards and reduce potential fire hazards

3.9 Building Stock Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	
Identified Risk	Data provided by the 2021 census indicates that 38.39% of the township’s residential building stock was built prior to the introduction of the 1981 OFC.
Identified Risk	There are several properties within Puslinch that have a potentially high fuel load and therefore an increased high fire risk.
Identified Risk	The Township of Puslinch currently has 1 registered vulnerable occupancy.
Identified Risk	Group C occupancies represent 82.88% of all occupancies. Residential occupancies are the highest occupancies linked to fire deaths and fire injuries across the province.
Identified Risk	There are 109 Properties Designated or Listed Under Part IV, Section 29 of the Ontario Heritage Act and 102 under Section 27 and 102 under Section 27.
Key Finding	
Key Finding	Data indicates that 61.61% of residential dwellings were constructed post 1980, which increase the possibility of light weight truss construction in these homes.
Key Finding	There are two occupancies over 200,000 square feet which include a food processing plant and a cold storage company.

SECTION 4

CRITICAL INFRASTRUCTURE PROFILE

Critical infrastructure refers to the systems, facilities, and assets crucial for the functioning of society and the economy. As referenced in **O. Reg. 378/18**, the critical infrastructure profile assessment includes analyses of the capabilities and limitations of critical infrastructure, such as electrical distribution, water distribution, telecommunications, hospitals, and airports. The following section considers these critical infrastructure characteristics within the Township of Puslinch.

4.1 Critical Infrastructure in the Township of Puslinch

Ontario's Critical Infrastructure Assurance Program defines critical infrastructure (CI) as "interdependent, interactive, interconnected networks of institutions, services, systems, and processes that meet vital human needs, sustain the economy, protect public health, safety and security, and maintain continuity of and confidence in government." The program identifies nine critical infrastructure sectors: continuity of government, electricity, financial institutions, food and water, health, oil and natural gas, public safety and security, telecommunications, and transportation networks. Infrastructure is a complex system of interconnected elements where the failure of one could lead to the failure of others. The vulnerability of infrastructure is often linked to the degree to which one infrastructure component depends upon another. Therefore, it is critical that these elements be viewed in relation to one another and not in isolation.

For the purposes of this CRA, Township of Puslinch-specific CI concerns are described in greater detail below.

4.1.1 Water Servicing & Infrastructure

The township has no structured municipal water source; all water for occupancies is provided through private wells fed by underground sources. Protecting this groundwater is vital for ensuring clean drinking water and the safety of residents.

Water supply is critical infrastructure essential for firefighting. Access to a reliable water delivery system is crucial for effective service delivery. Since the township relies on private wells, public hydrants are not available for firefighting operations. Therefore, alternative water sources such as dry hydrants, tanks, reservoirs, rivers, and lake water must be preplanned.

The township has identified 152 water reservoir tanks, both privately and publicly owned and maintained, 3 pump houses, and 13 private hydrants. Utilizing resources from neighboring municipalities (Guelph, Cambridge, Milton, and Hamilton) is also an alternative solution for tanker shuttle operations.

4.1.2 Stormwater & Sanitary Servicing & Infrastructure

Stormwater facilities are engineered to gather and regulate runoff from precipitation, including rain and snowmelt, thereby reducing the risk of flooding, erosion, and damage to property and infrastructure. Storm sewers, which are underground pipelines, are designed to collect and transport stormwater runoff to nearby water bodies such as rivers and lakes. By preventing stormwater from flooding streets and buildings, storm sewers help manage water quality and quantity in natural water bodies.

Stormwater services play a critical role in managing and controlling the flow of stormwater runoff during precipitation events, mitigating challenges and impacts associated with flooding. This becomes especially relevant when considering the effects of climate change.

Stormwater is operated by Wellington County which manages 3,535 meters of pipe and 126 structures in the township. According to the 2021 Asset Management Plan, the majority of the stormwater infrastructure in the township is rated as very good, with a small portion (2 structures and 85 meters of piping) rated as fair. Any disruption to the operation of stormwater facilities and storm sewers can have significant impacts on public safety, property, and the environment. For instance, malfunctioning storm sewers can lead to flooding, property damage, and health hazards such as waterborne diseases. Therefore, stormwater infrastructure is classified as critical and requires protection and maintenance to ensure proper functioning during extreme weather events.

Sanitary sewers, on the other hand, are underground pipelines that transport wastewater from residences, commercial establishments, and industries to treatment plants for purification before discharge into rivers or lakes. The proper operation of sanitary sewers is essential for preventing the spread of diseases, safeguarding public health, and preserving the environment. Any disruption to sanitary sewer operations can result in significant impacts on public health and the environment, underscoring the need to recognize them as part of critical infrastructure.

4.1.3 Transportation Infrastructure

Transportation infrastructure encompasses highways, railways, airports, seaports, and public transit systems. It plays a crucial role in enabling economic activity, ensuring public safety, facilitating social mobility, and promoting environmental sustainability. Disruptions to transportation infrastructure can have significant impacts on the functioning of municipalities and the economy, underscoring the importance of protecting and maintaining it.

The following section offers an overview of the township's transportation infrastructure. Additional details on the transportation systems in the Township of Puslinch are provided in the Geographic Profile.

4.1.3.1 Roads & Highways

As described in the Geographic Profile, the Township of Puslinch has a network of essential highways linking it to neighboring regions, including Toronto, Guelph, Hamilton, and Kitchener. Highway 401 serves as a primary route, supported by Highway 6, as well as major County-level roads, such as Brock Road South, which serves as a commuter route into the City of Guelph.

Major highways and roads are of concern from the perspective of fire protection services due to the following factors:

- Incidents involving hazardous materials transport
- Motor vehicle collisions driving fire department and ambulance call volume
- Multi-lane and vehicle collisions can obstruct lane access for responding apparatus
- Traffic hazards (distracted drivers, high-speed movement) present safety considerations for responding crews.

Approximately 658 emergency calls responded to between 2018 and 2022 pertain to motor-vehicle related incidents, this represents 96.5% of rescue calls and approximately 32.2% of all calls responded to by PFRS during that period.

4.1.3.2 Rail

The Guelph Junction Railway runs north/south through the northeastern border of the township and Canadian Pacific Railway operates track running east/west across the southern border of the township. Rail lines and operations are of concern from the perspective of fire protection services due to the following factors:

- Accidents involving transportation of hazardous cargo could result in release hazardous material requiring hazardous materials response
- Potential for explosions, fires, and destabilization of surrounding structures
- For passenger train derailments or collisions, passenger and rail employee extrication and technical rescue may be required
- Difficulty accessing scene
- Major incidents resulting in long term recovery could delay daily shipment of goods and services, with potential negative affects to local economy.

4.1.2.3 Airports

There are two listed airports within Puslinch. The first is the Cambridge (Puslinch Lake) Water Aerodrome (CMB3), a privately operated airport servicing seaplanes. The second is Reids Field Airport, located on Wellington Road #34. This is a private airfield servicing smaller planes. Airports and their operations are of concern from the perspective of fire protection services due to the following factors:

- Accidents involving planes during landing and takeoff
- Difficulty in locating and accessing scenes

- Requirement for technical rescues of passengers
- Potential for fire or destabilization of structures if impacted by a plane
- Consideration of water rescue techniques in the event of a seaplane incident in Puslinch Lake

4.1.4 Energy and Communications Infrastructure

Energy infrastructure comprises the systems, facilities, and assets involved in generating, transmitting, and distributing electricity, and gas within the municipality. In the Township of Puslinch, Hydro One serves as the local utility for electricity, while Union Gas provides natural gas services.

Energy and utility infrastructure are significant considerations for fire protection services due to several reasons:

- The natural gas subsector poses operational hazards to first responders, including leaks, personal injury, and exposure to toxic or hazardous materials
- There is potential for explosion and/or fire within these facilities
- Emergency incidents could result in limited gas supply across the township
- Firefighter safety is a concern when responding to fires at electrical substations, which may involve high-voltage electrical hazards and the presence of chemicals used to cool electrical conductors
- Disruptions to the electrical distribution system could affect emergency communication systems and municipal power supply, leading to various public health and safety concerns requiring fire department assistance

Communications infrastructure is also considered critical infrastructure because it provides essential connectivity and communication services for daily life and the economy. This includes systems, facilities, and assets enabling the transmission and reception of voice, data, and video communications.

In the Township of Puslinch, the combined energy and communications infrastructure includes hydro lines and towers, pipelines, transmission lines, communications fiber lines and towers. These components play vital roles in maintaining connectivity, facilitating communication, and supporting emergency response efforts within the township.

The most pertinent risk arising from these utilities relates to fallen hydro lines. Between 2018 and 2022 PFRS responded to 36 incidents for fallen hydro lines which is 36.7% of all public hazard calls.

4.1.5 Other Critical Infrastructure Considerations

General considerations and concerns related to each CI sector as it pertains to the provision of fire protection services for other critical infrastructure sectors are included in Table 13.

Table 13: Critical Infrastructure Overview

Sector	Identified Critical Infrastructure	Issues / Concerns
Health	Long-Term Care	<ul style="list-style-type: none"> Disrupting large numbers of people with mobility issues Potential communication issues Need for specialized medical equipment There is 1 long-term care facility in the township
	Outbreak/Illness	<ul style="list-style-type: none"> A major outbreak or illness can create unexpected shortages in the workforce Reduced staffing can result in an inability to run an apparatus, as well as affect ambulance and police services for widespread illnesses Illnesses and outbreaks can also increase medical calls in the County and have an increased cost in replenishing medical PPE
	Health Centres	<ul style="list-style-type: none"> There is no major hospital in the township, however four in nearby communities of Guelph, Milton, Hamilton and Cambridge. The Morriston Medical Clinic has recently opened to provide primary care to the township. There are numerous privately owned and operated walk-in clinics and doctors' offices in the township
Food	Food Supply and Demand	<ul style="list-style-type: none"> Food related infrastructure can include agriculture, major distribution centres or grocery stores. Grocery stores and food distribution centres typically contain large amounts of ammonia used as a component of refrigeration systems Fire responders should be aware of dangers related to an ammonia release and response protocols.
Safety	Fire and Emergency Services	<ul style="list-style-type: none"> There is one fire station located in the township Frequent or extreme emergency events could increase demand for emergency response services affecting the response capacity of the fire department

Sector	Identified Critical Infrastructure	Issues / Concerns
Government	Municipal Government	<ul style="list-style-type: none"> • Municipal government closed due to extreme weather, cyber-attack, health emergency, location, civil disruption causes disruption to decision making, financial support, declaration of emergencies etc. • Municipal services are often interconnected, therefore the failure of one may lead to the failure or damage to other services or loss of continuity of operations
Manufacturing	Supply Chain Disruption	<ul style="list-style-type: none"> • Prolonged disruptions to supply chains can impact apparatus replacement due to manufacturing delays (resulting in them going over lifetime) • Supply disruptions also have an unforeseeable but potentially impactful financially impact on running apparatus, as well as the ability to obtain/replenish PPE
	Industrial Sites	<ul style="list-style-type: none"> • According to the 2021 Statistics Canada Census, manufacturing in the Township of Puslinch accounts for 10.92% of local industry (see Economic Profile) Processing and other activities that involve various ignition sources often occur in these occupancies. Manufacturing facilities constitute a special fire hazard due to high levels of combustible, flammable or explosive content and the possible presence of oxidizing chemicals and gases

4.2 Critical Infrastructure – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	
Identified Risk	There were 658 emergency calls responded to between 2018 and 2022 pertaining to motor-vehicle related incidents, this represents 96.5% of rescue calls and approximately 32.2% of all calls responded to by PFRS during that period.
Identified Risk	There is no municipal water infrastructure to provide water supply for firefighting operations.
Key Finding	
Key Finding	Between 2018 and 2022 PFRS responded to 36 calls for fallen hydro lines which is 36.7% of all public hazard calls.
Key Finding	There are two registered private airports in the township. There are potential risks related to airplane incidents.
Key Finding	The municipality has identified private and public water reservoir tanks, pump houses and private hydrants throughout the township so to assist with structural firefighting water supply

SECTION 5 DEMOGRAPHIC PROFILE

As referenced in **O. Reg. 378/18**, the demographic profile assessment includes analysis of the composition of the community’s population, respecting matters relevant to the community such as population size and dispersion, age, gender, cultural background, level of education, socioeconomic make-up, and transient population. The following sections consider these demographic characteristics within the Township of Puslinch.

5.1 Population and Dispersion

Table 14 highlights the significant growth experienced by the Township of Puslinch over a twenty-year period from 2001 to 2021, in both population and total private dwellings. The most substantial increases occurred between 2001 and 2006, with a change of 13.66% in population and 18.15% in total private dwellings. These rates of increase have continued steadily since then.

Table 14: Historic Growth in Population and Households – Township of Puslinch

Year	Population	% Change	Total Private Dwellings	% Change
2001	5,885	8.66	2,028	7.30
2006	6,689	13.66	2,396	18.15
2011	7,029	5.08	2,534	5.76
2016	7,336	4.37	2,793	10.22
2021	7,944	8.29	2,946	5.48

Table Source: 2021 Census, Statistics Canada¹³

5.1.1 Population Age

Identifying a community’s population by age category is a core component of developing the CRA and identifying specific measures to mitigate risks associated with a specific age group, such as seniors. The 2021 Census identifies a total population of 7,944 for the Township of Puslinch. The age distributions of the township’s population and Ontario’s population are compared in Table 15.

¹³ Government of Canada, Statistics Canada. (2023, November 15). Profile table, Census Profile, 2021 Census of Population - Puslinch, Township (TP) [Census subdivision], Ontario. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=Puslinch&DGUIDlist=2021A00053523001&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0>

Table 15: Population by Age Group – Township of Puslinch and Ontario

Age	Puslinch Population	Puslinch %	Ontario Population	Ontario %
0 to 4 years	290	3.65	683,515	4.81
5 to 9 years	355	4.47	764,430	5.37
10 to 14 years	470	5.92	803,850	5.65
15 to 19 years	495	6.23	801,455	5.63
20 to 24 years	440	5.54	895,600	6.30
25 to 29 years	325	4.09	975,400	6.86
30 to 34 years	290	3.65	981,210	6.90
35 to 39 years	370	4.66	948,030	6.67
40 to 44 years	475	5.98	890,160	6.26
45 to 49 years	550	6.93	894,580	6.29
50 to 54 years	650	8.19	941,270	6.62
55 to 59 years	710	8.94	1,040,160	7.31
60 to 64 years	700	8.82	966,575	6.80
65 to 69 years	555	6.99	813,215	5.72
70 to 74 years	530	6.68	691,280	4.86
75 to 79 years	360	4.53	469,485	3.30
80 to 84 years	210	2.64	325,110	2.29
85 to 89 years	120	1.51	205,480	1.44
90 to 94 years	30	0.38	101,430	0.71
95 to 99 years	15	0.19	28,000	0.20
100 +	0	0.00	3,705	0.03
Total	7,940	100.00	14,223,945	100.00
Median Age of the Population	49.2		41.60	-
Population aged 14 and under	1,115	14.04	2,251,795	15.83%
Population aged 65 and over	1,820	22.92	2,637,710	18.54%
Population aged 55 to 64	1,410	17.76	2,006,735	14.11%
<i>* Note: Due to rounding totals may not reflect individual counts</i>				

Table Source: 2021 Census, Statistics Canada¹⁴

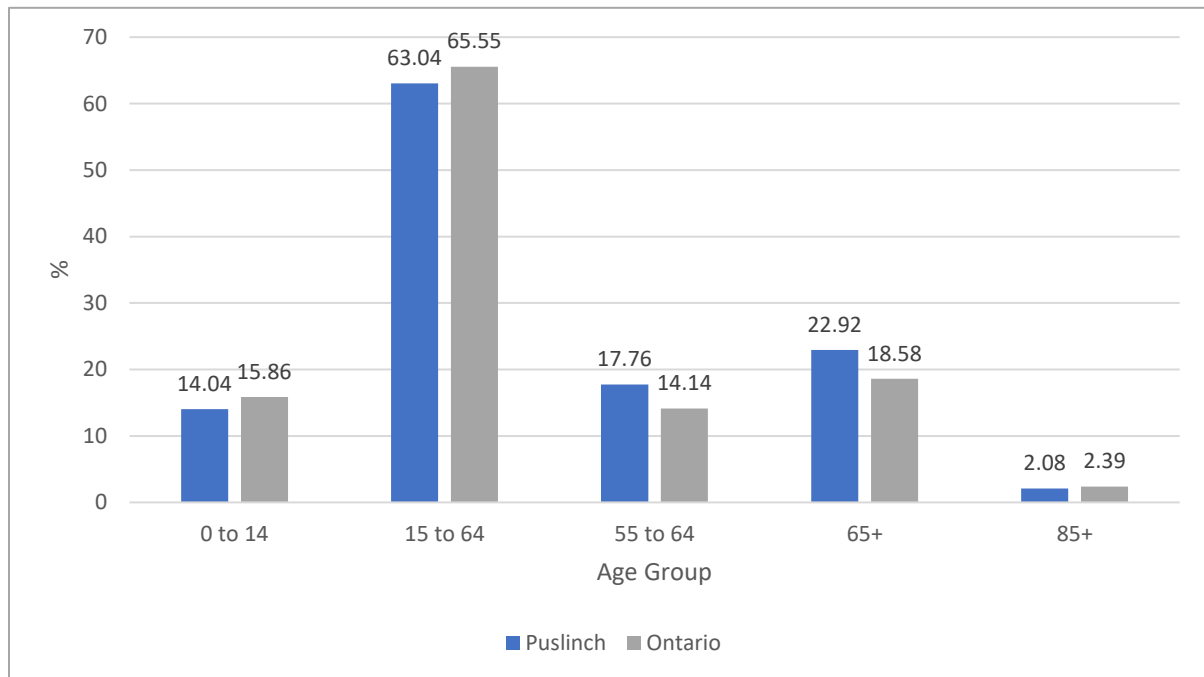
¹⁴ *ibid*

The youngest demographic, comprising individuals aged 14 years and under, accounts for 14.04% of the township’s total population, slightly lower than the province's figure of 15.83%. Although they face a lower risk of fatality in residential occupancies compared to seniors or adults, youth in this age group remain an essential demographic for public education efforts. Therefore, directing public education and prevention programs toward this demographic holds significant value. Implementing structured education programs consistently for children and youth can effectively embed fire and life safety awareness and knowledge into future generations. It is noted that there is one public elementary school in the township. Those in secondary school and catholic elementary are transported outside the township, providing access to this age demographic directly through the school system is difficult and will rely on neighbouring fire services to provide this public education through the school network.

The percentage of the population aged 65 years and older in Puslinch represents 22.92% of the total population, which surpasses the province's rate of 18.54%. Additionally, 17.76% of the township’s population falls between the ages of 55 and 64, gradually aging into the senior demographic of 65 years and older. This larger population of older adults compared to Ontario as a whole highlights the significance of implementing early intervention and prevention programs to mitigate fire risks as this cohort transitions into the senior demographic. Based on historic residential fire fatality data, this population faces greater risks. These demographic trends emphasize the importance of developing informed, **targeted public education programs** and risk reduction strategies within the community.

Figure 4 illustrates the age group comparisons between Puslinch and Ontario.

Figure 4: Percent of Population by Age Group – Township of Puslinch and Ontario



A community’s population by age is an important factor in identifying specific measures to mitigate risks associated with particular age groups, such as seniors. Canada’s aging population has emerged as one of the most significant demographic trends. According to Statistics Canada, from 2016 to 2021, Canada experienced a notable increase in the proportion of seniors since Confederation, primarily due to the baby boomer generation reaching the age of 65. Presently, there are more Canadians over the age of 65, accounting for 18.98% of the population, than there are children aged 14 years and younger, who make up 16.25%.

Seniors, defined as individuals aged 65 years and over, are regarded as one of the highest fire risk groups across the province, based on the residential fire death rate (fire deaths per million of population). Figure 5 illustrates the number of fire deaths in Ontario up to 2020, highlighting seniors' increased vulnerability to fatality in residential occupancies compared to other age groups.

Figure 5: 2011-2020 Residential Fire Death Rate by Age of Victim

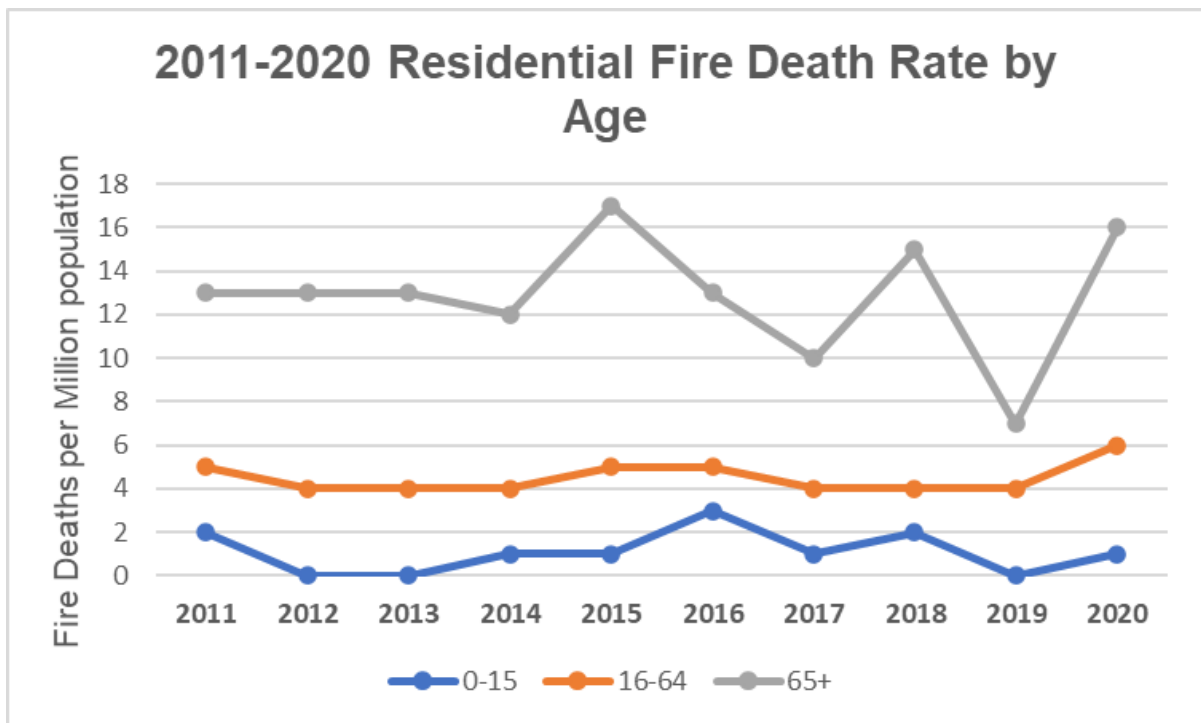


Figure Source: Adapted based on OFM reported residential fatal fires¹⁵

¹⁵ Office of the Fire Marshal and Emergency Management (revised 2018, November), Ontario Residential Fatal Fires, Retrieved from the Ministry of the solicitor General Website

5.1.2 Population Age by Dissemination Area

Further analysis of age-based population distribution is illustrated in Figure 6 and Figure 7, portraying the distribution across dissemination areas.

Figure 6: Population Distribution Ages 0-14

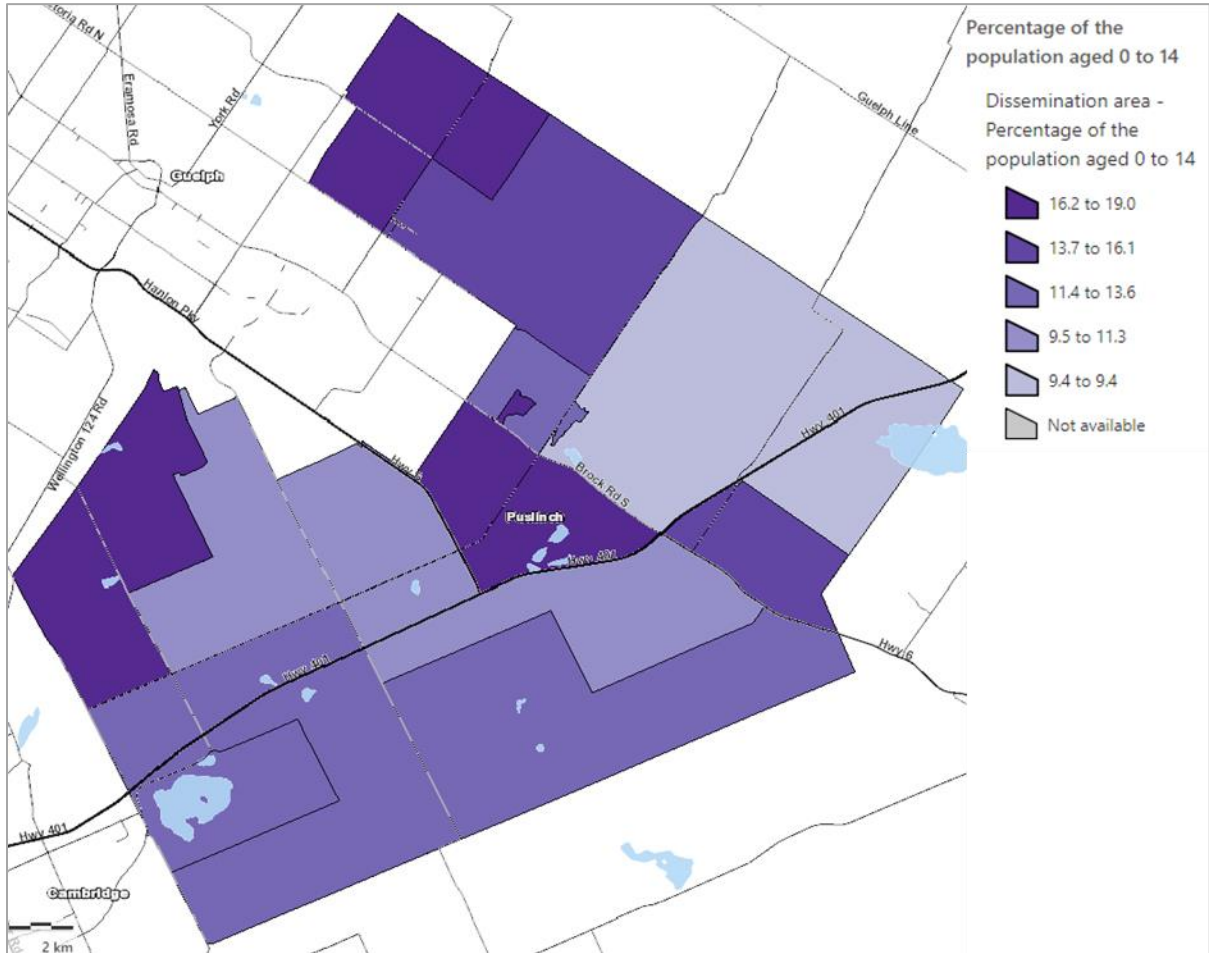


Figure Source: 2021 Census, Statistics Canada¹⁶

¹⁶ *ibid*

Figure 7: Population Distribution Age 65 and Over



Figure Source: 2021 Census, Statistics Canada¹⁷

5.2 Gender

NFPA 1730: Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations (2019 Edition) integrates gender considerations into Community Risk Assessments, acknowledging historical data indicating a higher incidence of fire-related injuries or fatalities among males. In the Township of Puslinch, Table 16 outlines the gender distribution by age, with males representing 50.69% and females 49.31%, closely aligning with the provincial gender ratio of 49.11% men and 51.10% women. This parity persists across age groups, with a minor gap emerging among individuals aged 14 and under (7.56% men versus 6.36% women). These statistics generally reflect provincial trends, suggesting that gender-based refinements in public education programming in Puslinch may not be necessary.

¹⁷ *ibid*

Table 16: Gender Distribution by Age Group – Township of Puslinch

Age Group	Total Population	Male	%	Female	%
0 to 4 years	290	145	1.83	140	1.76
5 to 9 years	355	190	2.39	165	2.08
10 to 14 years	470	265	3.34	200	2.52
15 to 19 years	495	245	3.09	245	3.09
20 to 24 years	440	230	2.90	205	2.58
25 to 29 years	325	170	2.14	155	1.95
30 to 34 years	290	155	1.95	140	1.76
35 to 39 years	370	180	2.27	195	2.46
40 to 44 years	475	240	3.02	240	3.02
45 to 49 years	550	270	3.40	275	3.46
50 to 54 years	650	325	4.09	325	4.09
55 to 59 years	710	365	4.60	345	4.35
60 to 64 years	700	350	4.41	355	4.47
65 to 69 years	555	285	3.59	275	3.46
70 to 74 years	530	245	3.09	280	3.53
75 to 79 years	360	180	2.27	175	2.20
80 to 84 years	210	110	1.39	105	1.32
85 to 89 years	120	60	0.76	65	0.82
90 to 94 years	30	15	0.19	20	0.25
95 to 99 years	15	0	0.00	10	0.13
100 +	0	0	0.00	0	0.00
Total	7,940	4,025	50.69	3,915	49.31

Table Source: 2021 Census, Statistics Canada¹⁸

5.3 Socioeconomic Circumstances

Socioeconomic circumstances of a community are known to have a significant impact on fire risk. Socioeconomic status is reflected in an individual’s economic and social standing and is measured in a variety of ways. These factors can be reflected in the analysis of socioeconomic indicators such as labour force status, educational attainment, and income as well as household tenure, occupancy, suitability, and cost.

¹⁸ *ibid*

Socioeconomic factors intersect in several ways and have direct and indirect impacts on fire risk. One such example is outlined in the OFM's Fire Risk Sub-Model. The Sub-Model refers to the relationship between income and fire risk. As one consideration, households with less disposable income may be less likely to purchase fire safety products (e.g., smoke alarms, fire extinguishers, etc.), which puts them at higher risk of experiencing consequences from a fire. Another consideration is that households living below the poverty line may have a higher number of persons per bedroom in a household and/or children who are more likely to be at home alone. These circumstances would impact both the probability and consequence of a fire. While these complex relationships between socioeconomic circumstances and the probability / consequence of a fire are not well understood, this CRA seeks to explore these factors.

The factors reviewed at a high level have been selected based on the data available from Statistics Canada. Socioeconomic factors such as income decile group and median household income have been displayed spatially throughout this section.

Factors that are highlighted in this section include:

- Labour force status
- Immigrant status
- Educational attainment
- Household tenure, occupancy, suitability, and cost

5.3.1 Labour Force Status

Those who are economically disadvantaged, including low-income families, the homeless, and perhaps those living alone, may experience a higher fire risk. The OFM's Fire Risk Sub-Model references several reports that suggest there is a correlation between income levels and fire risk. The reports identify the following factors:

- The higher number of vacant buildings found in low-income neighborhoods attract the homeless. This introduces risks such as careless smoking, drinking, and unsafe heating practices.
- Building owners are less likely to repair building systems (electrical, mechanical, suppression) due to affordability, increasing fire risk from improper maintenance.
- Households with lower disposable income are less likely to purchase fire safety products (i.e., smoke alarms, extinguishers, cigarette ignition-resistant furniture, etc.) due to affordability.
- Households with lower disposable income are more likely to have utilities shut off due to non-payment, leading to increased risks related to unsafe heating, lighting, and cooking practices.
- The 1981 report, "Fire-Cause Patterns for Different Socioeconomic Neighborhoods in Toledo, Ohio," determined that the incendiary fire rate in low-income neighborhoods is 14.4 times higher compared to areas with the highest median income. Further, fires caused by smoking and children playing occurred at rates 8.5 and 14.2 times higher, respectively.

- Single-parent families are more economically challenged since there is only one income. These households also have fewer resources to arrange childcare, increasing the likelihood of fires caused by unsupervised children.
- Studies have shown that cigarette smoking is inversely related to income. In Canada, findings by the Centre for Chronic Disease Prevention and Control through the National Population Health Survey established that there were nearly twice as many smokers in the lowest income group when compared against the highest (38% vs. 21% respectively).
- Those with low education and literacy levels are inhibited in their ability to read instruction manuals and warning labels and less likely to grasp fire safety messages.

Labour force status is a possible indicator of income levels which directly influence fire risk (e.g., lower income, increased fire risk). The participation rate (i.e., the proportion of residents in the labor force) can also be an indicator of income and can be considered alongside unemployment rates (e.g., lower participation rate and higher unemployment could mean lower income, higher fire risk).

Table 17 details the labor force statistics for Puslinch compared to Ontario. Despite a similar participation rate of 64.93% in Puslinch and 62.80% provincially, Puslinch presents a slightly higher employment rate of 58.97% compared to Ontario's 55.10%, along with a lower unemployment rate of 9.29% versus 12.25% in Ontario, indicative of a healthier job market. Puslinch also exhibits a lower percentage of individuals not in the labor force at 35.07% compared to Ontario's 37.20%.

Table 17: Labour Force Status – Township of Puslinch & Ontario

Status	Puslinch Total	Ontario Total
In the Labour Force*	4,415	7,399,200
Employed	4,010	6,492,895
Unemployed	410	906,310
Not in the Labour Force	2,385	4,383,620
Total	6,800	11,782,820
Participation Rate	64.93%	62.80%
Employment Rate	58.97%	55.10%
Unemployment Rate	9.29%	12.25%
<i>*Total - Population aged 15 years and over by labour force status</i>		

Table Source: 2021 Census, Statistics Canada¹⁹

*The Category “In the Labour Force” is a subtotal of employed and unemployed

5.3.2 Educational Attainment

The relationship between educational attainment and income is complex. An analysis conducted by Statistics Canada has found that high-income Canadians are generally more likely to be highly educated. Approximately two thirds (67.10%) of the top 1% had attained a university degree compared to 20.90% of all Canadians aged 15 and over.

Based on this national trend and for the purposes of this Community Risk Assessment, it is assumed that higher education leads to more disposable income and a lower fire risk. It is also assumed that households with higher disposable income are more likely to invest in fire life safety products such as fire extinguishers and smoke alarms, reducing the fire risk.

Table 18 compares educational attainment levels between the Township of Puslinch and the Province of Ontario using 2021 Census data. The data indicates that Puslinch residents generally have higher educational attainment compared to the provincial average. Puslinch exhibits both a lower-than-average percentage of individuals without a certificate, diploma, or degree (12.50% compared to the provincial average of 15.28%) and a higher-than-average percentage of residents with a high school diploma, as well as those holding a postsecondary certificate, diploma, or degree, in comparison to provincial averages. This trend suggests increased awareness of fire safety practices and potentially correlates with lower rates of accidental fires due to negligence.

¹⁹ Statistics Canada, 2021 Census of Population, Statistics Canada. 2023. Census Profile. 2021 Census. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released February 8 2023

Table 18: Educational Attainment – Township of Puslinch and Ontario

Educational Attainment	Puslinch Total	Puslinch %	Ontario Total	Ontario %
No Certificate / Diploma / Degree	850	12.50	1,799,890	15.28
High School Diploma or Equivalent	1,885	27.72	3,204,170	27.19
Postsecondary Certificate; Diploma or Degree	4,065	59.78	6,778,765	57.53
Total	6,800	100.00	11,782,825	100.00

Table Source: 2021 Census, Statistics Canada²⁰

5.3.3 Median Income

Table 19 presents median income statistics for Puslinch in 2020, showing higher income levels compared to the Ontario averages. The median individual income in Puslinch was \$48,800, which reflects an 18.45% difference compared to Ontario's median individual income of \$41,200. Similarly, the median household income in Puslinch was \$133,000, indicating a significant 46.15% difference from Ontario's median household income of \$91,000. Higher median incomes in Puslinch may indicate a more affluent community with better-resourced households, potentially leading to improved fire prevention measures and safer living conditions. However, higher income levels can also correspond to larger, more valuable properties that may pose unique challenges for firefighting and rescue operations in the event of emergencies.

Table 19: Median Income of the Township of Puslinch and Ontario - 2020

Geography	Median Income Individual	Median Income Household
Puslinch	\$48,800	\$133,000
Ontario	\$41,200	\$91,000
% Difference	18.45%	46.15%

Table Source: 2021 Census, Statistics Canada²¹

5.3.3.1 Income Decile Groups

Income can also be examined through the lens of income decile groups, which offer a rough ranking of an individual's economic status based on their relative position in the Canadian distribution of adjusted after-tax income of economic families, as defined by Statistics Canada²².

²⁰ Statistics Canada, 2021 Census of Population, Statistics Canada. 2023. Census Profile. 2021 Census. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released February 8 2023

²¹ Ibid

²² Statistics Canada. (Updated 2016). Income Decile Group. Retrieved from [Statistics Canada Website](https://www150.statcan.gc.ca/n1/pub/92-627-x/2016001/article/00001-eng.htm)

Table 20 presents data on economic family income decile groups for the population in private households in Puslinch compared to Ontario. In Puslinch, 26.17% of the population falls within the bottom half of the income distribution, while 73.83% are in the top half. This distribution contrasts with Ontario, where a larger proportion (46.44%) is in the lower half of the income distribution, and 53.56% are in the top half. These statistics indicate a higher concentration of higher-income households in Puslinch compared to the provincial average, which can influence the community's economic resilience and potentially impact fire risk and emergency preparedness. Understanding income distribution within the community is crucial for the fire department's risk assessment and resource allocation efforts.

Table 20: Economic Family Income Decile Group for the Population in Private Households – Township of Puslinch and Ontario

Decile Group	Puslinch Total	Puslinch %	Ontario Total	Ontario %
In the bottom half of the distribution	2,070	26.17	6,516,085	46.44
In the top half of the distribution	5,840	73.83	7,515,670	53.56
Total	7,910	100.00	14,031,755	100.00

Table Source: 2021 Census, Statistics Canada²³

5.3.4 Housing Tenure

Housing tenure, particularly the rate of homeownership, serves as a significant indicator of socioeconomic status within a community. A higher rate of homeownership often suggests greater wealth, stability, and higher incomes, whereas a higher rate of rental properties may reflect lower incomes and socioeconomic challenges.

Lower homeownership rates are generally associated with higher fire risk due to several factors. Homeowners typically invest in property maintenance and are more likely to have access to fire prevention resources and insurance. In contrast, rented properties may experience higher turnover rates, potentially leading to neglect of fire safety measures by tenants or landlords.

According to Table 21, in Puslinch, the majority of households (94.76%) are owned, while only a small percentage (5.24%) are rented. This ownership trend is notably higher than the provincial average, where 68.40% of households are owned and 31.41% are rented. The high rate of homeownership in Puslinch can significantly influence community stability and investment in property maintenance, indirectly impacting fire risk and emergency response dynamics.

²³ Statistics Canada, 2021 Census of Population, Statistics Canada. 2023. Census Profile. 2021 Census. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released February 8 2023

Table 21: Household Tenure – Township of Puslinch and Ontario

Household Tenure	Puslinch Total	Puslinch %	Ontario Total	Ontario %
Owner	2,710	94.76	3,755,720	68.40
Renter	150	5.24	1,724,970	31.41
Provided by Government, First Nation or Indian Band	0	0.00	10,510	0.19
Total	2,860	100.00	5,491,200	100.00

Table Source: 2021 Census, Statistics Canada²⁴

5.3.4.1 Occupancy

A higher proportion of multiple persons per household can contribute to increased fire risk and potential fire loss. As shown in Table 22, the Township of Puslinch has a higher proportion of households with two or more occupants (82.34%) compared to the provincial rate (73.55%). This higher occupancy density within households can elevate the risk of fire incidents.

Table 22: Household Occupancy

Household Occupancy	Puslinch Total	Puslinch %	Ontario Total	Ontario %
1 Person	505	17.66	1,452,540	26.45
2 Persons	1,090	38.11	1,798,040	32.74
3 Persons	435	15.21	872,480	15.89
4 Persons	470	16.43	825,445	15.03
5 Persons or more	360	12.59	542,700	9.88
Total	2,860	100.00	5,491,205	100.00

Table Source: 2021 Census, Statistics Canada²⁵

5.3.4.2 Suitability

The 2021 Census data, as presented in Table 23, indicates that the Township of Puslinch has a notably lower percentage of housing deemed unsuitable compared to Ontario as a whole. Specifically, only 1.05% of the township's housing is classified as not suitable, contrasting with 6.72% in the province. Housing suitability is determined based on whether the dwelling has adequate bedrooms relative to the ages and relationships among household members, according to the National Occupancy Standard. This discrepancy suggests that Puslinch has a lower fire risk from the perspective of housing suitability compared to the province.

²⁴ Ibid

²⁵ Ibid

Table 23: Household Suitability – Township of Puslinch and Ontario

Housing Suitability	Puslinch Total	Puslinch %	Ontario Total	Ontario %
Suitable	2,825	98.95	5,122,185	93.28
Not suitable	30	1.05	369,015	6.72
Total	2,855	100.00	5,491,200	100.00

Table Source: 2021 Census, Statistics Canada²⁶

5.3.4.3 Housing Costs

The cost of housing often reflects a household's disposable income, which can influence their ability to invest in household fire safety measures. In Puslinch, where fewer households (16.01%) spend 30% or more of their income on housing compared to Ontario (24.23%), as shown in Table 24, there may be more financial flexibility for fire safety investments.

Despite higher housing values in Puslinch compared to Ontario, as referenced in Table 25, the median monthly shelter costs for owned dwellings are comparable, while for rented dwellings, Puslinch costs are lower. This affordability may allow residents to allocate more resources to fire safety measures, potentially lowering fire risk.

Table 24: Shelter Costs – Township of Puslinch and Ontario

Shelter Costs	Puslinch Total	Puslinch %	Ontario Total	Ontario %
Spending less than 30% of household total income on shelter costs	2,335	83.99	4,103,320	75.77
Spending 30% or more of household total income on shelter costs	445	16.01	1,312,095	24.23
Total	2,780	100.00	5,415,415	100.00

Table Source: 2021 Census, Statistics Canada²⁷

Table 25: Median Costs – Township of Puslinch and Ontario

Median Costs	Puslinch	Ontario
Median value of dwellings	\$1,000,000	\$700,000
Median monthly shelter costs for owned dwellings	\$1,500	\$1,440
Median monthly shelter costs for rented dwellings	\$1,170	\$1,300

Table Source: 2021 Census, Statistics Canada²⁸

²⁶ Ibid

²⁷ Ibid

²⁸ Ibid

5.4 Cultural Background, Language Considerations

In the Township of Puslinch, where the proportion of newcomers is significantly lower (17.45%) compared to Ontario (29.98%), cultural background and language considerations remain crucial factors for fire service providers when developing and delivering fire prevention and public education programs. While the immigrant population is smaller, communication barriers, including language proficiency and literacy levels, continue to be important to address. Even with a lower proportion of newcomers, there may still be familiarity challenges related to fire safety standards within immigrant populations. Therefore, targeted education initiatives are necessary to ensure that all residents, regardless of cultural background or language proficiency, have access to essential fire safety information and resources. Table 26 summarizes the immigration status of Puslinch’s population.

Table 26: Immigration Status – Township of Puslinch and Ontario

Immigration Status	Puslinch Total	Puslinch %	Ontario Total	Ontario %
Non-immigrants	6,510	82.30	9,437,320	67.26
Immigrants	1380	17.45	4,206,585	29.98
Before 1980	570	41.30	860,305	20.45
1980 to 1990	215	15.58	506,195	12.03
1991 to 2000	370	26.81	852,765	20.27
2001 to 2010	160	11.59	941,630	22.38
2011 to 2015	35	2.54	461,010	10.96
2016 to 2021	35	2.54	584,680	13.90
Non-permanent residents	20	0.25	387,850	2.76
Total	7,910	100.00	14,031,755	100.00

Table Source: 2021 Census, Statistics Canada²⁹

Table 27 provides insights into language demographics in the Township of Puslinch and Ontario based on the 2021 Census. In Puslinch, 92.11% of the population knows only English, while 7.19% are proficient in both English and French. Additionally, only a small percentage (0.69%) have no knowledge of English or French. However, a deeper exploration into "mother tongue" languages reveals a diverse linguistic landscape.

²⁹ Ibid

The predominant language group comprises Indo-European languages other than English, followed by Indo-Aryan languages such as Punjabi (Panjabi). Slavic languages, Italian, German, and Chinese languages also feature prominently. Beyond these top languages, there is a notable presence of other language groups and specific languages contributing to the linguistic diversity of Puslinch. As Puslinch grows, it's important to address potential communication barriers arising from this diversity to ensure effective community engagement and emergency communication strategies.

Table 27: Knowledge of Official Language – Township of Puslinch and Ontario

Language	Puslinch Total	Puslinch %	Ontario Total	Ontario %
English Only	7,300	92.11	12,196,575	86.50
French Only	0	0.00	39,310	0.28
English and French	570	7.19	1,519,365	10.78
Neither English nor French	55	0.69	344,545	2.44
Total (non-institutional)	7,925	100.00	14,099,795	100.00

Table Source: 2021 Census, Statistics Canada³⁰

5.5 Transient Populations and Commuting

Ontario Regulation 378/18 mandates the consideration of “transient populations”, referring to population shifts occurring within a community at various times during the day, week, or year. Population shifts can stem from factors like employment, tourism, and education. In some municipalities, residents routinely leave for work, contributing to increased traffic and possibly more motor vehicle collisions. Other communities may serve as major tourist destinations, leading to significant population fluctuations based on seasonal tourism activities. This can heighten the demand for fire protection services, especially concerning overnight tourism accommodations. Additionally, educational institutions can draw transient student populations who commute daily or reside in dormitories or student housing seasonally.

Student accommodations and short-term rental units present distinct fire safety challenges, often arising from the conversion of houses into boarding houses or rooming house accommodations that do not adhere to the Ontario Fire Code (OFC) or Ontario Building Code (OBC). Identifying these properties poses a challenge for fire prevention division staff tasked with enforcing fire codes.

³⁰ Ibid

5.5.1 Commuter Populations

Commuter populations represent a significant portion of Puslinch’s labour force. Table 28 shows the commuting destination trends for the residents of the township based on 2021 Census data. Among Puslinch's labour force, 18.18% commute locally within their census subdivision (CSD) of residence, while 39.25% travel to nearby areas within the same Census Division (CD). Additionally, 42.57% of Puslinch residents commute to other locations within the same province, a significantly higher proportion than Ontario's rate of 23.50%, likely influenced by the township’s close proximity to major metropolitan areas.

Table 28: Commuting Destinations – Township of Puslinch and Ontario

Commuting Destination	Puslinch Labour Force	%	Ontario Labour Force	%
Commute within census subdivision (CSD) of residence	410	18.18	2,212,620	58.72
Commute to a different CSD within Census Division (CD) of residence	885	39.25	653,055	17.33
Commute to a different CSD and CD within province or territory of residence	960	42.57	885,485	23.50
Commute to a different province or territory	0	0.00	17,050	0.45
Total	2,255	100.00	3,768,210	100.00
*Commuting destination for the employed labour force aged 15 years and over in private households with a usual place of work - 25% sample data				

Table Source: 2021 Census, Statistics Canada³¹

Table 29 provides insights into the timing of commutes to work among Puslinch residents aged 15 years and over. The data reveals that the majority of commuters leave for work during peak morning hours, with 49.18% departing between 7 AM and 8:59 AM. Additionally, a significant portion of commuters (14.47%) begin their journeys between 6 AM and 6:59 AM. These patterns emphasize the significance of understanding peak commuting times for emergency planning, particularly during periods of high travel activity when motor vehicle collision calls are more likely.

³¹ Ibid

Table 29: Time of Commute to Work

Time Leaving for Work	Labour Force	%
Between 5 AM and 5:59 AM	185	6.69
Between 6 AM and 6:59 AM	400	14.47
Between 7 AM and 7:59 AM	750	27.12
Between 8 AM and 8:59 AM	610	22.06
Between 9 AM and 11:59 AM	425	15.37
Between 12 PM and 4:59 AM	395	14.29
Total	2,765	100.00
Total time leaving for work for the employed labour force aged 15 years and over with a usual place of work or no fixed workplace address - 25% sample data		

Table Source: 2021 Census, Statistics Canada³²

5.5.2 Tourism

An increase in tourism can lead to heightened demand for fire protection services, particularly with overnight accommodations. The Township of Puslinch hosts several events and attractions annually, drawing both residents and non-residents. These events, which include annual festivals and gatherings, contribute to increased foot traffic and activity within the community. The Puslinch Tract and Puslinch Lake area attract outside visitors for hiking, biking, boating, fishing, and other recreational water activities. The Mountsberg Conservation Area brings in larger groups for activities such as fishing, recreational boating, and other water-based recreation. Notable festivals and events held throughout the year include:

- **Puslinch Lake Family Day:** This event typically occurs in the summer months and includes family-friendly activities such as picnicking, swimming, and games around Puslinch Lake.
- **Annual Pollinator Festival:** Typically occurring in June, this event features guided tours, informational booths, a plant sale and much more.
- **Puslinch Harvest Festival:** Celebrate the fall season with the Puslinch Harvest Festival, featuring local produce, crafts, music, and autumn-themed activities.

³² Ibid

5.5.3 Indigenous Population

The Township of Puslinch has a lower proportion of Indigenous population (1.20%) compared to Ontario's average of 2.90%. The majority of those identifying as Indigenous in the Township of Puslinch report a single Indigenous identity, with 94.74% of these individuals having a single Indigenous response. Of these, the majority identify as First Nations (61.11%) or Métis (33.33%). Given these demographics, it's crucial to monitor these populations closely, especially with new Census data, to inform the planning of public education programs and materials that cater to the unique needs and perspectives of Indigenous communities in the Township of Puslinch. Table 30 provides insights into the Indigenous population within the Township of Puslinch compared to the province.

Table 30: Indigenous Population – Township of Puslinch and Ontario

Indigenous Identity	Puslinch Total	Puslinch %	Ontario Total	Ontario %
Indigenous Identity	95	1.20	406,585	2.90
Single Indigenous Responses	90	94.74	389,955	95.91
First Nations	55	61.11	251,030	64.37
Métis	30	33.33	134,615	34.52
Inuk (Inuit)	0	0.00	4,310	1.11
Multiple Indigenous Responses	0	0.00	7,115	1.75
Indigenous Responses not specifically listed above	0	0.00	9,515	2.34
Non-Indigenous Identity	7,810	98.80	13,625,165	97.10
Total	7,905	100	14,031,750	100.00
Registered or Treaty Indian	25	0.32	172,535	1.23
Not a Registered or Treaty Indian	7,880	99.68	13,859,215	98.77

Table Source: 2021 Census, Statistics Canada³³

³³ Ibid

5.6 Demographic Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	
Identified Risk	The percentage of the population aged 65 years and older in Puslinch represents 22.92% of the total population. An additional 17.76% of the township's population falls between the age group of 55 and 64, who are aging towards the senior's demographic of 65 years of age and older.
Identified Risk	Nearly 81.1% of the labour force population commutes to a different census division within the province. This is 57.60% more than that of the provincial commuters (23.50%).
Key Finding	
Key Finding	The 2021 Census data indicates that children aged 14 and under represent 14.04% of the township's total population. This represents an important demographic for the purposes of public education. There is only one public elementary school in the township and limits some access to this age group through the school system.
Key Finding	The number of residential occupants greater than 2 people is 44.23% which is slightly higher than the provincial average (40.80%)

SECTION 6 HAZARD PROFILE

6.1 Hazard Identification and Risk Assessment (HIRA)

The hazard profile assessment includes analysis of the hazards within the community, including natural hazards, hazards caused by humans, and technological hazards to which a fire service may be expected to respond, and that may have a significant impact on the community. This section considers these hazards within the Township of Puslinch.

A hazard is defined as a phenomenon, substance, human activity, or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Hazards can be natural, human-caused, or technological. A Hazard Identification and Risk Assessment (HIRA) is a comprehensive process to assess risks based on potential consequences and frequencies. The outcome of the HIRA assists municipalities in prioritizing risks based on their likelihood and potential to cause an emergency. Appropriate measures can then be taken to mitigate, prepare for, and respond to the risks that pose the greatest threat to reduce future losses.

Under the Local Authority Emergency Management Regulation 203/2018, municipalities are required to have an emergency plan that must include a 'hazard and risk assessment'. The regulation does not specify which standard must be used; however, the use of a formal HIRA process is encouraged.

6.1.1 Wellington County Emergency Response Plan Risk Assessment

A CRA provides an opportunity to examine the results of a community emergency management program (CEMP) risk assessment and the impact that these identified hazards would have on a fire service. For the purposes of this CRA, a "fire protection services" lens will be applied to the top hazards as identified. As a component of the risk assessment and risk analysis process, the top hazards in the community were identified as a part of the risk assessment conducted by the county in 2020. Hazards were assigned a risk score and risk level ranking from extreme to very low, depending on their probability and consequence. As a result of this analysis, the following top hazards were identified: (note some hazards were grouped together based on similar risks).

Hazard	Level of Risk
HAZMAT – Transportation	Moderate
Tornado / High Wind	Moderate
Winter Weather	Moderate
HAZMAT – Fixed Site	Low
Cyber Attack	Low
Infectious Disease	Low
Roadway / Highway Emergency	Low
Rail	Low
Fire / Explosion	Very Low
Extreme Heat	Very Low
Communications Disruption	Very Low
Electrical Energy	Very Low
Flood	Very Low

To better understand the risks of hazards as they pertain to fire protection services, the top hazards have been assessed to identify possible impacts on fire protection services. Many of the potential impacts are not unique to a jurisdiction. The results of this review are presented in Table 31.

Table 31: Impacts of Hazards on Fire Protection Services

Hazard	Possible Impact
HAZMAT Transportation	<p>Overall Impact Serious injury or fatality. Possible secondary emergencies such as fire or explosion when chemicals mixed with air, water, or other agents. Could require small- or large-scale evacuation of homes, businesses, school etc. Could result in transportation disruption and road closure and required detours.</p> <p>Fire Services Depending on the severity and type of release, could pose secondary risk to firefighters on-scene. Must have proper knowledge of chemical release. May not be able to access the scene until proper back-up arrives or have proper information.</p>

Hazard	Possible Impact
Tornado High Wind	<p>Overall Impact Above ground power lines could impact buildings or roads and winds could take down communication towers. Life safety risk, in particular to vulnerable population. Multiple areas of damage</p> <p>Fire Services Depending on the severity of the debris on roads and downed power lines, access to various sections of the road network could be limited to fire service response delaying emergency response times. Interruptions to communication towers could impact fire service communications. Multiple locations requiring additional resources.</p>
Winter weather	<p>Overall Impact Above ground power lines could be impacted along with road treatments, debris clearing, salt gravel or other road treatment supplies. Increase in call volume due to vehicular incidents, rescues.</p> <p>Fire Services Depending on the severity of the debris on roads and downed power lines, access to various sections of the road network could be limited to fire service response delaying emergency response times. Interruptions to communication towers could impact fire service communications.</p>
HAZMAT Fixed Sites	<p>Overall Impact Serious injury or fatality. Possible secondary emergencies such as fire or explosion when chemicals mixed with air, water, or other agents. Could require small- or large-scale evacuation of homes, businesses, school etc.</p> <p>Fire Services Depending on the severity and type of release, could pose secondary risk to firefighters on-scene. Must have proper knowledge of chemical release. May not be able to access the scene until proper back-up arrives or have proper information.</p>
Cyber Attack	<p>Overall Impact Privacy/data breach of public and/or township. Inability to perform administrative functions.</p> <p>Fire Services Breaches to major infrastructure could result in injury or fatalities. Breaches to databases could impede dispatch, record keeping and investigations. Breaches could result in financial loss.</p>

Hazard	Possible Impact
Infectious disease	<p>Overall Impact Medically vulnerable persons are at risk. Increased use of non-recyclable PPE for staff. Critical infrastructure must be maintained with planning for staffing and acquisition of critical supplies.</p> <p>Fire Services Epidemic or pandemic breakout can present significant challenges to first responders causing potential fire service workplace absenteeism, and an increased demand for medical response and supplies as was illustrated during COVID 19. Fire services currently take on a large number of medical calls. PPE was severely limited and supply chain issues for all equipment impacted operations. In many cases planned programming related to inspections and public education had to be delayed or modified.</p>
Roadway/highway emergency	<p>Overall Impact Threat to life safety. Impact to road network, downed power lines and vehicular fires.</p> <p>Fire Services Pose secondary threat to responders of fire or explosion. Delayed response in accessing scene. May require support for high number of injuries/fatalities and/or rescues.</p>
Rail	<p>Overall Impact Threat to life safety, may require evacuation. Impact to road network and environment.</p> <p>Fire Services Pose secondary threat of fire or explosion to responders. Requires support from rail owners. May require securing a large scene and additional support from mutual aid partners.</p>
Fire/explosion	<p>Overall Impact Threat of exposure fire to homes and businesses. Large-scale evacuations may be possible, with many people displaced. Evacuations with little notice may occur. Potential for damages and loss. Damage to the environment. Many industrial properties in the township.</p> <p>Fire Services May require mutual aid support. May not be equipped (with enough people or apparatus) to extinguish fire as it expands. May require specialized resources.</p>

6.2 Hazard Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Key Finding	
Key Finding	<p>The county’s 2020 risk assessment identifies the hazards listed below that could impact the delivery of fire protection services:</p> <ul style="list-style-type: none"> • HAZMAT Transportation • Tornado-High Wind • Winter weather • HAZMAT Fixed Site • Cyber Attack • Infectious Disease • Roads and Highways • Rail • Fire Explosion

SECTION 7

PUBLIC SAFETY RESPONSE PROFILE

7.1 Public Safety Response Agencies in the Township of Puslinch

As required by **O. Reg. 378/18**, the Public Safety Response Profile considers the types of incidents responded to by other entities in the community, and those entities’ responsibilities. These entities could include police, ambulance, fire, and other entities that may be tasked with or able to assist in some capacity the collective response to an emergency situation. The following sections consider these public safety response characteristics within the Township of Puslinch.

Public safety and response agencies refer to agencies and organizations that respond to specific types of incidents within a community that provide trained personnel and resources critical to upholding public safety. Each of these entities offers specialized skill sets in support of front-line operations. The types of response services offered might include fire protection, medical attention, rescue operations, policing activities, or dangerous goods response. In addition to responding individually to certain types of incidents, these entities work closely with one another in the event of major emergencies through a structured standardized response approach to ensure effective coordination among all response agencies.

Table 32 lists the public safety response agencies who could be able to assist the township in a collective emergency response effort and may contribute to the minimization of risk within the community. Identifying the public safety response agencies within the community can help the fire service understand the agencies that may be able to assist in the response to an emergency.

Table 32: Public Safety Response Agencies

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
Ontario Provincial Police (OPP) - County of Wellington OPP, Rockwood Detachment	<ul style="list-style-type: none"> • Federal provincial and municipal law infractions • Traffic calls, emergency calls, crowd control, public assistance • Major crimes i.e., homicide, kidnapping, organized crime • Investigations • Complaints 	<ul style="list-style-type: none"> • Enforce Criminal Code • Enforce Municipal bylaws • Investigate cross-jurisdictional and major crimes • Offender transport

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
Municipal By-Law Enforcement Officers	<ul style="list-style-type: none"> • Violations of township by-laws 	<ul style="list-style-type: none"> • Enforcing by-law infractions on township roads • Providing information on legislation and township by-laws to industry, as well as the general public • Enforce township bylaws • Liaise with County by-law enforcement
Office of the Fire Marshal	<ul style="list-style-type: none"> • Fire 	<ul style="list-style-type: none"> • Assistance with managing fire and obtaining resources beyond the capability of the township
Guelph Wellington Paramedic Service	<ul style="list-style-type: none"> • Advanced EMT pre-hospital care • Mass casualty incidents • Evacuation of health facilities (hospital, nursing homes etc.) • Disease related emergencies 	<ul style="list-style-type: none"> • Ensuring provision of paramedic services at the site of the emergency • Ensuring continuity of paramedic services coverage is maintained throughout the remainder of the community/township • Liaise with the Medical Officer of Health to help facilitate medical services
Wellington-Dufferin-Guelph Medical Officer of Health	<ul style="list-style-type: none"> • Communicable Diseases • Health Inspection Services • Advice on Medical Services • Public Health Advisory • Liaise with long term care facilities, hospitals, retirement homes, and other vulnerable populations as required 	<ul style="list-style-type: none"> • Provide information and instructions to the population on matters concerning public health • Protect the health of the community from inherent health threats by enforcement of the applicable legislation. • Continue delivery of established programs to ensure continuity of care and general health protection
Victim Services Wellington	<ul style="list-style-type: none"> • Serious assault • Domestic violence • Sexual assault • Stalking • Violent Crimes 	<ul style="list-style-type: none"> • Immediate crisis response • Victim assistance • Victim support and needs assessment

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
CANUTEC	<ul style="list-style-type: none"> Hazardous spills/emissions 	<ul style="list-style-type: none"> Product information Safe handling information emergency actions
Ministry of Natural Resources	<ul style="list-style-type: none"> Spills Environmental disasters 	<ul style="list-style-type: none"> Provide personnel and equipment for cleanup and remediation
Ministry of Environment	<ul style="list-style-type: none"> Spills Environmental disasters 	<ul style="list-style-type: none"> Provide personnel and equipment for cleanup and remediation
Ministry of Labour, Immigration, Training and Skill Development	<ul style="list-style-type: none"> Industrial accidents Workplace critical injuries and deaths 	<ul style="list-style-type: none"> Investigate worker injury or death
Ministry of Natural Resources and Forestry	<ul style="list-style-type: none"> Large wildland fires 	<ul style="list-style-type: none"> Assis in mitigating and combating wildland fires
Ministry of Transportation	<ul style="list-style-type: none"> Major/large vehicle incidents on King's Highways 	<ul style="list-style-type: none"> Traffic control Assist with repair and cleanup
Emergency Management Ontario	<ul style="list-style-type: none"> Large-scale emergencies requiring declaration of state of local emergency 	<ul style="list-style-type: none"> Provincial level support Communication
CP Police Service	<ul style="list-style-type: none"> Rail emergencies (on and off board) Rail security incidents on and-off board Promote rail safety Protect infrastructure Enforce Criminal Code 	<ul style="list-style-type: none"> Oversee response to all rail emergencies. Liaise with and support municipal or provincial fire and emergency services as needed for large incidents
Ontario SPCA	<ul style="list-style-type: none"> Incidents involving animals 	<ul style="list-style-type: none"> Advise responders on best tactics Assist in enforcement Address animal welfare needs
Wellington County Social Services	<ul style="list-style-type: none"> Attend incidents involving the displacement of people 	<ul style="list-style-type: none"> Provide temporary emergency shelter Warming/ cooling centres Long-term evacuation accommodations Address food, clothing needs and personal services.

7.1.1 Fire Protection Services Agreements and Plans

Large emergency events can quickly overwhelm the response capacity of most community fire departments in Ontario. As a result, mutual aid and automatic aid agreements are a necessary component in adding response capacity for these low frequencies but potentially high or extreme consequence events.

The Township of Puslinch has formal agreements and plans with:

- Township of Guelph Eramosa “Automatic Aid Agreement” 2014-11-05
- City of Cambridge “Fire Protection Agreement” 2021-01-19
- County of Wellington “Mutual and Automatic Aid Plan and Program” 2010-05
- City of Hamilton “Mutal Aid Agreement” - not documented

The principal purpose for entering into these mutual aid agreements is to promote and ensure that adequate and coordinated resources are made available when requested from, or by a neighbouring township to minimize the loss of human life and property and damage to the environment in the event of an emergency that requires such additional resources.

All inter-municipal agreements should be reviewed regularly and adjusted as required. This provides for the updating and clarification of agreements and consideration of adjustments. It may also lead to discussions regarding localized fire service response agreements and considerations about whether automatic aid in defined circumstances might be of additional value.

SECTION 8 COMMUNITY SERVICES PROFILE

As referenced in **O. Reg. 378/18**, the community service profile assessment includes analysis of the types of services provided by other entities in the community, and those entities’ service capabilities. This includes the presence or absence and potential abilities of other agencies, organizations, or associations to provide services that may assist in mitigating the impacts of emergencies to which the fire department responds. The following sections consider these community service characteristics within the Township of Puslinch.

8.1 Community Services

Fires and other emergency events can have devastating effects on a community and at times can overwhelm public safety and security agencies’ capacity to respond. In an emergency event, community-based agencies, organizations, and associations can provide surge capacity to the response and recovery efforts of first responders and a useful resource to call upon if integrated into the emergency management framework early on. These types of affiliations can contribute a variety of capabilities essential to response and recovery efforts, including support in the areas of communications, health care, logistics, shelter, food and water supply, emergency clothing, and more specialized skill sets. Table 33 lists the community agencies and non-government organizations (NGOs) available to the Township of Puslinch.

Table 33: Community Service Agencies

Community Service Agency	Type of Assistance Provided
Local School Boards: Upper Grand District School Board & Wellington Catholic District School Board	The 2021 Census data indicates that children aged 14 and under represent 15.03% of the township’s total population. The proportion of children in Puslinch should be considered as an opportunity for public education. These numbers support the development of enhanced public education programming that targets children/youth of all ages. Partnering with school boards and other agencies that work with children can provide opportunity for fire and life safety education.
Salvation Army – County of Wellington	The Salvation Army can provide both immediate and long-term recovery assistance in cooperation with Fire and Police Services. The Salvation Army also provides information and referral to other agencies, camps, disaster services and counselling.
Guelph-Wellington Paramedic Services	Provides basic and advance medical care for first aid emergencies at public events. They are also able to provide volunteer support in the event of emergency situations such natural or human disasters.
Victim Services Wellington	Provides immediate on-site crisis, trauma, safety & support services to victims of crime and tragic circumstances.
YMCA of Three Rivers	Provides a variety of employment services as well as youth programming.

Community Service Agency	Type of Assistance Provided
Big Brothers & Sisters of Guelph	Provides youth 6 to 16 years old with a role model to talk to and share the experiences of growing up with.
HOPE	Helping Other Parents Everywhere (HOPE) is a volunteer-run network of peer support groups for parents and guardians who share similar struggles, experiences, and concerns related to their adolescent or young adult children.
Community Care Waterloo Wellington	Provides access to adult day programs, assisted living/housing, mental health programs and access to fresh food.
Guelph Food Bank	Provides food for people in need and connects them with both internal and external support programs.
Centre Wellington Food Bank	Provides access to food in emergency situations.
Local community faith-based organizations	Public fire safety messaging does not always reach community's most vulnerable populations. Partnering with local faith-based organizations can provide PFRS with the opportunity to improve its public education program as a method of information sharing to a wider audience within the township. This type of opportunity could involve distributing printed materials with fire safety messaging and smoke alarm installation information among the congregation, or faith-based leaders may allow representatives from PFRS to address congregations at faith-based events with fire safety messaging in person. These organizations may also be able to identify residents within the community who are at great risk of fire danger due to substandard housing or hoarding.
Guelph-Wellington Women in Crisis	Provides services to women and their children on domestic violence, sexual violence, and human trafficking.

SECTION 9 ECONOMIC PROFILE

As referenced in **O. Reg. 378/18**, the economic profile assessment includes analysis of the economic sectors affecting the community that are critical to its financial sustainability. This involves economic drivers in the community that have a significant influence on the ability of the community to provide or maintain service levels. The following sections consider these economic characteristics within the Township of Puslinch.

9.1 Economic Sectors and Employers in the Township of Puslinch

The top industries that contribute to the economic base of the township are summarized in Figure 8. According to the Statistics Canada 2021 Census, Professional, Scientific, and Technical Services, Retail, Manufacturing, Construction, and Health Care and Social Assistance are the top contributing industries to Puslinch’s economic base.

Figure 8: Township of Puslinch Top Industries

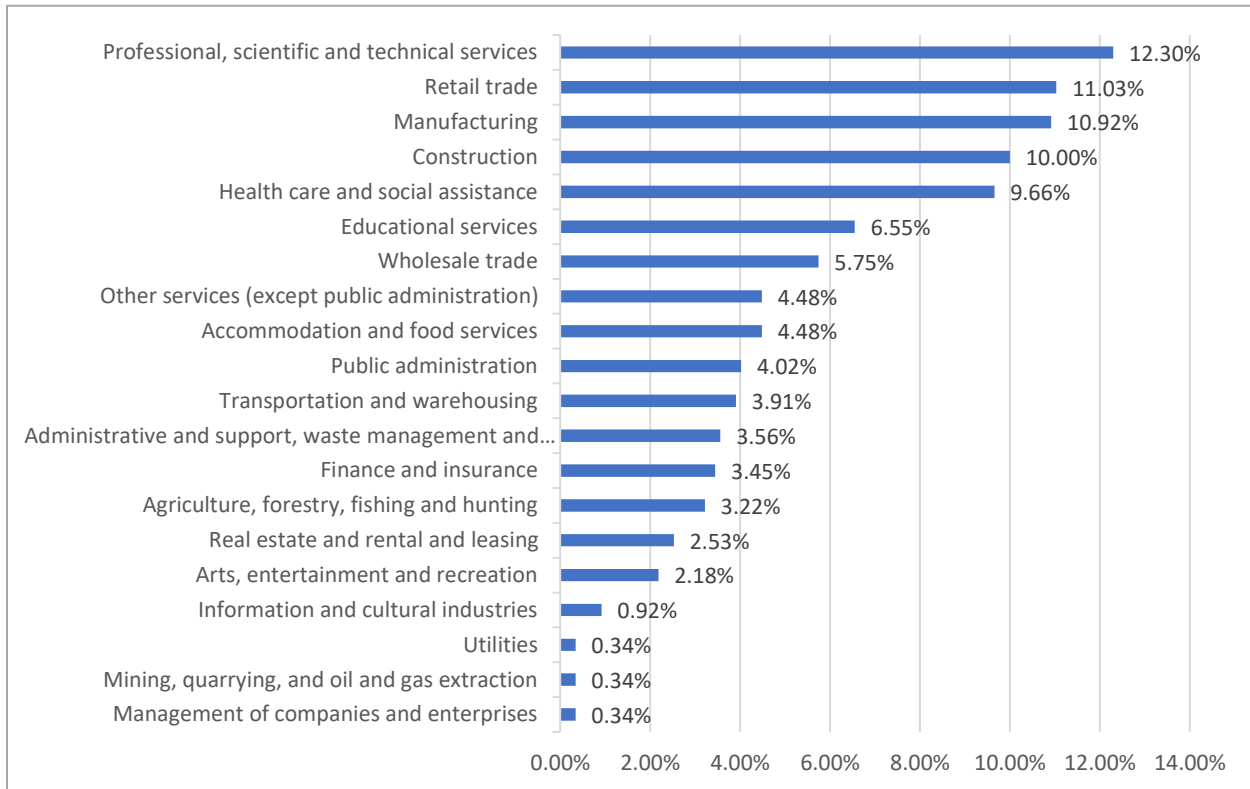


Figure Source: 2021 Census, Statistics Canada³⁴

³⁴ Ibid

Certain industries, employers and events contribute to the financial sustainability and economic vitality of a community. A fire or other emergency at key sectors and employment facilities within a community could have significant impacts on the local economy and employment.

The Township has identified the major employers as shown below in Table 34:

Table 34: Major Employers in the Township

Company	Service/Product	Address
Royal Canin Canada	Pet food manufacturer	100 Beiber Road
Triton Water Canada Holding – Blue Triton Brands	Water supplier	101 Brock Road South
Cascade Canada Ltd.	Manufacturer of Materials handling equipment	4 Nicholas Beaver Road
Mammoet Canada	Crane Rentals	7504 McLean Road East
Capital Paving Inc.	Surface paving	4459 Concession 7
Con-Cast Pipe Ltd.	Precast piping	299 Brock Rd. Sr

Puslinch has identified a number of major employers in various industries in the private sector, several of them being in the manufacturing industry. Certain industrial operations may have increased fuel loads and conduct higher risk activities. Proactive inspections should target these facilities to ensure compliance with codes, maintenance, and emergency planning requirements.

9.2 Economic Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Key Finding	
Key Finding	There are 6 major employers identified that contribute to the economic vitality of the community. If a fire were to occur at one of these facilities it could have an impact on the financial well-being of the township.

SECTION 10

PAST LOSS & EVENT HISTORY PROFILE

As referenced in **O. Reg. 378/18**, the past loss and event history profile assessment includes analysis of the community's past emergency response experience, including an analysis of the number and types of emergency responses, injuries, deaths, and dollar losses, and a comparison of the community's fire loss statistics with provincial fire loss statistics. Evaluation of previous response data will inform decisions on fire protection services delivery, including public fire safety education and inspection programs. The following sections consider these past loss and event history characteristics within the Township of Puslinch.

10.1 Past Loss

Analysis of historical data provides valuable insight into understanding the specific trends within a community. Assessing the key factors of life safety risk and fire risk in relation to provincial statistics provides a foundation for evaluating where specific programs or services may be necessary. The analysis within this section is based on the OFM's Standard Incident Reporting for the period of January 1st, 2018, to December 31st, 2022.

10.1.1 Total Fire Loss

The analysis of total fire loss in the Township of Puslinch over the five-year period from 2018 to 2022, Table 35 highlights three primary types of fires: structure fires, outdoor fires, and vehicle fires, totaling \$10,948,352 in property loss. On average, the Township of Puslinch experienced 24 fires per year and incurred approximately \$2,189,670 in property loss annually.

Table 36 presents a comparison of average structure fires and property loss between the Township of Puslinch and the province of Ontario for the years 2018 to 2022. Over this period, Puslinch experienced an average of 9.4 structure fires annually, resulting in an average property loss of \$1,667,750 per year. These fires accounted for 7.77% of all fires in the township and 15.23% of the total property loss. In comparison, Ontario reported an average of 7,026 structure fires annually with an average loss of \$881,092,618, representing 12.86% of all fires in the province and 17.70% of the total property loss.

Table 35: Total Fire Loss – Township of Puslinch

Year	Structure Fires	Loss (\$)	Outdoor Fires	Outdoor Loss	Vehicle Fires	Vehicle Loss	Total Fires	Total Loss
2018	6	\$1,442,000	1	\$5,000	20	\$299,000	27	\$1,746,000
2019	11	\$1,483,200	0	\$0	9	\$210,601	20	\$1,693,801
2020	10	\$913,201	1	\$50,000	16	\$672,000	27	\$1,635,201
2021	11	\$1,304,350	1	\$120,000	14	\$598,000	26	\$2,022,350
2022	9	\$3,196,000	1	\$15,000	11	\$640,000	21	\$3,851,000
Total	47	\$8,338,751	4	\$190,000	70	\$2,419,601	121	\$10,948,352
% of All Fires	38.84	76.16	3.31	1.74	57.85	22.10	100.00	100.00
Average	9.4	\$1,667,750	0.8	\$38,000	14	\$483,920	24.2	\$2,189,670

Table Source: OFM SIR Data for Puslinch³⁵

Table 36: Structure Fires and Property Loss – Township of Puslinch and Province of Ontario

Year	Puslinch Structure Fires	Puslinch Structure Loss	% of All Fires	% of All Loss	Ontario Structure Fires	Ontario Structure Loss	% of All Fires	% of All Loss
2018	6	\$1,442,000	4.96	13.17	7,012	\$734,340,655	12.83	14.75
2019	11	\$1,483,200	9.09	13.55	6,715	\$860,432,756	12.29	17.28
2020	10	\$913,201	8.26	8.34	6,842	\$790,698,587	12.52	15.88
2021	11	\$1,304,350	9.09	11.91	7,081	\$858,108,388	12.96	17.23
2022	9	\$3,196,000	7.44	29.19	7,482	\$1,161,882,704	13.69	23.34
Total	47	\$8,338,751	38.84	76.16	35,132	\$4,405,463,090	64.29	88.48
Total, fires with Loss	121	\$10,948,352	100.00%	100.00%	54,645	\$4,978,933,145	100.00	100.00
Average	9.4	\$1,667,750	7.77	15.23	7,026	\$881,092,618	12.86	17.70

Table Source: OFM SIR data for Township of Puslinch³⁶

³⁵ OFM SIR Data for the Township of Puslinch, 2018-2022

³⁶ Ibid

10.1.2 Fires by Occupancy Type

This section examines structure fires occurring from January 1st, 2018, to December 31st, 2022, categorized by occupancy type, utilizing data from the OFM's Standard Incident Reporting. Over this period, the Township of Puslinch experienced a total of 47 structure fires. Notably, 70.21% (33) of these fires occurred in Group C-Residential Occupancies, contributing to 35.61% of the total fire loss. Compared to the province, Puslinch exhibited a 3.65% lower incidence of fires in Group C-Residential Occupancies and a 31.83% lesser share of structure fire loss.

The second most substantial source of property loss was Group F – Industrial occupancies, representing 14.89% of structure fires and 32.63% of total structure fire loss during this period, with a 7.63% higher incidence than the province for this occupancy type (Table 37). Further the structure fire loss for Group F- industrial is 32.63% of the total structure fire loss, which is 20.62% higher than the province for Group F - industrial types.

Group A - Assembly occupancies accounted for 10.64% of total structure fires, which is 7.31% higher than the province for Group A occupancies and represents 26.12% of total structure fire loss which is 22.36% greater than the province for Group A occupancies.

Table 37: Fires by Major Occupancy Type – 2018-2022

Group	Occupancy Classification	# of Fires	Puslinch % of Structure Fires	Puslinch Structure Fire Loss	Puslinch % of Structure Fire Loss	Ontario % of Structure Fires	Ontario % of Structure Fire Loss
A	Assembly	5	10.64	\$2,178,000	26.12	3.33	3.76
B	Care & Detention	0	0.00	\$0	0.00	1.45	0.75
C	Residential	33	70.21	\$2,969,401	35.61	73.86	67.44
D	Business & Personal Services	0	0.00	\$0	0.00	2.63	2.63
E	Mercantile	0	0.00	\$0	0.00	3.28	4.44
F	Industrial	7	14.89	\$2,721,350	32.63	7.26	11.99
Other	Not Classified in OBC	0	0.00	\$0	0.00	5.52	1.18
Farm	Classified in the OBC	2	4.26	\$470,000	5.64	2.67	7.81
Total		47	100.00	\$8,338,751	100.00	100.00	100.00

Table Source: OFM SIR data for Township of Puslinch³⁷

³⁷ Ibid

10.1.3 Civilian Fatalities and Injuries

As shown in Table 38, according to data from the OFM Standard Incident Reporting, spanning from January 1st, 2018, to December 31st, 2022, there were 2 reported injuries and 0 fatalities within the Township of Puslinch. Notably, these numbers are considered low to the total identified by the provincial statistics.

Table 38: Civilian Fire Fatalities and Injuries by OBC Major Occupancy Classification – Township of Puslinch and Ontario

Group	Occupancy Classification	Puslinch Injuries	Puslinch Injuries (%)	Puslinch Fatalities	Puslinch Fatalities (%)	Ontario Injuries	Ontario Injuries (%)	Ontario Fatalities	Ontario Fatalities (%)
A	Assembly	0	0.00	0	0.00	23	0.90	3	0.64
B	Care & Detention	0	0.00	0	0.00	51	1.99	6	1.27
C	Residential	1	50.00	0	0.00	2304	89.68	444	94.07
D	Business & Personal Services	0	0.00	0	0.00	35	1.36	0	0.00
E	Mercantile	0	0.00	0	0.00	34	1.32	1	0.21
F	Industrial	1	50.00	0	0.00	74	2.88	12	2.54
Other	Not Classified in OBC	0	0.00	0	0.00	34	1.32	6	1.27
Farm	Classified in the NBC	0	0.00	0	0.00	14	0.54	0	0.00
Total		2	100.00	0	0.00	2,569	100.00	472	100.00

Table Source: OFM SIR data for Township of Puslinch³⁸

³⁸ Ibid

10.1.4 Reported Fire Cause

The NFPA defines fire cause as “the circumstances, conditions, or agencies that bring together a fuel, ignition source, and oxidizer (such as air or oxygen) resulting in a fire or a combustion explosion.” Assessing the possible cause of the fires reported is an important factor in identifying potential trends or areas that may be considered for introducing additional public education or fire prevention initiatives. Within OFM fire loss reporting, there are four categories of cause used to classify the cause of a fire. These include intentional, unintentional, other, and undetermined. Table 39 presents the reported fire causes for the township compared to the province over the five-year period from January 1st, 2018, to December 31st, 2022.

The analysis of fire causes in the Township of Puslinch, as detailed in Table 39, reveals various factors contributing to fires over the period examined. Almost 60% of fires were found to be undetermined. This rate of undetermined causes is 39.36% higher than the provincial average. Determining the cause of fires can assist fire services in developing public education programs to reduce or prevent future incidents. It could also help identify trends that may indicate a need for targeted enforcement.

The "intentional" category includes fires started for a specific reason, typically classified as arson, acts of vandalism, or for personal gain through insurance claims. According to the data, the township did not determine any intentional fires, including arson and acts of vandalism, during this five-year period. In contrast, the provincial total for intentional fires was 7.85%. This indicates that the township has a lower rate of intentional fires compared to the province, or the higher number of undetermined fires might have obscured these intentional fires.

The "unintentional" category represents common causes of fires, including human behavioral causes (e.g., misuse of ignition sources) and equipment failures (e.g., mechanical failure). Unintentional fire causes represented 38.30% of all reported fires in the township during this period, compared to 66.01% for the province. The leading causes of unintentional fires in the township were the misuse of ignition sources (14.89%) and mechanical/electrical failures (14.89%), compared to 28.14% and 15.06%, respectively, in the province.

Table 39: Reported Fire Cause – Township of Puslinch and Province of Ontario – 2018-2022

Nature	Fire Cause	Puslinch # of Fires	Puslinch % of Fires	Ontario # of Fires	Ontario % of Fires
Intentional	Arson	0	0.00	2,219	6.32
	Vandalism	0	0.00	536	1.53
	Other	0	0.00	11	0.03
Unintentional	Design/Construction/Maintenance Deficiency	1	2.13	2,232	6.35
	Mechanical/Electrical Failure	7	14.89	5,292	15.06
	Misuse of Ignition Source	7	14.89	9,885	28.14
	Other Unintentional	0	0.00	2,554	7.27
	Vehicle Collision	0	0.00	29	0.08
	Children Playing	0	0.00	138	0.39
	Undetermined	3	6.38	3,062	8.72
Other	Other	1	2.13	1,952	5.56
Undetermined	Undetermined	28	59.57	7,100	20.21
Unknown	Unknown, Not reported	0	0.00	122	0.35
Total		47	100.00	35,132	100.00

Table Source: OFM SIR data for Township of Puslinch³⁹

10.1.5 Ignition Source

According to the 2019 NFPA Glossary of Terms, ignition source is defined as “any item or substance capable of an energy release of type and magnitude sufficient to ignite any flammable mixture of gases or vapors that could occur at the site or onboard the vehicle.” Table 40 provides fire loss by source of ignition for the township and the province. Again, similar to reported fire cause, in 61.70% of fires, the ignition source was reported as undetermined. The lack of determination of cause is 35.9% greater than the provinces undetermined. Determining source can assist fire services in the development of public education program to reduce or prevent future events. It could also lead to trends that may indicate greater targeted enforcement needs or identify concerns to the Ontario Fire Marshal for review by their Technical Services section.

The balance of the source of ignition was fairly evenly distributed across a number of classifications (Electrical equipment, cooking equipment, heating equipment, open flame, other electrical/ mechanical) which all fall within or below the provincial averages. Efforts to enhance data collection and investigation methods could help reduce the number of undetermined cases, providing valuable insights for fire prevention and safety initiatives.

³⁹ OFM SIR Data for the Township of Puslinch, 2018-2022

Table 40: Source of Ignition – Township of Puslinch and Province of Ontario – 2018-2022

Reported Ignition Source	Puslinch # of Fires	Puslinch % of Fires	Ontario # of Fires	Ontario % of Fires
Appliances	0	0.00	1,528	4.35
Cooking Equipment	2	4.26	5,450	15.51
Electrical Distribution Equipment	2	4.26	2,977	8.47
Heating Equipment	2	4.26	2,582	7.35
Lighting Equipment	1	2.13	964	2.74
Open Flame tools/ Smokers Articles	3	6.38	4,974	14.16
Other Electrical/Mechanical	4	8.51	1,791	5.10
Processing Equipment	0	0.00	421	1.20
Miscellaneous	3	6.38	3,469	9.87
Exposure	1	2.13	1,736	4.94
Undetermined	29	61.70	9,101	25.91
Unknown/Not Reported	0	0.00	139	0.40
Total	47	100.00	35,132	100.00

Table Source: OFM SIR data for Township of Puslinch⁴⁰

10.1.6 Smoke Alarm Status

In the Province of Ontario, smoke alarms serve as crucial safety measures, mandated on every level of residential dwellings to act as the first line of defense against fires. Therefore, smoke alarm programs and compliance initiatives are integral components of public education and fire prevention efforts led by municipal fire services. Data regarding smoke alarm status during fire incidents is collected and reported by municipalities to the province, with information publicly available for analysis. Table 41 shows that over a five-year period from January 1st, 2018, to December 31st, 2022, in Group C - Residential occupancies, the Township of Puslinch reported that in 13.11% of fires responded to, there was no smoke alarm present. This is lower than the provincial average of 17.35%. Conversely, incidents where a smoke alarm was present but failed to operate accounted for 18.03%, higher than the provincial rate of 12.40%. In 36.07% of occurrences, smoke alarms were present and successfully operated, which is considerably less than the provincial rate of 44.68%.

⁴⁰ OFM SIR Data for the Township of Puslinch, 2018-2022

Table 41: Smoke Alarm Presence and Operation on the Floor of Fire Origin – Township of Puslinch and Ontario– 2018-2022⁴¹

Smoke Alarm Status (on floor of origin)	Puslinch							Ontario	
	2018	2019	2020	2021	2022	Total	%	Ontario Total	Ontario %
No Smoke Alarm Present	2	3	2	1	0	8	13.11	4,307	17.35
Smoke Alarm Present & Operated	4	6	3	4	5	22	36.07	11,091	44.68
Smoke Alarm Present & did not operate	4	3	2	1	1	11	18.03	3,079	12.40
Smoke Alarm Present, Operation undetermined	0	2	2	1	0	5	8.20	2,007	8.09
Smoke Alarm Presence Undetermined	2	4	2	4	3	15	24.59	4,269	17.20
Unknown, not reported	0	0	0	0	0	0	0.00	69	0.28
Total	12	18	11	11	9	61	100.00	24,822	100.00

Table Source: OFM SIR data for Township of Puslinch⁴²

Among the incidents analyzed over the five-year period, there were occurrences where the status of smoke alarms could not be conclusively determined. In the Township of Puslinch, these undetermined instances totaled 20, representing 32.79% of all cases. Similarly, in Ontario, 6,276 incidents, or 25.29% of the total, fell under this category. The reasons for the undetermined status could vary, including factors such as the extent of fire damage obscuring the evidence of smoke alarm presence or functionality, lack of proper documentation, or limitations in investigative procedures. Efforts to enhance data collection and investigation methods could help reduce the number of undetermined cases, providing valuable insights for fire prevention and safety initiatives.

⁴¹ Ibid

⁴² Ibid

10.2 Event History

Event history seeks to apply PFRS historic emergency call data to develop an understanding of community risks. The OFM provided the data used in this analysis for all historical calls for the five-year period from January 1st, 2018, to December 31st, 2022. This section provides a statistical assessment of historic emergency call volumes for the township. The analysis included within this section also provides a detailed breakdown of calls by OFM response type. Data used in the analysis of call volume by type was sourced from the OFM's Standard Incident Reporting because call volume by type is compared to the province. The volume and frequency of historic calls informs the understanding of response probability. The types of calls inform the potential consequences of PFRS responses and calls for service. The combined consideration of these elements provides an understanding of community risk, based on past calls for service.

10.2.1 Emergency Call Volume

This section illustrates the historical emergency call volume by year, month, day of week, and time of day for all types of incidents responded to by PFRS for the time from January 1st, 2018, to December 31st, 2022.

10.2.1.1 Annual Call Volume – All Incident Types

The analysis of annual emergency call volume can be beneficial in understanding evolving trends or changes in emergency response demand. A summary of the total number of emergency calls for the period from January 1st, 2018, to December 31st, 2022, is shown in Figure 9. This analysis identifies an increase in the total emergency call volume within the township over this period from 448 calls in 2018 to 507 calls in 2022. This represents a total increase of 13.17% over this five-year period with an average of 408 calls per year. There was a 32.03% increase in the call volume from 2021 to 2022, and a 67.26% increase from 2020 to 2022. These trends appear to be related mainly to an increase in motor vehicle incidents and medical calls. These should be monitored year by year to evaluate further increases/ decreases.

Figure 9: Annual Call Volume – All Incidents January 1st, 2018, to December 31st, 2022

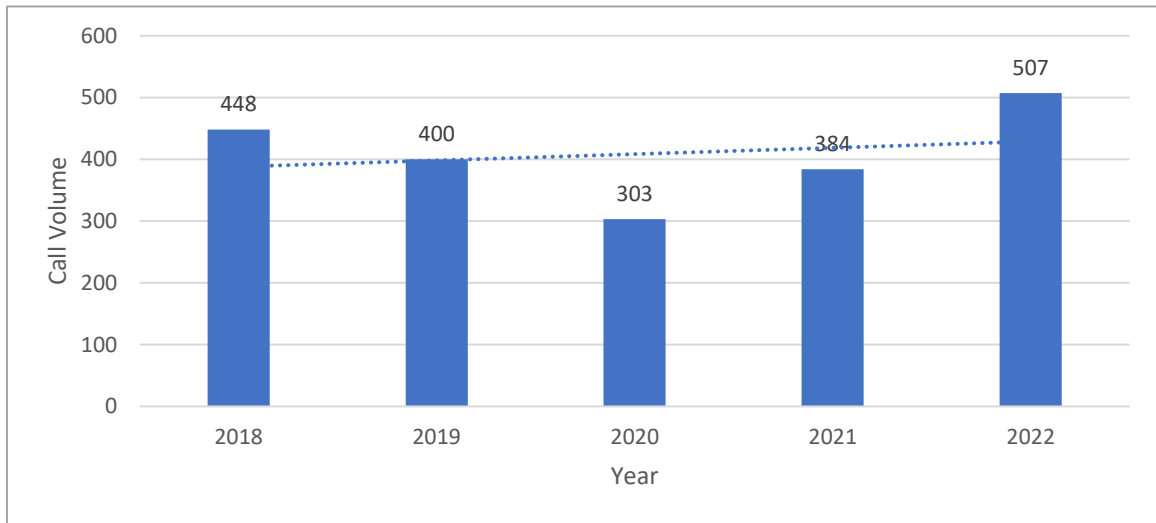


Figure Source: OFM SIR data for Township of Puslinch⁴³

10.2.1.2 Daily Emergency Call Volume – All Incident Types

For the period from January 1st, 2018, to December 31st, 2022, emergency call volume typically increases between 6:00 AM and 9:00 AM, reaching its peak between 3:00 PM and 6:00 PM (See Figure 10). The lowest percentage of emergency calls typically occurs between 12:00 AM and 6:00 AM, aligning with typical trends observed during commuting hours and reduced activity when most of the population is asleep.

Figure 10: Total Call Volume by Time of Day – All Incidents January 1st, 2018, to December 31st, 2021

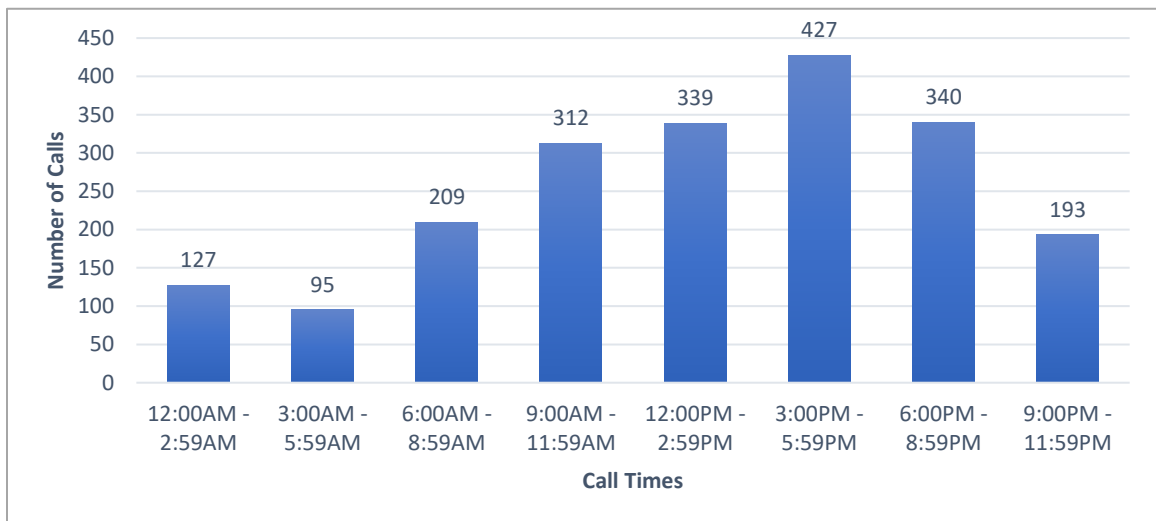


Figure Source: OFM SIR data for Township of Puslinch⁴⁴

⁴³ Ibid

⁴⁴ Ibid

An analysis of the call volume by day of the week reveals a generally consistent frequency of incidents, with slight increases noted on Fridays and Saturdays. These trends are anticipated, reflecting heightened recreational activities and increased traffic throughout the township. Further, call volumes tend to increase in summer months, coinciding with the influx of tourists.

10.2.1.3 Call Type – All Incident Types

This section analyzes all emergency call volume for the period from January 1st, 2018, to December 31st, 2022. Table 42 illustrates that during this period 33.40% of the total emergency calls that PFRS responded to were rescue incidents mostly attributed to motor vehicle collisions. Responding to other calls was the second highest percentage representing 17.58% of the department’s total emergency call volume. This includes CO calls, lift assists, unknown odour, and smoke alarm calls. During this five-year period, only 4.80% of emergency calls were categorized as Public Hazard. The number of fires reported over this 5-year period was 231 which is 11.31% of the total calls. This is higher than fires reported provincially at 2.10%. Table 43 provides a breakdown of all calls.

Table 42: Total Number of Incidents – Summary - January 1st, 2018, to December 31st, 2022.

Incident Subcategory	2018	2019	2020	2021	2022	Total	Total %
Property fires/explosions	50	29	47	53	52	231	11.31%
Burning (controlled)	18	12	16	6	7	59	2.89%
Overpressure rupture/explosion (no fire)	1	0	0	0	0	1	0.05%
Pre-fire conditions/no fire	5	5	6	6	11	33	1.62%
False fire calls	43	35	35	53	52	218	10.68%
CO false calls	22	13	10	6	8	59	2.89%
Public Hazard	11	15	17	25	30	98	4.80%
Rescue	152	147	91	125	167	682	33.40%
Medical/Resuscitator	84	77	31	47	63	302	14.79%
Other response	62	67	50	63	117	359	17.58%
Total	448	400	303	384	507	2,042	100.00%

Table Source: OFM SIR data for Township of Puslinch⁴⁵

⁴⁵ Ibid.

Table 43: Total Number of Incidents – Breakdown - January 1st, 2018, to December 31st, 2022

Call Type	2018	2019	2020	2021	2022	Total	Total %
A. Structure Fire	6	11	10	11	9	47	2.30
B. Other Fire	1	0	1	1	1	4	0.20
C. Vehicle Fire	20	9	16	14	11	70	3.43
D. No Loss Fire	12	0	12	15	7	46	2.25
E. No Loss Fire (Excluded)	11	9	8	12	24	64	3.13
F. Non-Fire Call	398	371	256	331	455	1811	88.69
Total	448	400	303	384	507	2042	100.00
F. Non-Fire Call Breakdown							
Burning Controlled	18	12	16	6	7	59	3.26
Authorized controlled burning complaint	7	4	6	1	1	19	32.20
Open Air Burning/unauthorized controlled burning	11	8	10	5	6	40	67.80
CO False Fire Calls	22	13	10	6	8	59	3.26
CO false alarm - equipment malfunction	12	7	9	1	3	32	54.24
CO false alarm - perceived emergency	10	6	1	5	5	27	45.76
False Fire Calls	43	35	35	53	52	218	12.04
Alarm System Equipment Accidental Activation	16	9	19	12	10	66	30.28
Alarm System Equipment Malfunction	15	16	7	27	29	94	43.12
Human - Accidental	2	4	7	3	6	22	10.09
Human - Malicious	0	0	0	0	0	0	0.00
Human - Perceived Emergency	6	3	1	5	2	17	7.80
Other False Fire Call	4	3	1	6	5	19	8.72
Medical/Resuscitator Call	84	77	31	47	63	302	16.68
Accident or illness	10	5	1	6	4	26	8.61
Alcohol or Drug Related	0	3	1	1	2	7	2.32
Asphyxia, respiratory Condition	9	11	4	4	4	32	10.60
Burns	0	0	1	0	0	1	0.33
Chest Pains or Suspected Heart Attack	13	12	2	3	1	31	10.26
CPR administered	4	3	3	0	0	10	3.31
Defibrillator Used	0	1	0	0	0	1	0.33
Electric Shock	0	0	0	0	0	0	0.00
Medical aid not required on arrival	4	1	1	9	17	32	10.60
Medical Resuscitator call false alarm	0	1	0	0	1	2	0.66

Call Type	2018	2019	2020	2021	2022	Total	Total %
Medical/Resuscitator Call - Continued							
Medical Resuscitator call no action required	15	17	3	9	7	51	16.89
Other Medical Resuscitator Call	18	12	8	9	19	66	21.85
Oxygen Administered	4	0	1	0	0	5	1.66
Seizure	4	6	3	0	3	16	5.30
Traumatic Shock	0	0	0	0	0	0	0.00
Vital Signs Absent, DOA	3	5	3	6	5	22	7.28
Other Response	62	67	50	63	117	359	19.82
Assistance not required by other agency	8	12	4	8	5	37	10.31
Assistance to other agencies	0	0	1	3	0	4	1.11
Assistance to Police	2	1	0	0	1	4	1.11
Assisting other Fire Department (Automatic Aid)	1	0	0	3	14	18	5.01
Assisting other Fire Department (Fire Protection Agreement)	2	5	6	0	3	16	4.46
Assisting other Fire Department (Mutual Aid)	0	5	3	10	16	34	9.47
Assisting other Fire Department (Other)	0	0	0	0	0	0	0.00
Cancelled on Route	28	21	23	33	57	162	45.13
Illegal Grow Operation (no fire)	0	0	0	0	0	0	0.00
Incident Not Found	15	21	11	5	14	66	18.38
Other Public Service	3	1	0	0	2	6	1.67
Other Response	3	1	2	1	5	12	3.34
Overpressure Rupture/explosion (no fire)	1	0	0	0	0	1	0.06
Overpressure Rupture- Gas pipe (no fire)	0	0	0	0	0	0	0.00
Overpressure Rupture (no fire- steam boilers, hot water)	1	0	0	0	0	1	100.00
Pre-Fire Conditions (no fire)	5	5	6	6	11	33	1.82
Fireworks (no fire)	0	0	0	0	0	0	0.00
Lightning (no fire)	0	0	0	0	0	0	0.00
Other (cooking, toasting, smoke, steam)	0	0	0	0	2	2	6.06
Other pre fire conditions (no fire)	3	1	4	2	3	13	39.39
Overheat (no fire- mechanical devices)	2	4	2	3	6	17	51.52
Pot on Stove	0	0	0	1	0	1	3.03

Call Type	2018	2019	2020	2021	2022	Total	Total %
Public Hazard	11	15	17	25	30	98	5.41
Bomb, Explosive removal Standby	0	0	0	0	0	0	0.00
CO incident, CO present	2	3	2	2	5	14	14.29
Gas Leak - Miscellaneous	0	1	1	0	0	2	2.04
Gas Leak - Natural Gas	0	3	2	3	2	10	10.20
Gas Leak - Propane	2	1	1	1	2	7	7.14
Gas Leak - Refrigeration	0	1	0	0	0	1	1.02
Other Public Hazard	0	0	1	5	3	9	9.18
Power Lines Down, Arcing	5	2	7	10	12	36	36.73
Public Hazard call false alarm	1	1	1	1	0	4	4.08
Public Hazard no action required	0	0	1	2	3	6	6.12
Ruptured Water, Steam Pipe	0	1	0	0	0	1	1.02
Spill- Gasoline or Fuel	0	1	1	0	2	4	4.08
Spill - Miscellaneous	1	0	0	0	1	2	2.04
Spill - Toxic Chemical	0	0	0	0	0	0	0.00
Suspicious Substance	0	1	0	1	0	2	2.04
Rescue	152	147	91	125	167	682	37.66
Animal Rescue	0	0	0	0	1	1	0.15
Building Collapse	0	0	0	0	0	0	0.00
Commercial Industrial Accident	0	1	0	0	0	1	0.15
Confine Space Rescue (non-fire)	0	0	0	0	0	0	0.00
High Angle Rescue	0	0	0	0	1	1	0.15
Home/Residential Accident	0	0	1	0	0	1	0.15
Low Angle Rescue	0	0	0	0	0	0	0.00
Other Rescue	2	1	4	0	2	9	1.32
Persons Trapped in Elevator	0	0	0	0	0	0	0.00
Rescue False Alarm	0	0	0	0	0	0	0.00
Rescue No Action Required	3	4	0	1	1	9	1.32
Vehicle Collision	141	137	81	118	159	636	93.26
Vehicle Extrication	5	4	5	5	3	22	3.23
Water Ice Rescue	0	0	0	0	0	0	0.00
Water Rescue	1	0	0	1	0	2	0.29

Table Source: OFM SIR data for Township of Puslinch⁴⁶

⁴⁶ Ibid

10.3 Past Loss & Event History Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	
Identified Risk	For the period from January 1st, 2018, to December 31st, 2022, the township experienced a total of 47 structure fires of which 70.21% occurred in Group C-Residential Occupancies.
Identified Risk	For the period from January 1st, 2018, to December 31st, 2022, group F- Industrial occupancies accounted for 14.89% of the structure fires and 32.63% of the total structure fire loss. The township's percentage of loss is nearly 3 times higher than that of the province. However Industrial occupancies only represent 3.49% of all occupancies in the township.
Identified Risk	For the period from January 1st, 2018, to December 31st, 2022, group A – Assembly occupancies accounted for 10.64% of the structure fires and 26.12% of the total structure fire loss. The township's percentage of fires is more than 3 times higher and fire loss is nearly 7 times higher than that of the province. However, assembly occupancies only represent 1.75% of all occupancies in the township.
Key Finding	
Key Finding	Over the five-year period from January 1st, 2018, to December 31st, 2022, in 36.07% of incidents, there was a smoke alarm present on the floor of origin and operated. This is lower than that of the province at 44.68%.
Key Finding	There was a 32.03% increase in the call volume from 2021 to 2022 primarily related to vehicle collisions and medicals. This trend should be monitored.
Key Finding	Over the five-year period from January 1st, 2018, to December 31st, 2022, 37.66% of the total emergency calls that PFRS responded to were rescue incidents.
Key Finding	Over the five-year period from January 1st, 2018, to December 31st, 2022, 61.70% of the reported fires had an ignition source undetermined which is 35.90% higher than that of the province.
Key Finding	The township has nearly triple the provincial rate of fires that were deemed undetermined.

SECTION 11 IDENTIFIED RISKS AND RISK TREATMENTS

The purpose of a CRA is to identify risks that are then used to inform decision-making regarding the provision of fire protection services. The analysis throughout this CRA identifies ‘Key Findings’ and ‘Identified Risks’ to be considered. In alignment with **TG-02-2019**, this section takes the identified risk conclusions (both the key findings and the identified risks) through a risk assignment process to assist in the prioritization of risks, as well as a risk treatment process. This section of the CRA brings together all the key findings and identified risks. They are taken through a risk treatment process and aligned with the “Five E’s” of Community Risk Reduction and three lines of defence in order to inform the analysis and recommendations for within a Fire Master Plan or other strategic document as shown in Figure 11.

Figure 11: Risk Conclusions Application Process

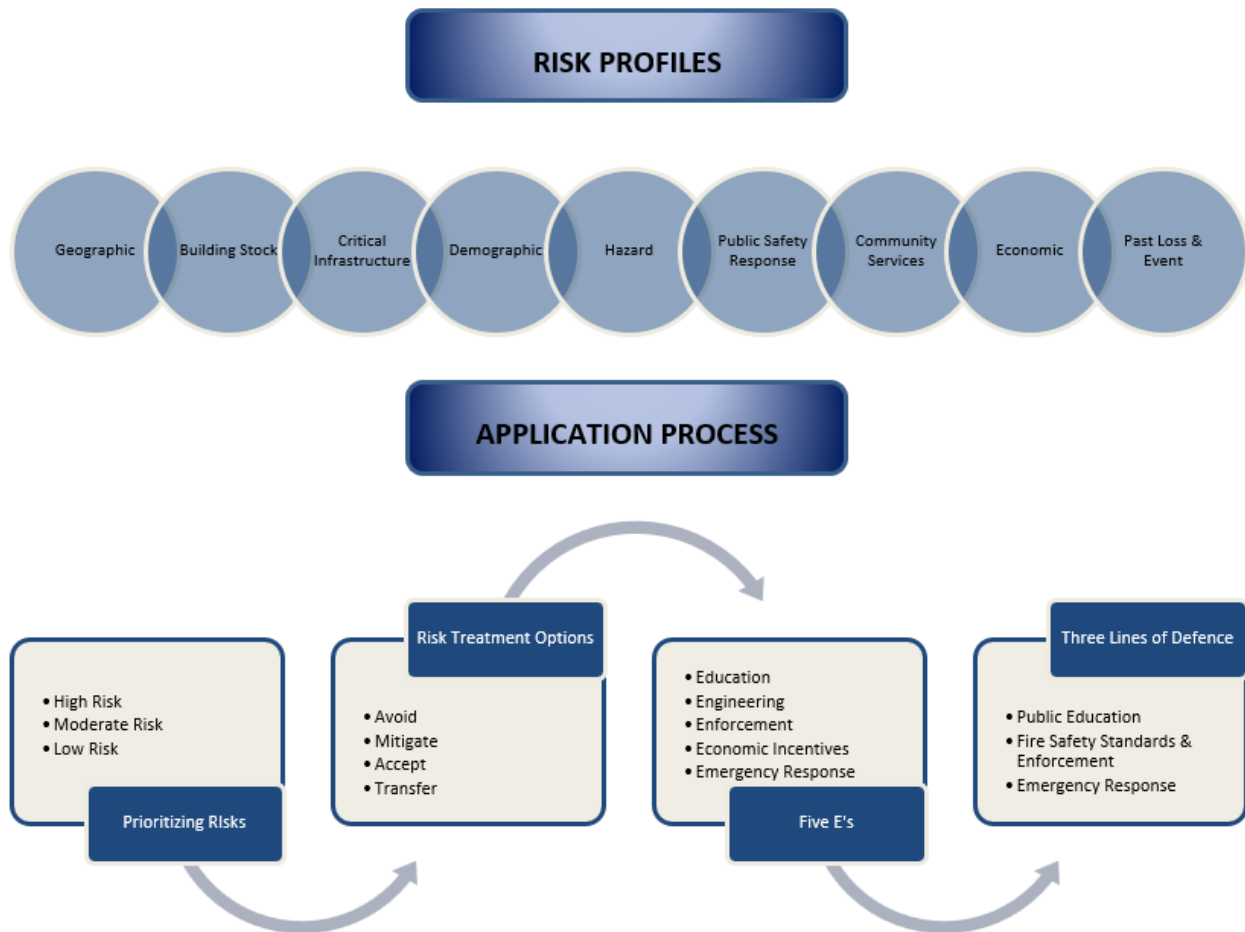


Figure Source: Adapted from OFM TG-02-2019 & NFPA 1300⁴⁷

⁴⁷ Office of the Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Section 6, Pg 16 & NFPA 1300, 2020 Edition, Annex A.6.3.3.2(4)

11.1 Prioritizing Risk

Following the probability and consequence levels identified by the OFM as described in the subsections below, the risk assignment process considers the probability and consequence of each identified risk. This will result in each risk having a risk level (e.g., low, moderate, or high) assigned. These risk levels will then be used to assist in the prioritization of risks as part of a Fire Master Plan.

11.1.1 Risk assignment Process Overview

The risk assignment methodology used as part of this CRA is informed by the OFM Technical Guideline (TG)-02-2019 Community Risk Assessment Guideline. There are three steps included in the risk assignment exercise used for this CRA.:

1. **Determine a probability level:** The probability of a fire or emergency event occurring can be estimated in part based on historical experience of the community and that of the province. The likelihood categories, and the values presented, follow the OFM TG-02-2019 Community Risk Assessment Guideline. Table 44 presents the probability levels and the adjusted descriptions.

Table 44: Probability Level

Likelihood Category	Numerical Value ⁴⁸	Description
Rare	1	<ul style="list-style-type: none"> • May occur in exceptional circumstances • No incidents in the past 15 years
Unlikely	10	<ul style="list-style-type: none"> • Could occur at some time, especially if circumstances change • 5 to 15 years since last incident
Possible	100	<ul style="list-style-type: none"> • Might occur under certain circumstances • 1 incident in the past 5 years
Likely	1,000	<ul style="list-style-type: none"> • Will probably occur at some time under current circumstances • Multiple or recurring incidents in the past 5 years
Almost Certain	10,000	<ul style="list-style-type: none"> • Expected to occur unless circumstances change • Multiple or recurring incidents in the past year

Table Source: OFM TG 02-2019⁴⁹

⁴⁸ Numeric scales is taken from Dillon Consulting, The Corporation of the city of Mississauga Community Risk Identification: Introduction and Methodology, July 2017

⁴⁹ Office of the Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Section 4.1, Pg 13

2. **Determine a consequence level:** The consequences of an emergency event relate to the potential losses or negative outcomes associated with the incident. There are four components that should be evaluated in terms of assessing consequence. These include:
- a) **Life Safety:** Injuries or loss of life due to occupant and firefighter exposure to life threatening fire or other situations.
 - b) **Property Loss:** Monetary losses relating to private and public buildings, property content, irreplaceable assets, significant historic/symbolic landmarks, and critical infrastructure due to fire.
 - c) **Economic Impact:** Monetary losses associated with property income, business closures, downturn in tourism, tax assessment value and employment layoffs due to fire.
 - d) **Environmental Impact:** Harm to human and non-human (e.g., wildlife, fish, and vegetation) species of life and general decline in quality of life within the community due to air/water/soil contamination because of fire or fire suppression activities. Table 45 presents the consequence levels.

Table 45: Consequence Levels

Likelihood Category	Numerical Value ⁵⁰	Description
Insignificant	1	<ul style="list-style-type: none"> • No life safety issue • Limited value or no property loss • No impact to local economy • No effect of general living conditions
Minor	10	<ul style="list-style-type: none"> • Potential risk to life safety of occupants • Minor property loss • Minimal disruption to business activity and/or Minimal impact on general living conditions
Moderate	100	<ul style="list-style-type: none"> • Threat to life safety of occupants • Moderate property loss • Poses threat to small local businesses • Could pose threat to quality of the environment
Major	1,000	<ul style="list-style-type: none"> • Potential for large loss of life • Would result in significant property damage • Significant threat to businesses, local economy, and tourism • Impact to environment would result in a short term, partial evacuation of local residents and businesses

⁵⁰ Numeric scales are taken from Dillon Consulting, *The Corporation of the city of Mississauga Community Risk Identification: Introduction and Methodology*, July 2017

Likelihood Category	Numerical Value ⁵⁰	Description
Catastrophic	10,000	<ul style="list-style-type: none"> Significant loss of life Multiple property damage to a significant portion of the township Long term disruption of businesses, local employment, and tourism and/or Environmental damage that would result in long-term evacuation of local residents and businesses

Table Source: OFM TG 02-2019⁵¹

- 3. Establish the risk level:** (i.e., low, moderate, or high) for each risk based on the identified probability and consequence for each event. Once probability and consequence are determined the level of risk is calculated by multiplying the numerical values⁵² for probability and consequence. The relationship between probability and consequence as it pertains to risk levels can be illustrated in a risk matrix. In a risk matrix, probability and consequence are defined on separate scales with varying descriptors providing directions on how to assign the probability and consequence of an event. Table 46 shows the risk matrix for this CRA.

Table 46: Probability & Consequence Risk Matrix

Probability/ Consequence	Insignificant 1	Minor 10	Moderate 100	Major 1,000	Catastrophic 10,000
Almost Certain 10,000	Moderate	Moderate	High	High	High
Likely 1,000	Moderate	Moderate	Moderate	High	High
Possible 100	Low	Moderate	Moderate	Moderate	High
Unlikely 10	Low	Low	Moderate	Moderate	Moderate
Rare 1	Low	Low	Low	Moderate	Moderate

Table Source: OFM TG 02-2019⁵³

⁵¹ Office of the Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Section 4.2 pg 14

⁵² Numeric scales are taken from Dillon Consulting, The Corporation of the city of Mississauga Community Risk Identification: Introduction and Methodology, July 2017

⁵³ Office of the Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Appendix B Pg B1

11.1.2 Assigned Risk Levels

The purpose of assigning a risk level is to assist in the prioritization of the range of risks that were identified as part of this CRA. The results of the risk assignment process are presented in Table 47. Where possible, quantitative data was used to inform the risk assignment as described in the rationale in the table.

Table 47: Risk Assignment

Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
The road network predominately Hwy 401 bisecting the township, is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires. (Source Geographic Profile)	Almost Certain	<ul style="list-style-type: none"> Approximately 658 emergency calls responded to between 2018 and 2022 pertain to motor-vehicle related incidents, this represents 96.5% of rescue calls and approximately 32.2% of all calls responded to by PFRS during that period 	Moderate	<ul style="list-style-type: none"> Potential for risk to life safety of occupants of motor vehicles Potential risk for property loss Could pose a threat to small local business Could pose a threat to the quality of the environment Consequence level could be impacted by the magnitude of a hazard event. 	High
There are several rail lines within the Township of Puslinch that present a risk related primarily to the movement of goods. (Source Geographic Profile)	Possible	<ul style="list-style-type: none"> Guelph Junction Railway, CN and CP Rail operate various lines running through the municipality, which includes farmland and over water surfaces. The containers transported include dangerous goods. 	Major	<ul style="list-style-type: none"> Significant loss of life Multiple property damage to significant portion of the township Long term disruption of farms, businesses, local employment, and tourism and/or Environmental damage that would result in evacuation of local residents, farms and businesses 	Moderate
There is an increased risk of ice and water rescue at Puslinch Lake, Mountsberg Reservoir and Mill Creek due to recreational activity on the water. (Source Geographic Profile)	Unlikely	<ul style="list-style-type: none"> Waterfront activities increase the risk of an incident both on the water and onshore. PFRS reported a total of 2 water and/or ice rescues in the past 5 years. 	Moderate	<ul style="list-style-type: none"> Threat to life safety of occupants Moderate property loss 	Moderate

Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Group C occupancies represent 82.88% of all occupancies. Residential occupancies are the highest occupancies linked to fire deaths and fire injuries across the province. (Source Building Stock and Fire Loss and Event History Profile)	Almost Certain	<ul style="list-style-type: none"> The majority of the township’s existing property stock is comprised of Group C - Residential Occupancies (82.88%) 70.21% of structure fires loss over the five-year period from January 1, 2018, to December 31, 2022, occurred within Group C - Residential Occupancies. In Ontario a high majority of fire deaths and injuries occur in Group C residential occupancies 	Moderate	<ul style="list-style-type: none"> Could pose a threat to the life safety of occupants Could result in moderate property loss Could pose a threat to small local businesses, and/or pose a threat to the quality of the environment Potential for vulnerable individuals including seniors and youth within Group C Potential for exposure risk depending on dwelling type and building age 	High
Data provided by the 2021 census indicates that 38.39% of the township’s residential building stock was built prior to the introduction of the 1981 OFC. (Source: Building Stock Profile)	Almost Certain	<ul style="list-style-type: none"> 38.39% of the township’s building stock was built prior to 1981, preceding the adoption of the 1981 OFC. There were 11 incidents (or 18.03%) where a smoke alarm was present but did not operate. There were 15 incidents (24.59%) where a smoke alarm presence was undetermined. 	Moderate	<ul style="list-style-type: none"> Could pose a threat to the life safety of occupants Could result in moderate property loss Could pose a threat to small local businesses, and/or pose a threat to the quality of the environment Occupants could be vulnerable individuals including seniors and youth within Group C – Residential 	High
There are several properties within Puslinch that have a potentially high fuel load and therefore an increased high fire risk. (Source: Building Stock Profile)	Likely	<ul style="list-style-type: none"> There are 106 industrial occupancies (3.49% of property stock) - several with known high fuel load concerns There have been 7 industrial fires over the past 5 years resulting in over \$2.7M fire loss (32.63% of the total fire loss) 	Major	<ul style="list-style-type: none"> Significant threat to businesses, local economy, and tourism Impact to environment could result in a short term, partial evacuation of local residents and businesses Prolonged disruptions to supply chains 	High

Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
The Township of Puslinch currently has 1 registered vulnerable occupancy. (Source: Building Stock Profile)	Possible	<ul style="list-style-type: none"> Vulnerable occupancies require regular inspections to ensure that compliance to the Ontario Fire Code is maintained. Vulnerable occupancies may house individuals with various mobility issues requiring detailed plans in the event of a fire in the building. 	Major	<ul style="list-style-type: none"> Ontario Regulation 150/13 requires fire departments to perform annual inspections and approve and witness fire drill scenarios Presence and maintenance of fire protection equipment, for example, fire alarm system, sprinklers, etc. Potential for vulnerable individuals including those who receive special care or treatment within a Group B occupancy 	Moderate
There are 109 Properties Designated or Listed Under Part IV, Section 29 of the Ontario Heritage Act and 102 under Section 27 and 102 under Section 27. (Source: Building Stock Profile)	Likely	<ul style="list-style-type: none"> 109 Properties Designated or listed Under Part IV, Section 29 of the Ontario Heritage Act and 102 under Section 27 and 102 under Section 27 These building are built prior to the adoption of the OBC or OFC 	Moderate	<ul style="list-style-type: none"> Significant threat to businesses, local economy, and tourism Impact to environment could result in a short term, partial evacuation of local residents and businesses Loss is permanent – cannot be replaced 	Moderate
There were 658 emergency calls responded to between 2018 and 2022 pertain to motor-vehicle related incidents, this represents 96.5% of rescue calls and approximately 32.2% of all calls responded to by PFRS during that period. (Source: Critical Infrastructure Profile)	Almost Certain	<ul style="list-style-type: none"> 658 emergency calls responded to between 2018 and 2022 pertain to motor-vehicle related incidents, this represents 96.5% of rescue Over 80% of the labour force commutes to a different census division within the province. This is 58.32% more than that of the provincial commuters (23.50%). a large proportion (49.18%) of the labour force begins their commute between the hours of 7 and 9 AM 	Moderate	<ul style="list-style-type: none"> Potential for risk to life safety of occupants of motor vehicles Potential risk for property loss Could pose a threat to small local business Could pose a threat to the quality of the environment Consequence level could be impacted by the magnitude of a hazard event. 	High

Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
There is no municipal water infrastructure to provide water supply for firefighting operations.	Almost Certain	<ul style="list-style-type: none"> Water supply is essential for fire suppression operations No municipal water infrastructure requires alternative sources including tanker shuttles and water bodies such as reservoirs, rivers and lakes There are 152 water reservoir tanks and 13 private hydrants available 	Moderate	<ul style="list-style-type: none"> Could pose a threat to the life safety of occupants Could result in moderate property loss Could pose a threat to small local businesses, and/or pose a threat to the quality of the environment Could pose risk to fire fighter safety is water suddenly becomes unavailable 	High
The percentage of the population aged 65 years and older in Puslinch represents 22.92% of the total population. An additional 17.76% of the township's population falls between the age group of 55 and 64, who are aging towards the senior's demographic of 65 years of age and older. (Source: Demographic Profile)	Almost Certain	<ul style="list-style-type: none"> Canada's aging population has been recognized as one of the most significant demographic trends. Seniors (those 65 years and over) are considered to represent one of the highest fire risk groups across the province based on residential fire death rate (fire deaths per million of population). The percentage of the population aged 65 years and older in Puslinch represents 22.92% of the total population 17.76% of the township's population falls between the age group of 55 and 64, who are aging towards the senior's demographic of 65 years of age and older 	Moderate	<ul style="list-style-type: none"> Could pose a threat to the life safety of occupants Could result in moderate property loss Potential for exposure risk depending on dwelling type and building age Potential presence and maintenance of fire protection equipment would influence consequence level 	High
Nearly 81.1% of the labour force population commutes to a different census division within the province. This is 57.60% more than that of the provincial commuters (23.50%).	Likely	<ul style="list-style-type: none"> 81.1% of the labour force commutes to a different census division (1845 people) 49.18% of the labour force begins their commute between the hours of 7 and 9 AM, and therefore the risk of Motor Vehicle Collision (MVC) calls is likely to be greatest during this time 	Moderate	<ul style="list-style-type: none"> Potential for risk to life safety of occupants of motor vehicles Potential risk for property loss 	Moderate

Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
For the period from January 1st, 2018, to December 31st, 2022, the township experienced a total of 47 structure fires of which 70.21% occurred in Group C-Residential Occupancies.	Almost Certain	<ul style="list-style-type: none"> Fires were responsible for 76.16% of the total fire loss for this period. Over this period, Puslinchh experienced similar rates of fires in Group C-Residential Occupancies than that of the province Provincially, civilian fire related injuries, and civilian fire related fatalities occurred in residential occupancies. 	Moderate	<ul style="list-style-type: none"> Could pose a threat to the life safety of occupants Could result in moderate property loss Potential for exposure risk depending on dwelling type and building age Potential presence and maintenance of fire protection equipment would influence consequence level 	High
For the period from January 1st, 2018, to December 31st, 2022, group F- Industrial occupancies accounted for 14.89% of the structure fires and 32.63% of the total structure fire loss.	Likely	<ul style="list-style-type: none"> Group F industrial accounts for only 3.49% of the property stock but 14.89 % of the structure fires and 32.63% of fire loss. The township’s percentage of loss is nearly 3 times higher than that of the province. 	Major	<ul style="list-style-type: none"> Potential presence and maintenance of fire protection equipment would influence consequence level potential for large loss of life, significant property damage, significant threat to businesses and local economy – depending on type of business 	High
For the period from January 1st, 2018, to December 31st, 2022, group A – Assembly occupancies accounted for 10.64% of the structure fires and 26.12% of the total structure fire loss.	Likely	<ul style="list-style-type: none"> The township’s percentage of fires is more than 3 times higher Ffire loss is nearly 7 times higher than that of the province. Assembly occupancies only represent 1.75% of all occupancies in the township 	Moderate	<ul style="list-style-type: none"> Could pose a threat to the life safety of occupants Could result in moderate property loss Potential for exposure risk depending on dwelling type and building age Potential presence and maintenance of fire protection equipment would influence consequence level 	Moderate

11.2 Risk Treatment

NFPA 1300 and the OFM TG-02-2019 apply the process of identifying a risk treatment option for an identified risk. The risk treatment options include avoidance, mitigation, acceptance, and transfer. (See Table 48).

Table 48: Risk Treatment Options

Treatment Option	Description
Avoid	Implementing programs and initiatives to prevent a fire or emergency from happening.
Mitigate	Implementing programs and initiatives to reduce the probability and/or consequence of a fire or emergency.
Accept	After identifying and prioritizing a risk, the fire service determines that no specific programs or initiatives will be implemented to address this risk.
Transfer	The fire service transfers the impact and/or management of the risk to another organization or body. (i.e. fire protection agreements, automatic aid)

Table Source: OFM TG 02-2019⁵⁴

Section 7 of TG 02-2019 discusses setting the levels of service. To assist with application of the Identified Risks in the CRA, municipalities must consider the “Establishment of goals and objectives, strategies, timelines, and evaluation for the proposed fire protection services to be provided.”⁵⁵ This includes the identification of programming or resource gaps and the plan to close those gaps. Typically, this articulated as part of a Fire Master Plan or Community Risk Reduction strategy.

Recommendations of a Fire Master Plan should focus on ways to proactively reduce risk through education, prevention, and enforcement with fire suppression as the fail-safe.

The Five Es is a framework outlined in NFPA 1300, and the Institution of Fire Engineers’ Vision 20/20 National Strategy for Fire Loss Prevention, is a tool that helps to provide a lens through which identified risks can be reviewed to inform and support the Fire Master Plan. Table 49 identifies and describes each of the 5 Es of risk mitigation.

⁵⁴ Office of the Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Section 6 pg 16

⁵⁵ Office of the Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, 7 pg 18

Table 49: 5 Es of Risk Mitigation

Mitigation Type	Description
Education	Aims to provide information that creates awareness and knowledge and subsequently changes behaviour.
Enforcement	Intended to correct negative human behaviour through legislation such as the Ontario Building Code and the Ontario Fire Code and the Provincial Offences Act.
Engineering	When education does not change an individual’s behavior, this component removes the human factor and introduces technology to improve safety such as smoke alarms.
Economic Incentives	Provided to reinforce positive impacts (e.g., insurance discounts or tax levy reductions) and discourage negative impacts (e.g., fines and charges)
Emergency Response	Necessary only if the first 4 Es are unsuccessful, and a fire incident occurs. The level of service for a community is determined by Council based on the needs and circumstances identified locally.

Source: Adapted from NFPA 1300 & Vision 20/20⁵⁶

Error! Reference source not found. summarize the identified risks and present ways in which the risks can be addressed by PFRS and ultimately considered within the Fire Master Plan analysis and recommendations. The same process is applied to the key findings in Error! Reference source not found..

⁵⁶ NFPA 1300, 2020 Edition, Annex A.6.3.3.2(4)

Table 50: Identified Risk Treatment

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Geographic	The road network predominately Hwy 401 bisecting the township, is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires.	High	Accept	No	No	No	No	Yes
Geographic	There are several rail lines within the Township of Puslinch that present a risk related primarily to the movement of goods.	Moderate	Accept	No	No	No	No	Yes
Geographic	There is an increased risk of ice and water rescue at Puslinch Lake, Mountsberg Reservoir and Mill Creek due to recreational activity on the water.	Moderate	Accept	Yes	No	No	No	Yes
Building Stock and Fire Loss and Event History	Group C occupancies represent 82.88% of all occupancies. Residential occupancies are the highest occupancies linked to fire deaths and fire injuries across the province	High	Mitigate	Yes	Yes	Yes	No	Yes
Building Stock	Data provided by the 2021 census indicates that 38.39% of the township's residential building stock was built prior to the introduction of the 1981 OFC.	High	Mitigate	Yes	Yes	Yes	No	Yes

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Building Stock	There are several properties within Puslinch that have a potentially high fuel load and therefore an increased high fire risk.	High	Mitigate	Yes	Yes	Yes	No	Yes
Building Stock	The Township of Puslinch currently has 1 registered vulnerable occupancy.	Moderate	Mitigate	Yes	Yes	Yes	Yes	Yes
Building Stock	There are 109 Properties Designated or Listed Under Part IV, Section 29 of the Ontario Heritage Act and 102 under Section 27 and 102 under Section 27.	Moderate	Mitigate	Yes	Yes	Yes	Yes	Yes
Critical Infrastructure	There were 658 emergency calls responded to between 2018 and 2022 pertain to motor-vehicle related incidents, this represents 96.5% of rescue calls and approximately 32.2% of all calls responded to by PFRS during that period.	High	Accept	No	No	No	No	Yes
Critical Infrastructure	There is no municipal water infrastructure to provide water supply for firefighting operations.	High	Mitigate	No	Yes	Yes	Yes	Yes

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Demographic	The percentage of the population aged 65 years and older in Puslinch represents 22.92% of the total population. An additional 17.76% of the township's population falls between the age group of 55 and 64, who are aging towards the senior's demographic of 65 years of age and older	High	Mitigate	Yes	Yes	Yes	No	Yes
	The number of residential occupants greater than 2 people is 44.23% which is slightly higher than the provincial average (40.80%)	Moderate	Mitigate	Yes	Yes	Yes	No	Yes
Demographic	Nearly 81.1% of the labour force population commutes to a different census division within the province. This is 57.60% more than that of the provincial commuters (23.50%).	Moderate	Accept	No	No	No	No	Yes
Past Loss & Event History	For the period from January 1st, 2018, to December 31st, 2022, the township experienced a total of 47 structure fires of which 70.21% occurred in Group C-Residential Occupancies.	High	Mitigate	Yes	Yes	Yes	Yes	Yes

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Past Loss & Event History	For the period from January 1st, 2018, to December 31st, 2022, group F- Industrial occupancies accounted for 14.89% of the structure fires and 32.63%% of the total structure fire loss.	High	Mitigate	Yes	Yes	Yes	Yes	Yes
Past Loss & Event History	For the period from January 1st, 2018, to December 31st, 2022, group A – Assembly occupancies accounted for 10.64% of the structure fires and 26.12%% of the total structure fire loss.	Moderate	Mitigate	Yes	Yes	Yes	No	Yes

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Appendix A: List of Figures, Maps, and Tables

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Appendix B:References

Appendix C: Heritage Properties

No.	Property Name	Address	Year of Construction
Designated Heritage Property			
1	David Morlock House	82 Queen ST Morriston Puslinch	1910
Listed Properties			
2	Samuel Pannabecker House	6633 Roszell RD, Puslinch ON	c. 1870
3	William Thompson House	4661 Sideroad 10 North	1875
4	James Anderson House	4855 Pioneer TR Puslinch	c. 1862
5	Thomas Saunders House/Vimy Ridge	4856 Sideroad 10 N Puslinch	1846
6	Ellis Chapel and cemetery	6705 Ellis RD Puslinch	1861
7	Charles Barrett House	1-06500	c. 1875
8	Hector McCaig House	6927 Wellington RD 34 Puslinch	1875
9	Angus McPherson House	4453 Sideroad 20 N Puslinch	1903
10	Donald Cameron House	4495 Sideroad 20 N Puslinch	c. 1862
11	School House	6690 Wellington RD 34	1868
12	Alexander McKay House	6958 Wellington RD 34, Puslinch	c. 1860
13	Alexander McCaig House	6926 Wellington RD 34 Puslinch	1844
14	John McCormick House	6872 Wellington RD 34 Puslinch	c. 1862
15	Nicholas P. Cober House	6530 Wellington RD 34 Puslinch	c. 1900
16	Puslinch Mennonite/United Brethren Church	4614 Wellington RD 32 Puslinch	1874
17	Robert Little House	6710-6714 Concession 4 Puslinch	c. 1862
18	Peter Stewart House	6981 Concession 4 Puslinch	c. 1865
19	Margaret McLennan House	4556 Sideroad 20 N Puslinch	c. 1850
20	Duncan McKellar House	6526 Gore RD Puslinch	1850s
21	David Milroy House	6529 Concession 1 Puslinch	c. 1890
22	Donald Ferguson House, Store and Post Office	6714 Concession 1 Puslinch	c.1869
23	John McMaster House	6684 Concession 1 Puslinch	1871
24	Archie McKellar House	6652 Concession 1 Puslinch	c. 1880
25	Fred/August Begerow House	6592 Concession 1 Puslinch	c. 1860s
26	Puslinch Lake Hotel	Barber's Beach Hotel	1880
27	Angus McPherson House	7112 Gore RD Puslinch	1859
28	Malcolm McCormick House	6954 Gore RD Puslinch	c. 1880

No.	Property Name	Address	Year of Construction
Listed Properties			
29	John Scott House	6830 Gore RD Puslinch	1900
30	Killean Teacherage	6639 Concession 1 Puslinch	1874
31	Laughlin McMillan House	6815 Concession 1 Puslinch	c. 1870
32	Scott House	6835 Concession 1 Puslinch	c. 1877
33	Donald Stewart House	4048 Sideroad 20 S Puslinch	1874
34	James McPherson house	7087 Concession 1 Puslinch	1877
35	Duncan McDonald House	7111 Concession 1 Puslinch	1863
36	Murdoch/Kenneth Munro House	4071 Sideroad 25 S Puslinch	c.1860
37	Duncan McPherson House	7201 Concession 1 Puslinch	c.1880
38	Walter Cowan House	7243 Concession 1 Puslinch	c. 1865
39	Henry Becker Store and House	7160 Concession 1 Puslinch	c. 1874
40	Knox Presbyterian Church and cemetery	7156 Concession 1 Puslinch	1882
41	William McDonald House	4095 Sideroad 25 S Puslinch	c. 1880
42	John Thompson House	7094 Concession 1 Puslinch	1845
43	Archibald Thomson House	7030 Concession 1 Puslinch	1853
44	Richard Bond House	6920 Concession 1 Puslinch	c. 1850s
45	Malcolm Gilchrist Sr. House	4253 Sideroad 10 S Puslinch	c. 1862
46	Richard Paddock House	4227 Wellington RD 35 Puslinch	1882
47	John McFarlane House	4350 Concession 7 Puslinch	c. 1864
48	Jacob Schultz House	7329 Concession 1 Puslinch	1882
49	Malcolm McNaughton House	7345 Concession 1 Puslinch	c. 1865
50	A. John McCallum House	4062 Highway 6 Puslinch	c. 1855
51	Robert Galbraith House	28 Badenoch ST E Morriston Puslinch	c. 1880
52	Alexander Watson House	12 Badenoch ST E Morriston Puslinch	1850s
53	Duncan McEdwards Blacksmith Shop	69 Queen ST Morriston Puslinch	c. 1856
54	R.B. Morrison commercial block	ENVERS HOLDINGS INC	1860
55	Morrison Hotel	46 Queen ST Morriston Puslinch	1860
56	John Calfas log house	56 Queen ST Morriston Puslinch	1842

No.	Property Name	Address	Year of Construction
Listed Properties			
57	John Calfas house	47 Whitcombe WY Morriston Puslinch	1851
58	John Morlock House	78 Queen Street, Morriston	c.1854
59	John Christian Morlock House	80 Queen Street Morriston	1909
60	Lorenz Schlegel house	5 Victoria ST Morriston Puslinch	1853
61	Frank Kistenmacher House	4 Victoria ST Morriston Puslinch	1874
62	Herbert Leitch/August Wurtz house	6 Victoria ST Morriston Puslinch	c.1885
63	German Evangelical Church	22 Victoria ST Morriston Puslinch	1856
64	Christian Morlock House	84 Queen ST Puslinch	1882
65	Paul Winer homestead	4162 Highway 6 Puslinch	1829
66	John Marshall House	4096 Highway 6 Puslinch	1869
67	William Nicoll house	7618 Leslie RD W Puslinch	1860-1880
68	Archibald Watson house	7594 Flamborough-Puslinch Townline Puslinch	c. 1850
69	William Simpson House	4085 Victoria RD S Puslinch	1850
70	Robert Clark House	4148 Watson RD S Puslinch	c.1880
71	Duncan MacEdward House	4073 Watson RD S (4079 Watson Rd S) Puslinch	1862
72	Malcolm Kennedy House	7735 Leslie RD W Puslinch	1883
73	John Clark House	4240 Victoria RD S Puslinch	1835
74	John McPhee House	4304 Victoria RD S Puslinch	1905
75	Hugh Cockburn House	4512 Victoria RD S Puslinch	c.1868
76	Hugh Cockburn Sr. House	381 Maltby RD E Puslinch	c.1855
77	Robert Johnston House	77 Brock RD N Puslinch	c. 1838
78	Richard Ellis House	63 Brock RD N Puslinch	c. 1862
79	George McLean/Aberfoyle Mill	80 Brock RD S Aberfoyle Puslinch	c.1862
80	George McLean House	84 Brock RD S Aberfoyle Puslinch	c.1857
81	Duff's Presbyterian Church/East Presbyterian Church	319 Brock RD S Puslinch	1854
82	Malcolm McBeath House	95 Brock RD S Aberfoyle Puslinch	c.1870

No.	Property Name	Address	Year of Construction
Listed Properties			
83	Aberfoyle Blacksmith and Wagon Shop	8 Brock RD N Aberfoyle Puslinch	1860
84	Aberfoyle School S.S.#4	32 Brock RD N Aberfoyle Puslinch	1872
85	John Hammersley House	68 Brock RD N Puslinch	c. 1859
86	Peter McLaren House	4347 Concession 11 Puslinch	c. 1865
87	Kenneth/Archibald/Catherine McKenzie House	4556 Concession 11 Puslinch	1879
88	Duncan Campbell House	7839 Wellington RD 34 Puslinch	1850s
89	Andrew McRobbie House	4402 Concession 11 Puslinch	1851
90	Badenoch School, S.S #9	4217-4223 Watson RD S Puslinch	1889
91	John J. McRobbie House	4435 Watson RD S Puslinch	c. 1862
92	Duncan McFarlane House	7751 Maltby RD E Puslinch	1870
93	Corwhin School, S.S #10	4492 Watson RD S Puslinch	1885
94	John McLean House	4272-4276 Watson RD S Puslinch	1872
95	Alexander McLean House	7704 Wellington RD 36 Puslinch	c. 1885
96	Donald A. McLean House	7697 Wellington RD 36 Puslinch	1920
97	Peter McLean House	7661 Wellington RD 36 Puslinch	1869
98	John Gordon House	7737 Stone RD E Puslinch	1872
99	James Orme House and Barns	711 Arkell RD Puslinch	1854
100	William Hume House	4715 Watson RD S Puslinch	1861
101	John Murray House	4677 Watson RD S Puslinch	1896
102	William Rae House and barn	4726 Watson RD S Puslinch	c. 1870
103	Arkell Teacherage	845 Watson RD S Arkell Puslinch	1875
104	Arkell School, S.S #1	843 Watson RD S Arkell Puslinch	1862
105	George Nichol Blacksmith shop	596 Arkell RD Arkell Puslinch	c. 1850
106	Arkell Methodist Church	600 Arkell RD Arkell Puslinch	1877
107	John Caulfield House	880 Victoria RD S Puslinch	1840, 1855
108	John Isles, Jr. House	86 Farnham RD Puslinch	1901
109	Thomas Arkell House	413 Arkell RD Puslinch	1852

2nd Draft Township of Puslinch Heritage Permit By-law

May 22, 2024



Legislated Timelines for Processing Heritage Alterations/Demolitions

Time for Decision on Heritage Alteration requests:

- 90 days after the notice of a complete application is served or such longer period after the notice is served as is agreed upon by the owner and the council

Timeline for Decision on Heritage Demolition or Removal Requests:

- 90 days after the notice of a complete application is served or such longer period after the notice is served as is agreed upon by the owner and the council

Offences and Restoration Costs

69 (1) Subject to subsection (2), every person who,

- (a) knowingly, furnishes false information in any application under this Act or in any statement, report or return required to be furnished under this Act or the regulations;
- (b) fails to comply with any order, direction or other requirement made under this Act; or
- (c) contravenes this Act or the regulations,

and every director or officer of a corporation who knowingly concurs in such furnishing of false information, failure or contravention is guilty of an offence and on conviction is liable to a fine of not more than \$50,000 or to imprisonment for a term of not more than one year, or to both. R.S.O. 1990, c. O.18, s. 69 (1).

Property altered in contravention of the Act

(5) Subsection (5.1) applies if,

- (a) property designated under Part IV is altered in contravention of section 33 or 34.5; or
- (b) property located in a heritage conservation district designated under Part V is altered in contravention of section 42. 2009, c. 33, Sched. 11, s. 6 (22).

Recovery of restoration costs

(5.1) In addition to any other penalty imposed under this Act, the council of the municipality or the Minister, as the case may be, may restore the property described in subsection (5) as nearly as possible to its previous condition, if it is practicable to do so, and may recover the cost of the restoration from the owner of the property. 2009, c. 33, Sched. 11, s. 6 (22).

Proposed Heritage Permit By-law

Summary of Feedback and Staff Recommendations:

Heritage Advisory Committee feedback:

- “1.3.(c)(vii) Will bring an information report to the Puslinch Heritage Advisory Committee once per calendar year, outline the Heritage Permit Waivers issued under this delegated authority” that the wording be amended to staff providing the Committee quarterly reports regarding all Heritage permits received and issued during each quarter of the calendar year.

Staff Recommendation:

- That section 1.3(c)(vii) be amended to state “Will bring an information report to the Puslinch Heritage Advisory Committee quarterly during the calendar year, outlining Heritage Alteration Permits, Heritage Demolition and Removal Permits and Heritage Permit Waivers issued under this delegated authority;”

Proposed Heritage Permit By-law

Summary of Feedback and Staff Recommendations:

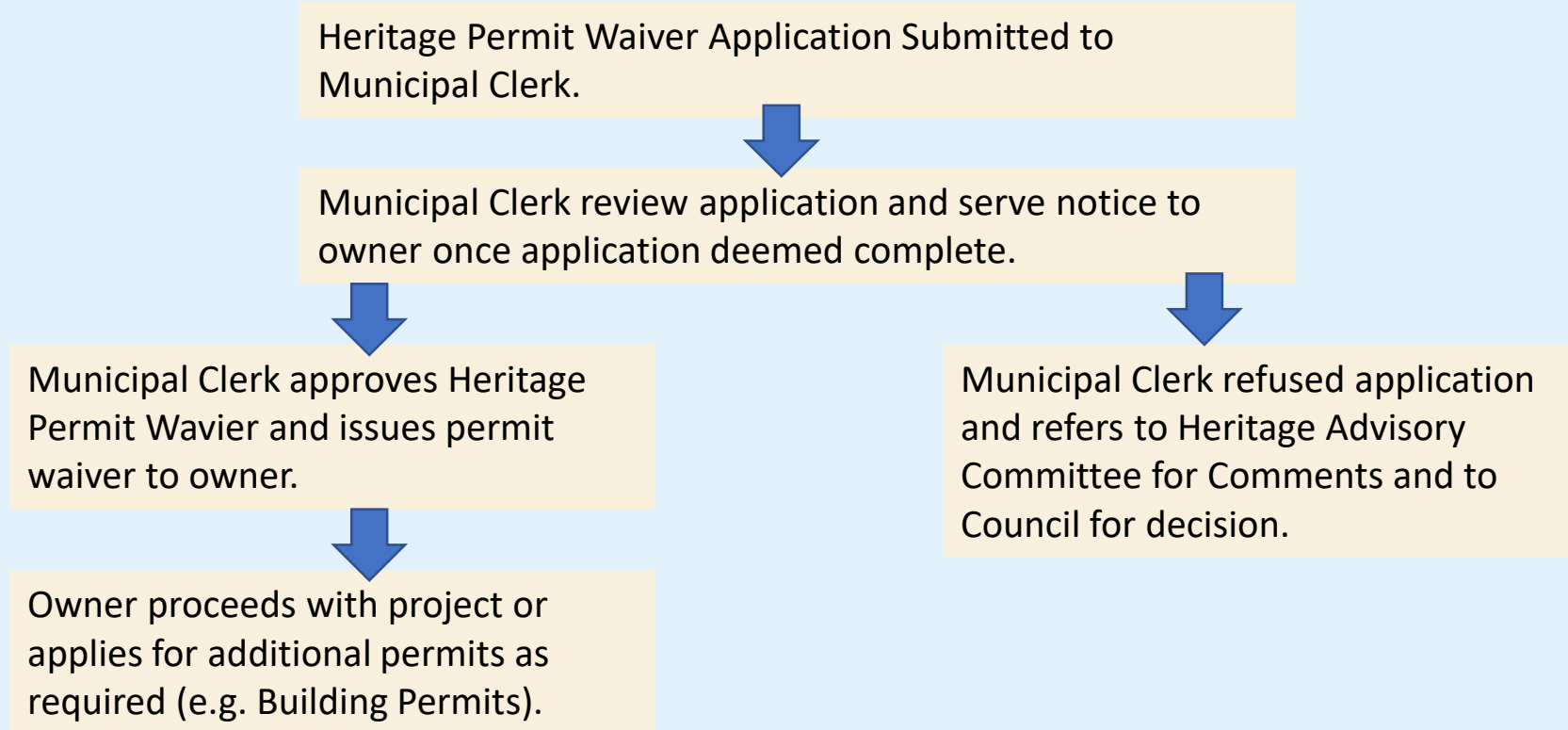
Council feedback:

- “4.1. Heritage Permit Waiver (a) A Heritage Permit Waiver may be applied for where: (i) For the alteration, construction and demolition of buildings and structures on properties designated under Section 29 of Part IV of the Act which do not impact Heritage Attributes identified in the “Statement of Cultural Heritage Value or Interest” adopted as part of the Heritage Designation By-law.”; if the work does not impact the Heritage Attributes why do we need to require a waiver? My suggestion is to include the above clause (i) under exemptions

Staff Recommendation:

- While inadvertent alterations to heritage attributes through construction would largely be captured through the building permit process, there are circumstances where a property owner could alter heritage attributes in other ways such as adding stairs to a porch or painting of masonry that was not previously painted. While many municipalities require a permit for the alterations included under the section, staff have proposed that this circumstance be addressed through an exemption waiver on a designated property. Township Staff are seeking to strike a balance of protection of designated properties and freedom of property owners to alter their property in a timely manner.

Heritage Permit Waiver Process



Proposed Heritage Permit By-law

Summary of Feedback and Staff Recommendations:

Council feedback:

- ❑. **Heritage Permit Waiver** “4.1 (C) (iii) The Municipal Clerk shall make a decision to approve the permit or refer the permit the Heritage Advisory Committee for comment and Council for decision within 30 days of the application being deemed complete.”; not clear if Clerk does not approve whether the proponent needs to ask for a referral or will it be done automatically

Staff Recommendation:

- ❑. Clarification under Section 4.1 (C) (iii) to revise the wording to... “The Municipal Clerk shall make a decision to approve or deny the permit within 10 business days. If the Municipal Clerk denies the permit, it shall be referred to the Heritage Advisory Committee for comment and Council for decision within 30 calendar days of the application being deemed complete.”

Proposed Heritage Permit By-law

Summary of Feedback and Staff Recommendations:

Council feedback:

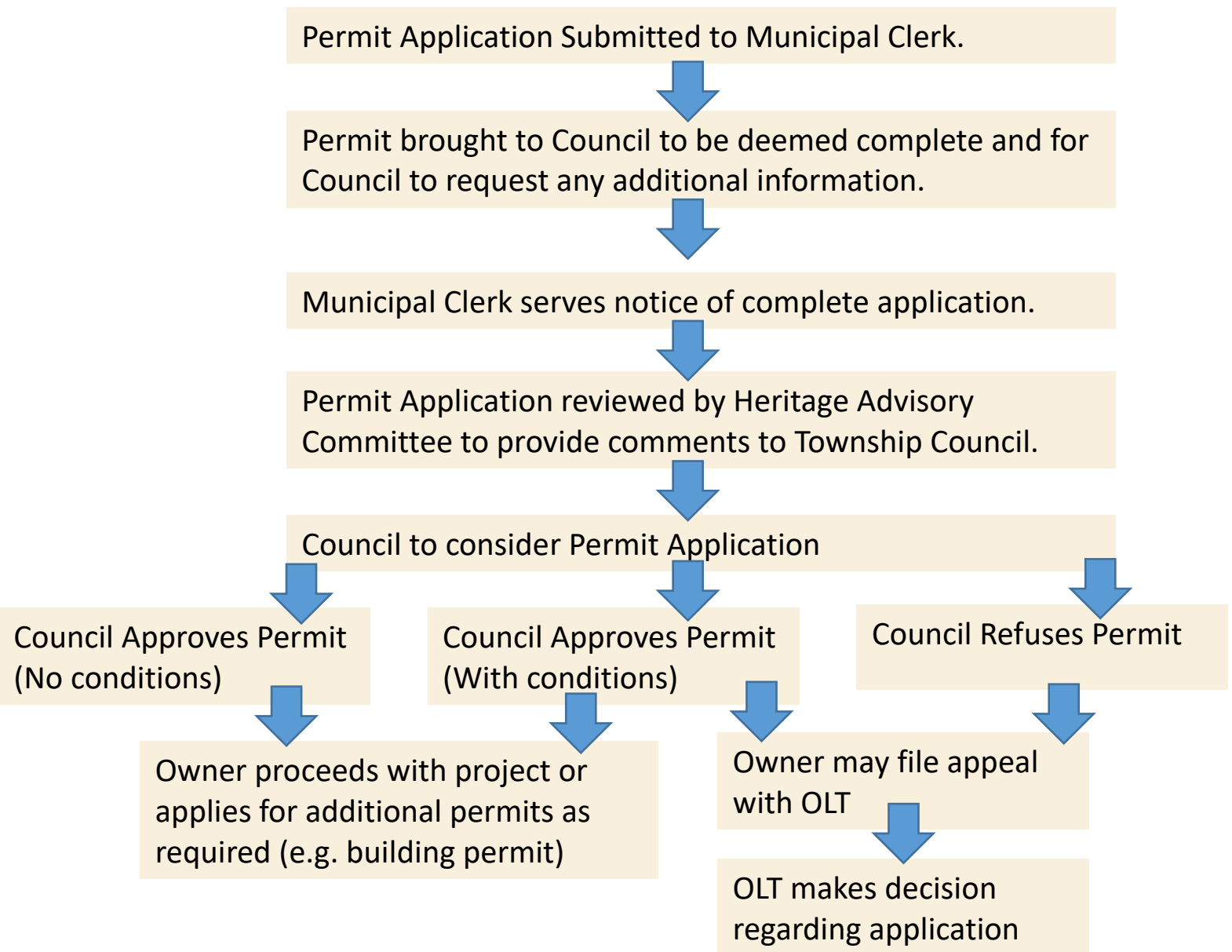
- Heritage Alteration Permit** “Section 4.2(b)(ix) Any other information related to the application as required by the Municipal Clerk or Council.”; suggest replace Council with Heritage Advisory Committee

Staff Recommendation:

- Staff have prepared the following process matrixes which outline how the process changes depending on how authority is delegated for requesting additional information and deeming an application complete.



The process below outlines the Alteration Heritage Permit Process if Council **retains the authority** to deem applications complete and **retains the authority** to request additional information.





TOWNSHIP OF
PUSLINCH
EST. 1850

The process below outlines the Alteration Heritage Permit Process if the Municipal Clerk is provided **delegated authority** to deem applications complete and Section 4.2(b)(ix) is **amended** to state “Any other information related to the application as required by the Municipal Clerk or **Heritage Advisory Committee**”

Permit Application Submitted to Municipal Clerk.

Permit Application brought to Heritage Advisory Committee determine if additional information is requested (Special Meeting may be required)

Heritage Advisory Committee or Municipal Clerk request additional information

Applicant submits additional information and the Municipal Clerk deems the application complete and serves notice of the complete application.

Heritage Advisory Committee or Municipal Clerk do not require additional information, and Municipal Clerk deems the application complete and serves notice of the complete application.

Permit Application reviewed by Heritage Advisory Committee to provide comments to Township Council (Special Meeting may be required)

Council to Consider Permit Application

Council Approves Permit (No conditions)

Owner proceeds with project or applies for additional permits as required (e.g. building permit)

Council Approves Permit (With conditions)

Owner may file appeal with OLT

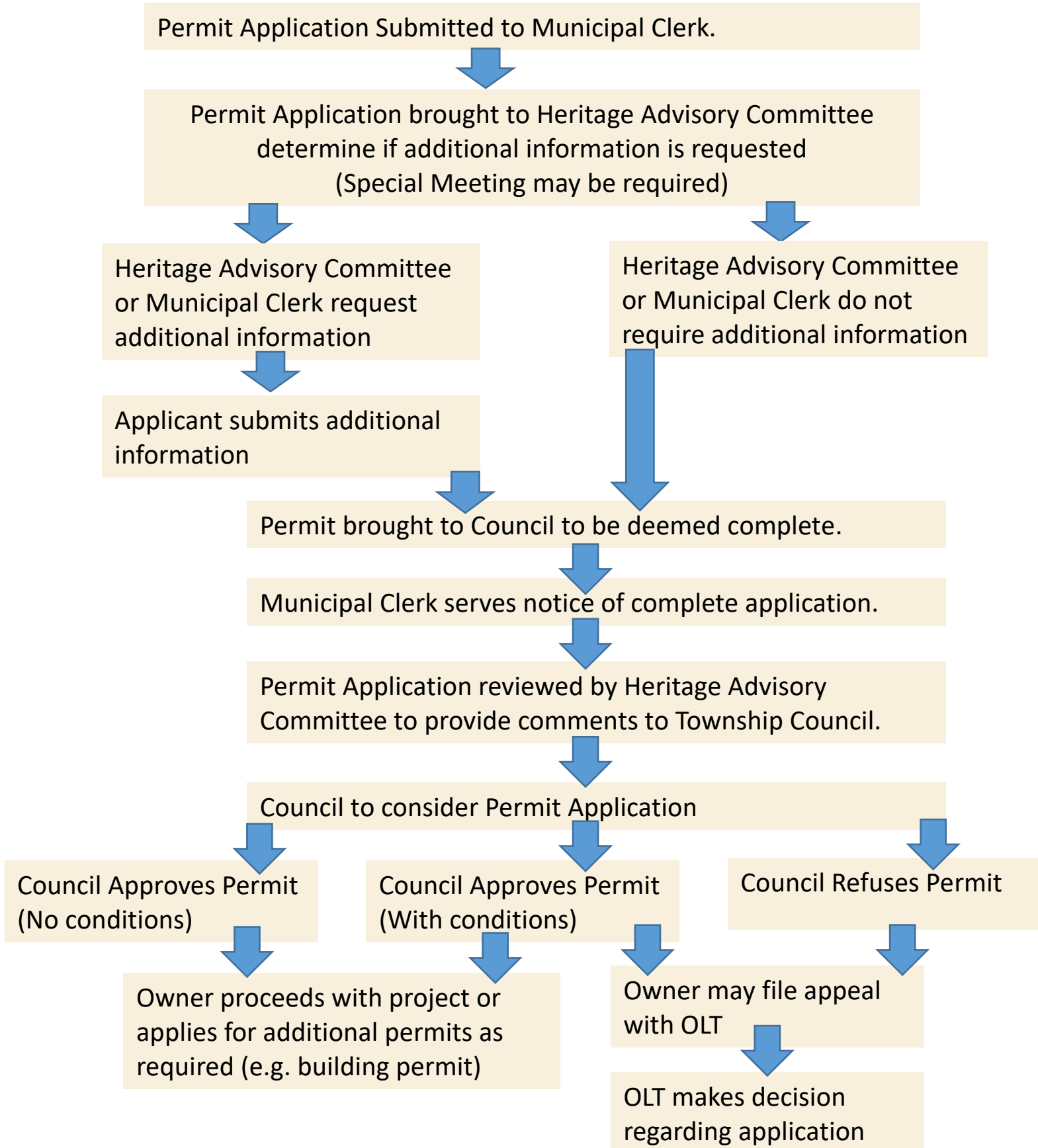
OLT makes decision regarding application

Council Refuses Permit



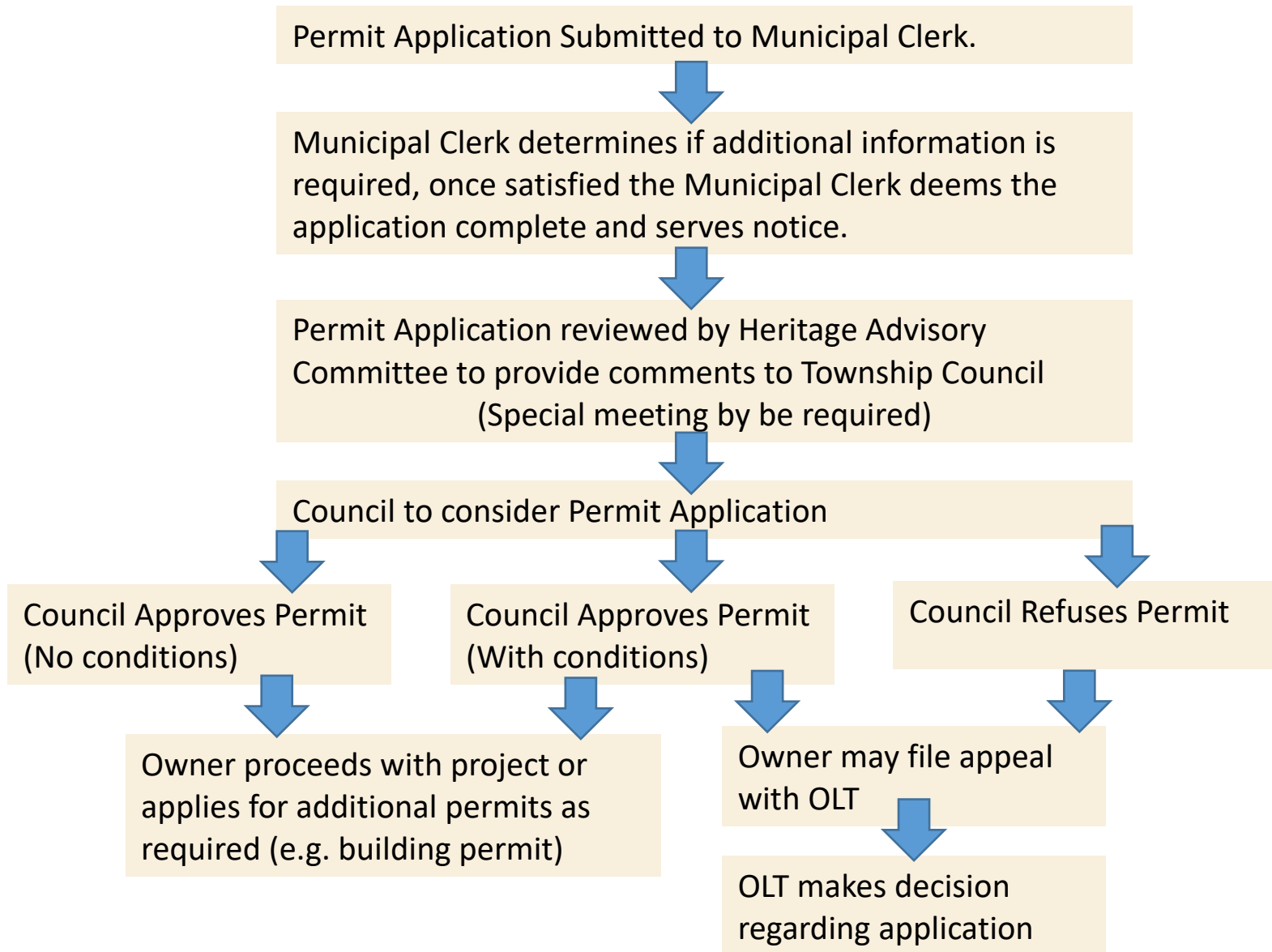
TOWNSHIP OF
PUSLINCH
EST. 1850

The process below outlines the Alteration Heritage Permit Process if the Council **maintains** its authority to deem applications complete and Section 4.2(b)(ix) is **amended** to state “Any other information related to the application as required by the Municipal Clerk or **Heritage Advisory Committee**”





The process below outlines the Alteration Heritage Permit Process if the Municipal Clerk is provided **delegated authority** to deem applications complete and Section 4.2(b)(ix) is **amended** to state “Any other information related to the application as required by the Municipal Clerk ~~or Council.~~”



Proposed Heritage Permit By-law

Summary of Feedback and Staff Recommendations:

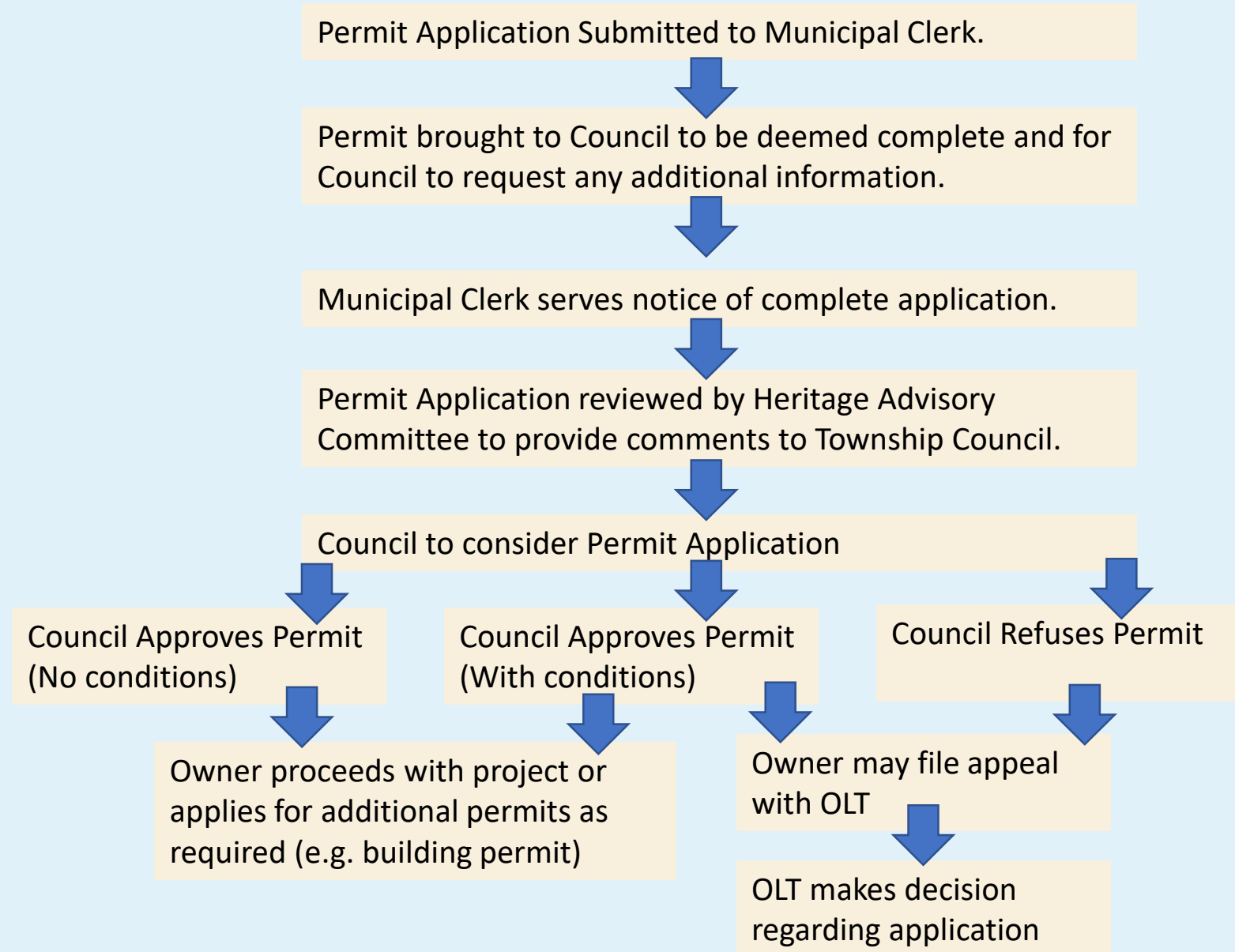
Council feedback:

- Heritage Demolition and Removal Permit** “Section 4.3(b)(ix) Any other information related to the application as required by the Municipal Clerk or Council.”; suggest replace Council with Heritage Advisory Committee

Staff Recommendation:

- Council cannot delegate authority with respect to applications for demolition therefore staff recommend that this wording remain the same, in accordance with the legislation, Council has the authority to deem the application complete and to require additional information. The Heritage Advisory Committee would be providing comments to Council for consideration through the process.

Heritage Demolition or Removal Permit Process



Proposed Heritage Permit By-law

Summary of Feedback and Staff Recommendations:

Council feedback:

- Heritage Alteration Permit** “Section 4.2 (C) (ii) Council shall upon receiving all information and material required, serve notice on the applicant informing them that the application is complete.”; why can’t the Clerk do this?
- Heritage Demolition and Removal Permit** “Section 4.3(c)(ii) Council shall upon receiving all information and material required shall serve notice on the applicant informing them that the application is complete.”; why can’t Clerk do this?

Staff Recommendation:

- Council can delegate its authority to staff to grant applications to alter under the Ontario Heritage Act. If Council delegates its authority to staff to deem the application complete Council must make a decision within 90 days unless otherwise agreed upon by the applicant. Council will need to be satisfied with the documentation required by staff as there would be limited opportunity for Council to request additional information.
- Council cannot delegate its authority to grant applications to demolish under the Ontario Heritage Act. Therefore staff recommend that Section 4.2 (C) (ii) to revise the wording to... “The Municipal Clerk shall, following Council deeming the application complete, serve notice on the applicant informing them that the application is deemed complete.”

Proposed Heritage Permit By-law

Summary of Feedback and Staff Recommendations:

Council feedback:

- Heritage Alteration Permit** “Section 4.2(C)(iii) Council shall consult with its Heritage Advisory Committee prior to making a decision.”; suggest reword along the lines “The Clerk shall provide the information and material to the Heritage Advisory Committee who shall provide their opinion to Council when it makes a decision”
- Heritage Demolition and Removal Permit** “Section 4.3 (c)(iii) Council shall consult with its Heritage Advisory Committee prior to making a decision.”; suggest reword along the lines “The Clerk shall provide the information and material to the Heritage Advisory Committee who shall provide their opinion to Council when it makes a decision”

Staff Recommendation:

- Clarification under Section 4.2 (C) (iii) to revise the wording to... “The Municipal Clerk shall provide the application once deemed complete to the Heritage Advisory Committee who shall provide their opinion to Council when it makes a decision.”
- Clarification under Section 4.3 (C) (iii) to revise the wording to... “The Municipal Clerk shall provide the application once deemed complete to the Heritage Advisory Committee who shall provide their opinion to Council when it makes a decision.”

Proposed By-law Engagement

- Survey launched March 28th through EngagePuslinch
 - Mailed with 2024 Open House Invitations to properties of interest
 - Shared during the 2024 Open House presentation and recording posted on Township website
 - Banner on Township Website
 - Public notice on Township Website
 - Shared through Social Media
- Survey Results
 - 33 people visited the Heritage Permit By-law Engagement Page
 - 10 people viewed the survey
 - 1 person submitted the survey
 - Their biggest concerns when seeking to make alterations to their property was conditions that may be imposed as part of a permit and the length of time for a permit to be processed.
 - They stated that the Heritage Permit Wavier was a good provision

Timeline and Next Steps

- March 20, 2024 Council review the 1st draft of the proposed by-law
- March 28, 2024 Launch of EngagePuslinch Survey
- April 11, 2024 Open House for 2024 Priority Properties
- May 6, 2024 Heritage Advisory Committee review of Council's comments on 1st draft of the proposed by-law
- May 22, 2024 Council consideration of 2nd draft of the proposed by-law
- June 12, 2024 Council consideration of 3rd draft of proposed by-law for adoption

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

BY-LAW NUMBER 0XX-2024

Being a by-law to establish a Heritage Permit Process and a by-law to delegate the power to grant Heritage Permits for the alteration of designated heritage properties.

WHEREAS Sections 33(15) and 33(16) of the Ontario Heritage Act, R.S.O. 1990, c. 0.18, as amended (“the Act”), the Council of a municipality may by by-law delegate the power to consent to alterations to property designated under Part IV to an employee or official of the municipality after having consulted with its municipal heritage committee;

AND WHEREAS Section 23.2(1)(c) of the Municipal Act, 2001, S.O. 2001, c.25, as amended (“the Municipal Act”), permits a municipality to delegate certain legislative and quasi-judicial powers to an individual who is an officer, employee or agent of the municipality;

AND WHEREAS the Council of the Corporation of the Township of Puslinch has consulted with the Heritage Advisory Committee;

NOW THEREFORE the Corporation of the Township of Puslinch hereby enacts as follows:

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1. GENERAL

1.1. Short Title

- (a) This By-law may be referred to as the “Heritage Permit By-law”

1.2. Administration

- (a) The Municipal Clerk or their designate shall be responsible for the administration of this By-law.
- (b) This By-law applies to all Property in the Corporation of the Township of Puslinch (the Township) in accordance with Ontario Heritage Act. R.S.O. 1990, c. 0.18, as amended

1.3. Delegated Authority

- (a) The Municipal Clerk or their designate is authorized and has the delegated authority to:

- (i) Consent to the alteration of properties designated under Part IV of the Act, through the granting of Heritage Permit Exemption Waivers;
- ~~(ii)~~ (ii) Deem applications for Heritage Permits complete;
- ~~(iii)~~ Extend the timeline in which alterations proposed in a previously approved Heritage Permit can be undertaken if the Owner is not able to complete the works within the required timeline.
- ~~(iv)~~ (iv) Appoint a peer review consultant or other technical expert to fulfill the role or duties of an inspector for the purposes of this By-law;
- ~~(v)~~ (v) Permit alterations required for an emergency repair or to address health and safety or security issues with or without submission of an application. All emergency approvals shall be reported to the next Council and Committee meeting.

- (b) The delegated authority in Section 1.3.(a)(i) and (ii) is limited to the following alterations to properties designated under Section 29 of Part IV of the Act which do not impact Heritage Attributes identified in the “Statement of Cultural Heritage Value or Interest” adopted as part of the Heritage Designation By-law:
- (i) Exterior repainting of part or the whole of a building or structure;
 - (ii) Alterations to roofing material and colour;
 - (iii) Addition/removal/replacement of, or alterations to, permanent hard landscaping features, including but not limited to walkways, driveways, patios, planters, fences, gates, walls, trellises, arbours and gazebos;
 - (iv) Addition/removal/replacement of, or alteration to, signage;
 - (v) Addition/removal/replacement of, or alteration to, exterior lighting;
 - (vi) Addition/removal/replacement of, or alteration to, basement windows and window wells;
 - (vii) Addition/removal/replacement of, or alteration to non-heritage features, including but not limited to doors, trim, shutters, railings, stairs, porch flooring, columns, brackets, and decorative features;
 - (viii) Addition/removal/replacement of, or alteration to non-heritage features, including additions or outbuildings;
 - (ix) Construction of detached accessory structures, which do not impact the heritage attributes of the property; and,
 - (x) Temporary measures reasonably necessary to deal with an emergency which puts the security or integrity of a building or structure at risk of damage.
- (c) In exercising the delegated authority in Section 1.3.(a) the Municipal Clerk:
- (i) May grant a Heritage Permit Exemption Waiver to alter a Designated Heritage Property; or
 - (ii) May grant an extension or re-issuance of Heritage Permits previously considered by the Committee and approved by Council, where the proposal and relevant policy framework are substantially unchanged since the initial approval;
 - (iii) May refer a Heritage Exemption Waiver application to alter a Designated Heritage Property to the Committee and Council;
 - (iv) Shall prescribe and supply the forms required to apply for a Heritage Permit Exemption Waiver and Heritage Permit;

- (v) May issue, receive and process notices under any section of the Act;
- (vi) May receive and issue notices of complete or incomplete application for Heritage Permits pursuant to Section 33 and Section 34 of the Act;
- (vii) Will bring an information report to the Puslinch Heritage Advisory Committee once quarterly—every— during the calendar year, outlining Heritage Alteration Permits, Heritage Demolition and Removal Permits and Heritage Permit ~~Exemption~~—Waivers issued under this delegated authority;

(d) In addition, the Municipal Clerk, Committee, or Council may require:

- (i) A Heritage Conservation Plan or Heritage Impact Assessment, prepared by a qualified architect and/or engineer licensed to practice in the Province of Ontario or heritage consultant specializing in the subject heritage resource.
- (ii) Any other information relating to the application may be required by the Municipal Clerk, Committee or Council.

(e) Notwithstanding Section 1.3(a) of this by-law, Council shall retain all powers and authority under the Act, for the following matters:

- (i) Refusal of a Heritage Permit under 33(6)(a)(iii) of the Act;
- (ii) Approval of applications to demolish or remove properties designated under Part IV of the Act.

1.4. Severability

- (a) If a court of competent jurisdiction declares any section, or any part of any section, of this By-law to be invalid, or to be of no force or effect, it is the intention of the Township that every other provision of this By-law be applied and enforced in accordance with its terms to the extent possible according to law.

1.5. Responsibility for Other Obligations

- (a) Compliance with this By-law does not relieve the Owner from any responsibility to obtain any other approvals as required from any other government or authority, or compliance with any other obligations.

2. DEFINITIONS

- (a) “Act” means the Ontario Heritage Act, R.S.O. 1990, C.O.18, as amended from time to time; and all definitions included therein;
- (b) “Alter” means to change in any manner and includes to restore, renovate, repair or disturb but does not include to demolish or remove a heritage attribute.
- (c) “Applicant” means the Owner of a Property and includes a Person authorized in writing to act on behalf of the Owner of the Property to apply for a Permit.
- (d) “Application” means a written submission to request or amend a permit, in a form prescribed by the Township.
- (e) “Building” means a permanent or temporary enclosed structure with exterior walls and a roof, and including all attached equipment and fixtures that cannot be removed without cutting into roof or ceiling, floors, or walls.;
- (f) “Clerk” means the “Clerk” for the Township of Puslinch.
- (g) “Committee” means the Township of Puslinch Heritage Advisory Committee.
- (h) “Council” means the Council of the Township.
- (i) “Designated Property” means real property in the Township, including all buildings, structures, and other features thereon, that has been designated under Part IV of the Act, or is subject to a

Notice of Intention to Designate under Section 29 of Part IV of the Act, for having cultural heritage value or interest.

- (j) "Heritage Attribute" means, in relation to real property, and to the buildings and structures on the real property, the attributes of the property, buildings and structures that contribute to their cultural heritage value or interest.
- (k) "Heritage Permit" means a Permit issued by the Township pursuant to the provisions of this by-law.
- (l) "Inspector" means any person designated by this or any other By-law(s) of the Township as an Inspector or agent of the Township or any persons appointed for the purposes of enforcing this By-law, and includes the Chief Building Official, Building Inspectors, and By-law Enforcement Officers.
- (m) "Maintenance" means the routine, cyclical, non-destructive actions, necessary to slow the deterioration of the Designated Property including the following:
 - a. gardening and repair of landscape features;
 - b. repainting where there is little or no change in colour;
 - c. caulking and weather proofing.
- (n) "Owner" means the registered Owner(s) of the Property.
- (o) "Permit" means a formal authorization issued by the Township under this By-law.
- (p) "Person" includes an individuals, firms, sole proprietorships, partnerships, associations, trusts, corporations, directors and officers of corporations, trustees, and agents, and the heirs, executors, assigns or other legal representatives of a person to whom the context can apply in law.

3. EXEMPTIONS

3.1. Exemptions in this By-law

- (a) An owner of a designated heritage property does not require a permit for the following:
 - (i) All interior work, except where specifically designated by designation by-law or easement passed under the Act;
 - (ii) Typical backyard features that are not readily visible from the public realm such as a patio, garden and tool shed, gazebo, dog house and other small outbuildings less than 10 square metres in size;
 - (iii) Landscaping which does not require heavy machinery and which will not significantly change the appearance of the property; and
 - (iv) Maintenance as defined in this by-law.
- (b) Consultation with staff on the need for an application is recommended.

4. APPLICATION REQUIREMENTS AND PROCESS

4.1. Heritage Permit ~~Exemption~~ Waiver

- (a) A Heritage Permit ~~Exemption~~ Waiver may be applied for where:
 - (i) For the alteration, construction and demolition of buildings and structures on properties designated under Section 29 of Part IV of the Act which do not impact Heritage Attributes identified in the "Statement of Cultural Heritage Value or Interest" adopted as part of the Heritage Designation By-law.
- (b) Application Requirements for a Heritage Permit ~~Exemption~~ Waiver:
 - (i) A complete application must be submitted using the prescribed form, as amended from time to time;
 - (ii) There shall be no application or administrative fee for a Permit;
 - (iii) The Owner shall be responsible for any third-party cost and recoveries if an external review is required as determined by the ~~Designated Official~~ Municipal Clerk;
 - (iv) A site plan or sketch showing the location of the proposed work on the property;
 - (v) A statement of the proposed work including an indication if the proposed alteration is likely to affect the property's heritage attributes;

- (vi) Any drawings, specifications, photographs, paint chips, or additional notes as necessary to fully explain the work to be undertaken;
 - (vii) Approvals of authorities having jurisdiction (Conservation Authority, Source Water Protection); and,
 - (viii) An affidavit or a sworn declaration by the owner/applicant certifying that the information required and provided is accurate.
- (c) Approval/Refusal Process for a Heritage Permit ~~Exemption~~ Waiver:
- (i) All Heritage Permit Exemption Waiver are subject to the Municipal Clerk's review.
 - (ii) The Municipal Clerk shall upon receiving all information and material required serve notice on the applicant informing them that the application is complete.
 - (iii) The Municipal Clerk shall make a decision to approve or deny the permit within 10 business days. If the Municipal Clerk denies the permit, it will be automatically referred to or refer the permit the Heritage Advisory Committee for comment and Council for decision within 30 calendar days of the application being deemed complete.

4.2. Heritage Alteration Permit

- (a) A Heritage Alteration Permit must be applied for where:
- (i) For the construction or alteration of building or structures on properties designated under Section 29 of Part IV of the Act impact Heritage Attributes identified in the "Statement of Cultural Heritage Value or Interest" adopted as part of the Heritage Designation By-law.
- (b) Application Requirements for a Heritage Alteration Permit:
- (i) A complete application must be submitted using the prescribed form, as amended from time to time;
 - (ii) There shall be no application or administrative fee for a Heritage Permit;
 - (iii) The Owner shall be responsible for any third-party cost and recoveries if an external review is required as determined by the ~~Designated Official~~ Municipal Clerk;
 - (iv) A site plan or sketch showing the location of the proposed work on the property;
 - (v) A statement of the proposed work including an accompanying brief rationale which addresses alterations likely to affect the property's heritage attributes as described in the designation by-law;
 - (vi) Any drawings, specifications, photographs, paint chips, or additional notes as necessary to fully explain the work to be undertaken;
 - (vii) As may be required, a Heritage Conservation Plan by a Built Heritage Specialist;
 - (viii) As may be required, a Heritage Impact Statement prepared by a Built Heritage Specialist;
 - (ix) Approvals of authorities having jurisdiction (Conservation Authority, Source Water Protection);
 - (x) An affidavit or a sworn declaration by the owner/applicant certifying that the information
 - (xi) required and provided is accurate; and,
 - (xii) Any other information related to the application as required by the Municipal Clerk or Council.
- (c) Approval/Refusal Process for a Heritage Permit:
- (i) Council approval is required for all Heritage Permit Applications.
 - (ii) ~~The Municipal Clerk Council~~ shall upon receiving all information and material required, serve notice on the applicant informing them that the application is complete.
 - (iii) ~~The Municipal Clerk Council~~ shall provide the application and supporting materials once deemed complete to the -consult with its- Heritage Advisory Committee who shall provide their opinion to Council when it makes a decision. -meeting prior to making a decision.
 - (iv) Council shall make a decision in accordance with the legislated timelines under Section 33(7) of the Act and issue notice in accordance with Section 33(6).
 - (v) If Council approves a permit with conditions or refuses a permit, the owner, within 30 days after receipt of the notice may appeal Council's decision to the Tribunal by giving notice of the appeal to the Tribunal and the clerk of the municipality setting

out the objection to the decision and the reasons in support of the objection, accompanied by the fee charged by the Tribunal.

4.3. Heritage Demolition or Removal Permit

- (a) A Heritage Demolition or Removal Permit must be applied for where:
- (i) For the demolition or removal of buildings or structures on properties designated under Section 29 of Part IV of the Act impact Heritage Attributes identified in the “Statement of Cultural Heritage Value or Interest” adopted as part of the Heritage Designation By-law.
- (b) Application Requirements for a Heritage Demolition or Removal Permit:
- (i) A complete application must be submitted using the prescribed form, as amended from time to time;
 - (ii) There shall be no application or administrative fee for a Heritage Permit;
 - (iii) The Owner shall be responsible for any third-party cost and recoveries if an external review is required as determined by the ~~Designated Official~~ Municipal Clerk;
 - (iv) A site plan or sketch showing the location of the proposed demolition or removal within the property;
 - (v) Photographs showing the existing building or structure including all elevations, as well as their condition and context;
 - (vi) Drawings and written specifications of the proposed demolition or removal. As may be required, a building condition assessment prepared by a qualified Engineer of the building or structure or material part thereof which is proposed to be demolished or removed;
 - (vii) The reasons for the proposed demolition or removal and the potential impacts to the heritage attributes of the property or the heritage conservation district. As may be required, a Heritage Impact Statement prepared by a Built Heritage Specialist;
 - (viii) Any technical cultural heritage studies that are relevant to the proposed demolition or removal; and
 - (ix) Any other information related to the application as required by the Municipal Clerk or Council.
- (c) Approval/Refusal Process for a Heritage Demolition or Removal Permit:
- (i) Council approval is required for all Heritage Permit Applications.
 - (ii) ~~The Municipal Clerk Council~~ shall, following Council deeming the application complete, upon receiving all information and material required shall serve notice on the applicant informing them that the application is complete.
 - (iii) ~~The Municipal Clerk Council~~ shall provide the application and supporting materials once deemed complete to the ~~consult with its~~ Heritage Advisory Committee who shall provide their opinion to Council when it makes a decision. meeting prior to making a decision.
 - (iv) Council shall make a decision in accordance with the legislated timelines under Section 34(4.3) of the Act and issue notice in accordance with Section 34(4.2).
 - (v) If Council approves the demolition or removal with conditions or refuses a demolition or removal, the owner, within 30 days after receipt of the notice my appeal Council’s decision to the Tribunal by giving notice of the appeal to the Tribunal and the clerk of the municipality setting out the objection to the decision and the reasons in support of the objection, accompanied by the fee charged by the Tribunal.

5. ABANDONMENT, EXPIRY, RENEWAL, TRANSFER, REVOCATION, AMENDMENT AND CLOSURE OF PERMITS

5.1. Abandoned Application

- (a) An Application for a Heritage Waiver or Heritage Permit will be deemed abandoned and the Application and respective file will be closed, where a period of twelve (12) months has elapsed during which all information, document or fees as required have not been provided to the Township or where the application has not seeing meaningful progress through submissions towards the issuance of a permit.

5.2. Expiry

- (a) A Heritage Waiver or Heritage Permit will be issued for a period of two (2) years and expires on the date set-out in the permit, unless otherwise specified as a condition of the permit.

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5.3. Transfer

- (a) If title to the Property for which a Permit has been issued is transferred while the Permit is in effect, the Permit shall be automatically revoked unless the new Owner, prior to the time of the transfer, provides the Township with an undertaking, to the satisfaction of the Clerk, to comply with all Conditions under which the Permit was issued.

5.4. Revocation

- (a) The Clerk may revoke a Permit for any of the following reasons:
 - (i) It was obtained based on mistaken, false or incorrect information;
 - (ii) It was issued in error;
 - (iii) The Property Owner and/or Permit holder requests in writing that it be revoked;
 - (iv) The Permit holder has failed to comply with any of the Conditions of the Permit; or
 - (v) The Permit holder is unwilling or unable to comply with the Conditions of the Permit.

5.5. Amendment

- (a) An Owner may submit a request in writing to the Clerk for an amendment to a Permit.

5.6. Renewal

- (a) An Owner may submit a request in writing to the Clerk for a renewal of a Permit if the only change from the initial Application and Permit is the expiry date.

5.7. Closure

- (a) A Permit is considered closed when all the Conditions related to the Permit have been fulfilled to the satisfaction of the Clerk.

6. ENFORCEMENT

6.1. Entry and Inspection

- (a) Inspectors and the Municipal Clerk may, at any reasonable time:
 - (i) Enter and inspect Property to determine compliance with the provisions of this By-law, or any Condition of a Permit, or Order issued under this By-law. This power of entry does not allow entry into any dwelling;
 - (ii) Require the production of documents for inspection or things relevant to the inspection, inspect and remove documents or things relevant to the inspection for the purpose of making copies or extracts.

7. OFFENCE AND RESTORATION PROVISIONS

- (a) Every person who knowingly furnishes false information in an application made pursuant to this By-law, or who fails to comply with any order, direction or requirement made pursuant to this By-law, or who contravenes any provision of this By-law or the Act, is guilty of an offence and on conviction is liable to a fine or to imprisonment as provided by Section 69 of the Ontario Heritage Act, R.S.O. 1990, c.0.18, as amended.
- (b) If this By-law is contravened and a conviction entered, the Court in which the conviction was entered or any Court of competent jurisdiction may, in addition to any other remedy, and to any penalty that is imposed, make an order prohibiting the continuation or repetition of the offence by the person convicted.
- (c) Where a designated heritage property is altered in contravention of this By-law, in addition to any other penalty imposed pursuant to the provisions of Section 69 of the Act, or pursuant to the Township's other by-laws, as the case may be, the Township may restore the property as nearly as possible to its previous condition, if it is practicable to do so, and may recover the cost of the restoration from the Owner of the property pursuant to the Act.
- (d) Where an order to restore the property is issued, Council may authorize any person in writing to enter on the property to carry out the restorations.
- (e) Notwithstanding clause (d) above, and in accordance with the provisions of Section 69 of the Act, the Township shall not restore the property if, in the opinion of the Township, the

property is in an unsafe condition or incapable of repair or the alteration was carried out for reasons of public health or safety or for the preservation of the property.

- (f) Where the provisions of this By-law have been contravened, the process to address the contravention shall be as follows:
- (i) The Municipal Clerk shall conduct an investigation to determine the circumstances and nature of the contravention;
 - (ii) Based on the results of the investigation pursuant to (i) above and a determination that there has been a breach of the law, the Municipal Clerk shall review with Legal Counsel who may determine whether formal processes are warranted as follows:
 - a. A prosecution may be initiated in accordance with the provisions of the Act and this By-law;
 - b. A Property Standards Order may be issued pursuant to the provisions of the Township's Property Standards By-law, as amended, and the Building Code Act;
 - c. Where warranted and it is practicable to do so, recommend that the property be restored as nearly as possible to its previous condition. Any such recommendation for restoration shall be referred by the Municipal Clerk to Council for approval;
 - d. The Municipal Clerk may exercise discretion in consultation with Legal Counsel to resolve the contravention by alternative means. The Municipal Clerk may meet with the owner to discuss the contravention, the penalties that could be imposed and to ensure that the owner is aware of the requirement to obtain a heritage permit for any future alterations.

8. EFFECTIVE DATE

- (a) This by-law shall come into effect on **ENTER DATE.**

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS XXX OF MONTH 2024.

James Seeley, Mayor

Justine Brotherston, Interim Municipal Clerk



REPORT ADM-2024-031

TO: Mayor and Members of Council

PREPARED BY: Courtenay Hoytfox, Interim CAO

PRESENTED BY: Courtenay Hoytfox, Interim CAO

MEETING DATE: June 12, 2024

SUBJECT: Badger Daylighting ERO for Waste Disposal Site ECA Application

RECOMMENDATION

That Report ADM-2024-031 entitled Badger Daylighting ERO for Waste Disposal Site ECA Application be received; and

Whereas the Zoning By-law Amendment appeal to the Ontario Land Tribunal was withdrawn by the Appellant on May 24, 2024, finalizing Council's decision such that the zoning remains extractive alone and hydrovac operations are not permitted; and

Whereas the Environmental Protection Act (EPA), Section 91 of Part X Spills, defines a "spill" as a discharge of a pollutant into the natural environment from or out of a structure, vehicle, or other container that is abnormal in quality; and

Whereas the process occurring on the subject lands of depositing, draining, and drying liquid soils (a waste defined by Reg. 347 and O.Reg. 406/19), potentially containing contaminants, has the potential to impact groundwater; and

Whereas such releases into the natural environment necessitate notification, reporting, and appropriate responses as outlined within the EPA regulations;

Therefore, Puslinch Council expects the hydrovac use to cease and the ECA application to be withdrawn. However, should the use continue, Puslinch Council requests that the Ministry of the Environment, Conservation and Parks (MECP) take steps to enforce compliance with the Environmental Protection Act, its Regulations, and the obligations therein; and

Whereas the hydrovac operations could result in a spill, as defined by the EPA, each time a truck discharges at the property;

That Puslinch Council requests that the MECP work directly with the property owner to ensure the site be rehabilitated to the satisfaction of the MECP, in accordance with the EPA, to protect adjacent landowners, the environment, and groundwater from adverse effects; and further:

That this report be forwarded directly to the Minister of the Environment, Conservation, and Parks, requesting a response, to MPP Arnott requesting his support, and to the MECP Local District Manager.

And That Puslinch Council directs Staff to formally object to the Waste Disposal Site ECA posted as ERO number 019-8678, in accordance with the comments herein

Purpose

The purpose of this report is to seek Council's endorsement of staff's recommended comments regarding Badger Daylighting ERO 019-8678 for Waste Disposal Site ECA Application at the property Wellington Road 34.

Background

Puslinch Council was in receipt of the ERO notice 019-8678 for Waste Disposal Site ECA Application at the property Wellington Road 34 at the May 22, 2024 Council meeting and resolved as follows:

That Council receive correspondence item 10.7 regarding the Ministry of Environment, Conservation and Parks notice regarding Application for Approval of Waste Disposal Site for hydrovac soil processing facility located at 6678 Wellington Rd 34 for information; and

That Council direct staff to prepare comments for Council's consideration at the June 12 Council meeting.

Staff have had the opportunity to draft the following comments in respect to the application and are seeking Council's endorsement to send correspondence as outlined in the report recommendation:

1. The property is owned by 2374868 Ontario Inc., and the hydrovac operation is operated by Conestoga Badger Inc.;
2. Both corporations are controlled by the same individual;

3. The property is split-zoned, with the northern 2/3 being a specialized Extractive Zone, and the southern 1/3 being specialized Agricultural. The extractive portion is subject to an ARA license in favour of Capital Paving (license no. 20085);
4. That operation is located on a smaller subset of the extractive zone, within the ARA licenced area;
5. Prior to the Excess Soil regulations (O.Reg. 406/19) coming into force, there was no requirement for liquid soils operations such as this to have Waste ECAs. However, it always would have required proper zoning to be in place;
6. The site also requires an Air/Noise ECA and a Sewage Works ECA, none of which are currently approved;
7. Puslinch Township Council refused the Zoning By-law amendment application seeking to permit a hydrovac operation over a year ago on March 22, 2023. The matter was appealed to the OLT but the appeal was withdrawn on May 24, 2024 thereby finalizing Council's decision such that the zoning is and will remain extractive alone and the hydrovac operations are not permitted. Township opposes the issuance of any ECA that purports to permit a use that contravenes its Zoning By-law. There is no prospect of the use being authorized as Council's decision to refuse the Zoning By-law amendment is now final
8. Badger has continued operating in direct violation of the zoning and without any ECAs (and that illegal use continues every day as confirmed by recent site inspections in May/June 2024);
9. There is no dispute that ECAs are required. The outcome of the OLT is final. The Township is unsure why the MECP would not take enforcement action where an ongoing operation that otherwise requires an ECA is bringing in liquid soil every day;
10. In addition to operating without a Waste ECA, there have been multiple reported exceedances of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA (Table 1), including (all of these are noted by GHD, the consultant retained by 2374868 Ontario Inc. to advance the now-withdrawn rezoning application):
 - Barium, cobalt, chromium (total) and vanadium in a soil sample collected in July 23, 2020;
 - Anthracene in a soil sample collected on August 13, 2020;
 - Fluoranthene in a soil sample collected on October 8, 2020;
 - Toluene in a sample collected on October 29, 2020;
 - Lead in a sample collected on November 12, 2020;

- Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene in a soil sample collected on December 3, 2020;
 - PHC F3 and PHC F4 in a soil sample collected on December 10, 2020;
 - PHC F4 in soil samples collected on January 7 and April 20, 2021;
 - Benzo(a)pyrene, fluoranthene, and indeno(1,2,3-cd)pyrene in a soil sample collected on May 20, 2021;
 - Chromium (hexavalent) in a soil sample collected on June 17, 2021;
 - PHC F2 in a soil sample collected on June 10, 2021
11. There are also several exceedances for Arsenic and Aluminum Table 2 potability standards in surface water data. The results from 2020 were presented in the GHD stormwater management plan and Hydrogeologic Impact Assessment prepared for an Industrial Sewage Works ECA;
12. Notably, the owner's consultants have represented that the liquid soils imported and dried at this site are used exclusively or almost exclusively for rehabilitation of the Capital Pit (20085); However, the Compliance Assessment Reports filed by Capital Paving in each of the last 2 years (2022, 2023) indicate that no rehabilitation occurred during those years. As such, this site is seemingly being used as a waste transfer site, with most or all dry soil presumably being shipped offsite;
13. The Rules for Soil Management and Excess Soil Quality Standards is adopted by reference in O.Reg. 406/19 made under the EPA, and administered by the MECP. The rules for storage of liquid soils in Section C1 of the Soil Rules include:
- Under Section C1 All liquid soil and process residues that are liquid shall be stored in a leakproof container on an impermeable surface in a manner sufficient to contain and prevent the material from escaping into the natural environment of the Soil Rules, there are requirement for managing liquid soils at a project area or a local waste transfer facility
 - The owner/operator are currently operating in a manner that is not compliant with this - currently, the liquid soil stockpile dewatering area is not in a leakproof container and is on a permeable sand and gravel material, not an impermeable surface. The existing infrastructure does not protect the soil and groundwater at the Site from being adversely impacted by contaminants that may be present in the liquid soil and liquid process residues.
14. Section 91 of Part X Spills of the EPA defines a "spill" as a discharge of a pollutant into the natural environment, from or out of a structure, vehicle or other container that is abnormal in quality. Considering the above, the process of depositing, draining, and drying liquid soils (a waste defined by Reg. 347 and O.Reg. 406/19) potentially containing contaminants has the potential to impact groundwater. Such releases into

the natural environment necessitate notification, reporting, and appropriate responses as outlined within the EPA regulations. There is no evidence that the Applicant has reported their releases of liquid soils at the Site as spills have been found in the reports provided by the owner's consultants as part for the now-withdrawn Zoning By-law amendment application.

In addition, the final report provided to Council on March 22, 2023 and the supporting peer review materials is enclosed as Schedule "A".

Financial Implications

None

Applicable Legislation and Requirements

The Rules for Soil Management and Excess Soil Quality Standards O.Reg. 406/19

Aggregate Resources Act, 1990

Environmental Protection Act, 1990

Township Comprehensive Zoning By-law 23-18

Engagement Opportunities

Township Website; ERO portal

Attachments

Schedule "A" Report ADM-2023-016 Zoning By-law Amendment Application Recommendation Report - 6678 Wellington Rd 34

Schedule "B" Environmental Registry of Ontario Waste ECA Notice

Respectfully submitted,

Courtenay Hoytfox
Interim CAO



REPORT ADM-2023-016

TO: Mayor and Members of Council

PREPARED BY: Courtenay Hoytfox, Municipal Clerk

PRESENTED BY: Courtenay Hoytfox, Municipal Clerk

MEETING DATE: March 22, 2023

SUBJECT: Zoning By-law Amendment Application Recommendation Report - 6678 Wellington Rd 34

RECOMMENDATION

That Report ADM-2023-016 entitled Zoning By-law Amendment Application Recommendation Report - 6678 Wellington Rd 34 be received; and

Whereas the Township and its expert consultants have identified concerns and non-compliance with a number of policies through their comprehensive review of submission materials by the applicant; and

Whereas The County Planner and the Township Hydrogeologist have recommended the refusal of the Zoning Amendment application as detailed in Schedule "A" and Schedule "B" respectively; and

Whereas the community has expressed significant opposition and concern related to the proposed legalization of the land use;

Therefore,

That Council refuse the Zoning By-law Amendment Application for the property 6678 Wellington Rd 34; and

That notice of Council's decision be forwarded to the applicant and to the Provincial Officer for the Ministry of the Environment, Conservation and Parks Drinking Water and Environmental Compliance Division Guelph District Office.

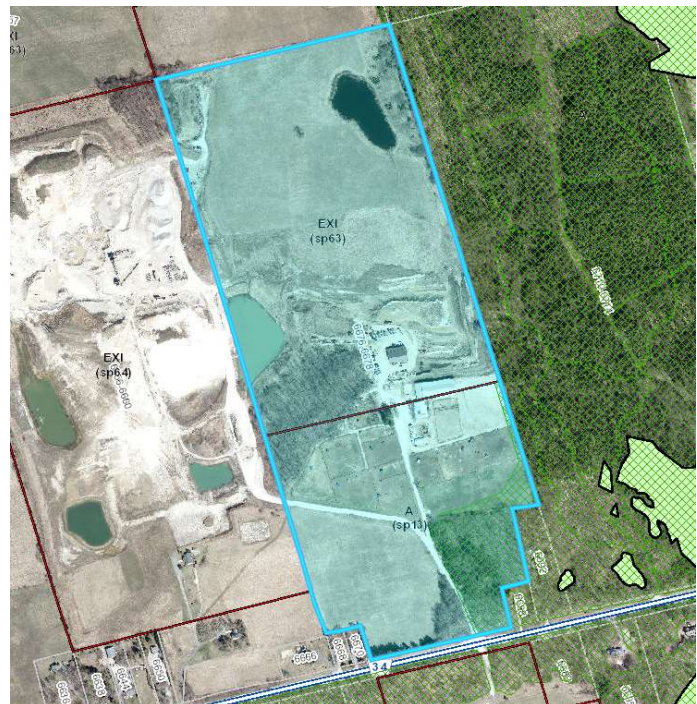
Purpose

The purpose of this report is to provide Council with a recommendation relating to the Zoning By-law Amendment Application for the property 6678 Wellington Rd 34. The agent for the applicant submitted two (2) formal submissions in relation to this application with three (3) addendums to the second submission. The addendums were submitted in February 2023. All materials submitted by the applicant have been peer reviewed and peer reviews are attached to this report.

Background

The Township was contacted in the spring of 2021 related to an Environmental Compliance Approval (ECA) application for the property 6678 Wellington Rd 34. The Township was being asked to confirm local zoning compliance for the proposed ECA application. The property is zoned Extractive (EXI sp63), Agricultural (A sp13). There is an active Aggregate Resource Act (ARA) license over the lands zoned EXI sp63. The licensee is Capital Paving Inc. The Township was not able to confirm zoning compliance for the ECA application given that the hydro vac use identified in the ECA application was not a permitted use in either zone on the property.

The Township contacted both the MNRF and the MECP regarding the on-going use and requested clarification on whether the use was permitted under the ARA license or through the MECP authority. Both Ministries responded that the use was not currently permitted or explicitly included in existing permissions for the property, however no enforcement action would be taken by the Ministries.



A formal objection letter was sent to the MECP in relation to the ECA application due to zoning non-compliance. The applicant withdrew the ECA application with the Ministry and proceeded to submit a Zoning Amendment application with the Township. The Zoning Amendment application was received on January 11, 2022 however, the Township was not able to deem the application complete until October 28, 2022 as the application did not meet the requirements for a complete application. The statutory public meeting was held on November 30, 2022. The

Township received significant opposition and concern related to the proposed legalization of the land use from the public.

A number of statements were made at the public meeting that required follow up action by staff. Concerns that have been identified may require further action by the property owner regardless of the outcome of the zoning amendment.

In response to comments made at the public meeting (by the agent for the applicant and the public) regarding soiling testing and contamination, the Township retained the firm XCG which specializes in Environmental Engineering. XCG has noted a number of concerns detailed in the peer reviewed attached to this report as Schedule "C".

The agent of the applicant advised that fill was imported near the south area of the property in the Agricultural zone and was approved by the Township through a Site Alteration permit. Staff confirm that no permit has been issued to this property, although an application was made after the fill was imported to the site.

The agent of the applicant advised that a portion of the Agricultural zone area was being used by a tenant for temporary outdoor storage. The tenant, had been advised that the use is not a permitted in the Agricultural Zone and has vacated the property.

The agent for the applicant advised the public at the public meeting that all buildings and structures were legal and have proper approvals. This statement was made in response to a question by a member of the public regarding the existing permissions for an office building and truck parking on the property. In response to this public feedback, staff reviewed the property file and could not locate any building permit records for the office building or septic system. The Township Chief Building Official was asked to comment and provided the following information:

The ARA license does not exempt the property from requiring building permits. At a high level, to bring the property into compliance from a building code perspective, we would need the following:

- *Existing building(s):*
 - *We would require a "change of use" permit for any building not used for agricultural purposes.*
- *Holding tank(s):*
 - **Option A – Valid permit:**

- *If the applicant can prove that the existing holding tank(s) was installed with a valid permit, we will require:*
 - *A written agreement with an approved hauled sewage system operator.*
 - *A septic assessment by a qualified person that the existing tank is in good condition and is adequate to serve the building and its occupants.*
- **Option B – No valid permit:**
 - *If it cannot be proven the existing holding tank(s) have a permit and were inspected, we will require*
 - *The applicant must apply for a building permit to install a traditional septic system (tank and septic bed) to serve the building and its occupants.*

The Ecologist report prepared by Dougan & Associates identifies that an EIA addendum be provided to attempt to address the outstanding concerns. Given that the primary concerns Dougan & Associates has raised are non-compliance with relevant Core Greenlands Policies and non-compliance with the County Official Plan, staff recommend that no further addendums be requested from the applicant at this time. County Planning staff have raised similar concerns and ultimately recommend the refusal of the zoning amendment application.

The attached Schedules provide a detailed review of the application for Council’s consideration.

Financial Implications

None

Applicable Legislation and Requirements

Planning Act, R.S.O. 1990,

Aggregate Resources Act, R.S.O. 1990

Environmental Protection Act, R.S.O. 1990

Engagement Opportunities

None

Attachments

Schedule “A” County Planning Recommendation Report

Schedule “B” Harden Environmental Peer Review

Schedule “C” XCG Environmental Engineering Peer Review

Schedule “D” Wellington County Source Water Comments

Schedule "E" Dougan & Associates Ecology Peer Review
Schedule "F" GM BluePlan Engineer Comments

Respectfully submitted,

Reviewed by:

Courtenay Hoytfox,
Municipal Clerk

Glenn Schwendinger,
CAO



PLANNING REPORT for the TOWNSHIP OF PUSLINCH

Prepared by the County of Wellington Planning and Development Department

MEETING DATE: March 22nd, 2023
TO: Glenn Schwendinger, CAO
Township of Puslinch
FROM: Zach Prince, Senior Planner
County of Wellington
SUBJECT: **RECOMMENDATION – 2374868 Ont Inc (Badger)
Zoning By-law Amendment Application D14/BAD
Part of Lot 8, Concession 3
6678 Wellington Road 34**
ATTACHMENTS: **1 – Aerial of Subject Lands and area of existing use
2 – Sketch Provided by Applicant
3 – Requested zoning permissions**

RECOMMENDATIONS:

- 1) That Council receive this Planning Report by the County of Wellington Planning and Development Department; and,
- 2) That Council refuse the rezoning application D14/BAD

SUMMARY

The purpose of this application is to amend the Township of Puslinch Zoning By-Law 23-2018 to permit an existing vacuum truck operation. The operation includes an existing office building, parking for trucks and employees and materials handling and sorting facilities. The use currently operates on a site that is an active gravel pit license (Wellington Pit 5). The pit is licensed to Capital Paving however the use is operated by Badger. The pit license would need to be removed to allow the use on the property.

The intent of this report is to provide Council with our planning opinion in order for Council to make an informed decision on the proposed application.

A statutory public meeting was held on November 30th, 2022. Comments in support have been received in addition to concerns raised by consultants and the public.

Planning staff are of the opinion that the subject development proposal is not consistent with Provincial policy or the County of Wellington Official Plan and does not represent good land use planning. It is recommended that this application be refused, and that Council pass a resolution to refuse this application.

INTRODUCTION

Planning staff prepared a report for the Public Meeting held on November 30th, 2022. In addition staff prepared a memo outlining concerns with the application attached to a Puslinch staff report which was received by council on February 8th, 2023. The subject property is legally known as Part of Lot 8, Concession 3 and municipally known as 6678 Wellington Road 34 within the Township of Puslinch. The lands are approximately 38.22 ha (94.4 ac) and contains an existing building used for office space, a

detached accessory structure (former primary dwelling), agricultural building, truck parking, employee parking, soil handling area and agricultural fields. The applicant has indicated the use has existed for 9 years on the property and has included various monitoring data to supplement the submission. An aerial of the subject property is included as **Attachment 1**.

The property is a licensed aggregate pit - Wellington Pit #5 operated by Capital Paving Inc. (License number 20085). The applicant has indicated that the section of the pit that is subject of this application is in the rehabilitation phase of the pit's lifecycle. Further, the applicant has indicated that aggregate rehabilitation is anticipated to take 10 years.

PROPOSAL

The purpose of the Zoning By-law amendment is to rezone the subject property, which is currently zoned as EXI(sp63), to add the existing vacuum truck business as a permitted use. The use includes parking for the vacuum trucks, parking for employees, unloading liquid soil, screening and drying the deposited soil. The property has two (2) site specific zones. The proposed use operates on the Extractive zoned portion of the site, the area zoned Agricultural (sp13) is proposed to remain. The applicant has indicated that the existing office is approximately 650m² and approximately 35 employee's operation from the site. The applicant has indicated their intent to limit the number of vacuum trucks parked/operating from the site to 19 and the soil processing use encompasses approximately 2 ha. A concept plan provided by the applicant has been included as **Attachment 2**.

The subject lands are accessed via an existing driveway onto Wellington Road 34 which is also used as a haul access for the aggregate operation. The soil that is brought to site via the vacuum trucks is collected from properties throughout Southern Ontario and is a mixture of water and soil. Once brought to the site, the soil is stock piled, dried, tested and eventually used as fill as part of the rehabilitation for the gravel pit on the subject property. The water (effluent) from the liquid soil drains to an existing pond. The applicant is proposing the soil processing use would take place on an engineered clay liner if approved.

Staff's opinion is that the proposed use has two parts. The first being the truck parking, employee parking, and office uses related to vacuum truck business and the second part is the depositing of liquid soils, processing and stockpiling of the soils. The soil processing use is required to receive an Environmental Compliance Approval (ECA) for Waste and Air & Noise from the Ministry of Environment, Conservation and Parks (MECP). Once the soil is processed and meets the applicable MECP requirements, the soil can be transferred to any location, in this case the existing pit is in close proximity and the applicant has indicated that the final location of the processed soil is part of the existing pit rehabilitation program. Soil processing has a dedicated area on the site and equipment to move the stockpiles around the area.

REPORTS & SUPPORTING DOCUMENTS

In support of the subject Zoning By-law Amendment application, the following information and studies were submitted by the applicant:

- Planning Rationale Report, prepared by GHD, dated December 2021
 - *Planning comment:* Planning staff have reviewed this report and provide further discussion on planning policy and analysis below.
- Stormwater Management Report, prepared by GHD, dated April 14, 2022; *updated August 25th, 2022*
 - *Planning comment:* This report was peer reviewed by GM BluePlan, concerns were raised regarding the existing use and suggested a clay lined pond at a minimum be constructed. The applicant has agreed to a clay lined pond in principle but has not provided a design

or general stormwater management plan that would appropriately size the use to the proposed 2 ha area of the site.

- Environmental Impact Assessment, prepared by GHD, dated May 10th, 2022; *updated August 10th, 2022*
 - *Planning comment:* The EIS was reviewed by Dougan and associates. The EIS provides recommendations for setbacks to the adjacent woodlot (10 m). Dougan provided additional comments but have not indicated they are satisfied with the revised EIS at the time of this report.
- Design and Operations Report Waste Processing Facility, prepared by GHD, dated February 2, 2021.
 - *Planning comment:* This supplemental report was reviewed by planning staff and GM Blue Plan and has not been updated since the applicant has agreed to provide a clay lined area for the soil processing. Planning staff have reviewed this report for context for the proposed use.
- Acoustic Assessment Report, prepared by GHD, dated January 7, 2021.
 - *Planning comment:* This report was peer reviewed by Valcoustics who provided comments back to the applicant. The applicant submitted a response letter but not an updated report. Valcoustic's has not provided that they are satisfied with the responses or report at the time of this report.
- Erosion and Sediment Control Plan, Sheet No. C-02, prepared by GHD, dated December 13, 2021.
 - *Planning comment:* Peer reviewed by GM Blue Plan and factored in to their comments. Including potential for grading issues with the neighbouring property and not including the lands where site alteration occurred on the agricultural field.
- Traffic Operations Assessment, prepared by GHD, dated December 13, 2021.
 - *Planning comment:* County Roads staff reviewed the report and noted the peak estimated trips would not trigger further road improvements to WCR 34.
- Environmental Emergency and Contingency Plan 2374868 Ontario Inc.
 - *Planning comment:* This report was reviewed by GM BluePlan. Planning staff consider this report supplementary to other reports and information provided which provide context to the proposed use.
- Approximate Locations of Septic Systems Figure, prepared by GHD, dated December 2021.
 - *Planning comment:* Planning staff have reviewed this plan and the applicant has indicated the septic system serving the office is a holding tank. The Township does not have building permit or septic design information for this tank. Staff note holding tanks are generally not accepted by the Township.
- MNRF Rehabilitation Plan Map by Harrington and Hoyle Ltd., dated March 20, 2003.
 - *Planning comment:* Planning staff have reviewed this plan and note the 2 buildings have been removed and the new office building is not shown on the site plan. The Township has no building or demolition records for these buildings. Further, the rehabilitation plan is clear that the after use of the site it to be returned to an Agricultural use.

Following the public meeting, Township staff provided a status update to Council including a report from XCG Consulting Ltd (Environmental Engineers and Consultants) highlighting concerns with the application. XCG peer reviewed the environmental reports and documents provided by the applicant and has concerns regarding impacts to the groundwater from the existing operations and the sampling methods proposed. Updated comments from XCG were received on March 8th that they are not satisfied that the existing operations have not had an effect on the surrounding area.

The applicant (GHD) submitted response letters to staff to address comments raised by council, the public and agencies. Not all responses have been received at the time of this report.

PUBLIC CONSULTATION AND AGENCY COMMENTS

Planning staff had previously identified in the Public Meeting Report and Information Memo that there were outstanding technical concerns to be addressed prior to the zoning amendment and recommendation report being brought forward. Some of these concerns have been addressed but some remain outstanding including the effects to ground water resources.

A statutory Public Meeting was held on November 30th, 2022 and a number of comments were verbally received and written comments were received before and after the meeting. Some written submission expressing support for the application were received. The concerns raised by the resident's, Puslinch Development Advisory Committee (PDAC) and agencies are summarized in the following categories:

- Potential impacts to ground water resources (neighbouring wells) including sampling and monitoring of materials brought to the site and the potential impacts to groundwater;
 - *Planning comment:* In consultation with the Township's hydrogeologist concerns with the proposal remain.
- Scale of use and meeting Official Plan policy requirements, including permitted uses in Secondary Agricultural Area;
 - *Planning comment:* Staff provide discussion on the County's OP below including evaluating criteria for the Secondary Agricultural area.
- Permission and concerns regarding additional uses on the property (ie Telecon, importing large amounts of fill);
 - *Planning comment:* The applicant has indicated that Telecon was operating from the site but is no longer on the site storing outdoor equipment. Further, the applicant has confirmed fill has been received to the site without a site alteration permit. The permit that has been applied for is for agricultural purposes. The applicant has also indicated the owner of the subject property also is a partial owner of another vacuum truck company which infrequently visits the site.
- Concerns regarding trucking in the rural area;
 - *Planning comment:* The applicant is of the opinion that the soil processing use is an extension of the aggregate use on the property and has similar impacts regarding trucking. Planning staff have provided further discussion below.

Planning comment

Staff and agencies submitted a number of comments and the applicant has submitted responses. Planning staff have outlined similar concerns regarding the above comments and have provided discussion on these items below.

POLICY ANALYSIS

PROVINCIAL POLICY - PROVINCIAL POLICY STATEMENT (PPS 2020) & PROVINCIAL GROWTH PLAN (2020)

The subject lands are designated primarily as Secondary Agricultural Area in the County of Wellington Official Plan, as such, Section 1.1.4 Rural Area and Section 1.1.5 Rural Lands in the PPS are applicable. Rural Areas are described as being a system of settlement areas, rural lands, prime agricultural areas, natural heritage features and other resource areas.

The PPS provides a definition of safe communities that includes avoiding development that may cause environmental or public health and safety concerns including the re-use of excess soil where feasible and

will protect human health and the environment. The PPS also protects Sensitive Ground Water Features; these include an aquifer that is susceptible to the addition of pollutants. The PPS in Section 2.2 and the Growth Plan in Section 4.2.1 aim to protect Water Resources including surface water features and ground water features by restricting development or site alteration in or near sensitive water and ground water features. The subject property is located in an area and on a property that has the potential risk of contaminating a municipal drinking water supply regardless of the monitoring processes that could be applied to the site, as indicated by the Township's Hydrogeologist. Staff's opinion is that the use would be better served on a site located with fewer risks to municipal water supply and private wells.

Regarding compatibility, the lands are largely surrounded by the existing aggregate operation, Natural features (Significant Woodland), Agricultural, and residential uses. The applicant has prepared a series of supporting studies, including a Noise Impact Study, Traffic Impact Study, Stormwater Management Brief and Hydrogeological Assessment. These studies have been peer reviewed but concerns from an hydrogeological, environmental and civil engineering standpoint remain outstanding. Planning staff have further discussion regarding compatibility below.

The PPS also encourages on site and local re use of excess soil through planning and development approvals while protecting human health and the environment. The PPS also encourages progressive rehabilitation and recognizes the interim nature of the extraction use. Based on the comments from the Township's hydrogeologist this is not an appropriate location for the processing of liquid soils and does not meet this section of the PPS.

Regarding Natural Heritage Features, there is an adjacent woodlot and comments from the Township's peer reviewer have not been fully addressed and it has not been satisfactorily addressed that there will be no negative impacts to the adjacent woodlot.

Similar to the PPS, with the Growth Plan the Rural Lands and Rural Areas policies apply, additionally the Growth Plan directs much of the employment growth to settlement areas, unless where otherwise permitted. The Growth Plan includes policies for Rural Employment areas which are accounted for and designated in the County of Wellington's Official Plan. The Township of Puslinch does not have Industrial designated lands within a settlement area but it does have designated Rural Employment lands. Planning Staff's opinion is that the proposed use is industrial in nature and is more appropriately located within the Industrial designated sites within Puslinch, these are also largely located in the Rural Area, and meet rural service levels, these lands are identified as Rural Employment areas in the County of Wellington Official Plan.

PROVINCIAL POLICY – O.Reg 244/97, O.Reg 406/19, ENVIRONMENTAL PROTECTION ACT (EPA)

The Province introduced changes to the Environment Protection Act (EPA) in 2019 and defined a number of items related to excess soil management through O.Reg 406/19, "Soil Rules". The "Soil Rules" state that "all liquid soil, processed or dewatered or solidified soil and process residues that are liquid shall be stored in a leakproof container on an impermeable surface in a manner sufficient to contain and prevent the material from escaping into the natural environment."

One of the changes made by the Ministry of Natural Resources and Forestry (MNRF) to O.Reg 244/97 was to align the Aggregate Resources Act (ARA) with the excess soils definition which references Liquid Soils and clarification that the quality of soil for pit rehabilitation must be tested prior to being placed on the active site and processed outside of a licensed pit. Further, the applicant must receive an ECA under the EPA to authorise a waste processing facility. These additional processes to permit liquid soils are

significantly different from an Aggregate Processing Facility or a similar aggregate accessory uses that may be permitted on an active gravel pit site plan or license which is accessory to the pit operations.

It is understood that the applicants will also need an ECA for air and noise in addition to the industrial sewage works ECA or waste processing facility ECA for the use itself. This ECA was previously applied for then withdrawn by the applicant to allow the zoning to first occur for the use.

WELLINGTON COUNTY OFFICIAL PLAN

The subject property is designated as Secondary Agricultural, Core Greenlands and Greenlands within the County of Wellington Official Plan. Identified features include Environmentally Sensitive Area and Significant Woodlands. The subject lands are located within the Paris Galt Moraine Policy Area. Further, the lands are identified as a sand and gravel resource of Primary and Secondary Significance in Schedule C and Appendix 2 of the Official Plan and within a Licensed Aggregate Operation.

Water resources

The OP provides policies for groundwater resources in Section 4.9.3 and the Paris Galt Moraine Policy Area in Section 4.9.7 which apply to this site. The intent of these policies is to protect the moraine processes and features, these include groundwater recharge and surface water detention. The intent of the plan is to ensure water quality and quantity are not negatively affected by development. Large scale developments are required to demonstrate that ground and surface water functions will be maintained, restored and enhance where possible. Further, Section 4.9.5.9 provides policies relative to Mineral Aggregate Resources which apply to this site, including that the use and storage of recyclable and imported material for blending purposes may be permitted provided that these uses and materials do not pose a risk to groundwater quality. Staff, in consultation with the Township's Hydrogeologist, have concerns regarding the level of risk this use places on the existing aquifer in this area.

Mineral Aggregate Overlay

Ancillary uses may only be established if the environment is adequately protected from negative effects of the use. Staff are of the opinion that the proposed use is not ancillary to the aggregate use of the site because the business and associate processing of excess soils is considered a separate use from aggregate operations. Due to the requirement for the aggregate site plan to be amended to allow the use, the proposed end product may benefit the aggregate use of the site but is not required to be located on or adjacent to a gravel pit going through rehabilitation. Further, the Overlay emphasises the importance of the rehabilitation plan to ensure the agricultural uses are restored after extraction for above water pits.

Greenlands

The proposed operations area is located 10m from the existing Significant Wooded Area on the site and adjacent Wooded Area (Little Tract). The Applicant has submitted an EIS which has been peer reviewed by the Township (Dougan and Associates). The proposed EIS recommends a 10 m buffer be applied from the processing area to the existing drip line. Staff note that previous site alteration has occurred in this buffer with an existing silt fence located at the tree line, a permanent fence located 10m away is recommended in the EIS.

Secondary Agricultural Area

The Secondary Agricultural Area allows for small scale commercial or industrial uses subject to the criteria in Section 6.5.4. "Small scale commercial, industrial and institutional uses may be permitted provided that:

- a) appropriate sewage and water systems can be established;
 - *Planning comment:* The proposed use has on site private sewage (existing holding tank) for the office use and a private well. The applicant has indicated they do not meet the

threshold for a Permit to Take Water for the use. No building permits were received for the septic system servicing the office on site. Staff note that generally holding tanks are not permitted as a means of sewage treatment and a permanent leaching bed should be considered by the applicant and Township if approved. In addition, there are 2 other existing septic systems servicing an agricultural building and A framed structure on the site located outside of the proposed zoning by law amendment. No information has been provided regarding these septic systems and when combined with the office septic system, a MOE approval may be required.

Regarding stormwater, the applicant is proposing a claylined pond which would help alleviate some concerns regarding possible contamination, the soil processing use will require additional approvals from the MECP. Currently there are no engineering controls in place for the surface water run off, the applicant is proposing a clay liner which would be an improvement but the underlying subsoils are not appropriate for this use in this area

b) the proposed use is compatible with surrounding uses;

- *Planning comment:* The surrounding land uses include significant features identified by the Township's hydrogeologist, an existing gravel pit, agricultural uses and residential uses. The surrounding area is a combination of Prime agricultural, Secondary Agricultural, Greenlands and Core Greenlands designations in the Official Plan. Gravel pits are generally intended to be a temporary use. The pit is nearing the end of its lifecycle (approximately 10 years remaining as indicated by the applicant) at which point it would be returned to an agricultural use. The applicant is proposing the use be permitted on the site permanently, however the applicant suggests the use would cease after the pit is rehabilitated. Planning staff do not agree that it is appropriate to allow the use permanently when it intended to be a temporary use. The applicant has submitted a traffic impact study and noise assessment which have been peer reviewed. As noted above the Township's consultants have not indicated they are satisfied with the responses received to date.

Given the size and concerns regarding groundwater risks with this use in this area, planning staff do not agree that the proposal has adequately demonstrated that the use is compatible with the surrounding agricultural and residential uses in the area and the use would be better served in the Rural Employment / Industrial areas of the Township.

c) the use requires a non-urban location due to: market requirements; land requirements; compatibility issues.

- *Planning comment:* The proposed use includes office space, parking of trucks and employee parking. Staff consider the proposed use to be an industrial use and not required to be located on an aggregate site. The use serves a large clientele, accepting soil from up to 19 different sites a day, and requires trucks to access the site daily. The applicant has also indicated that hours of operation can vary depending on the needs of clients and timing of construction works. The use may benefit from a non-urban location but does not require a non-urban location. The County Official Plan provides non-urban industrial lands in the Rural Employment area. The Rural Employment areas are specifically for uses that require large sites and a non urban location.

Similar to other uses, the parking, storing of the trucks, office, employee parking does not need to be the same location as where the material is deposited. Staff note this site appears to be optimal from the applicant's perspective due to the aggregate use and intent to support aggregate rehabilitation, however this use is proposed to be permanent and a permanent industrial use of this scale would be better served on sites designated as Rural Employment in the County OP. Puslinch has Industrial zoned lands available in the Rural Employment areas. Staff have looked in to numerous Badger locations which operate from Industrial zoned sites in Ontario without taking place on the same lands as the soil processing use.

The Rural Employment areas in the County OP are intended to serve uses that are similar to this operation including parking, storage, office space. The Secondary Agricultural area is intended to provide more uses and flexibility than the Prime Agricultural area, it is not intended to serve all industrial uses.

d) the use will not hinder or preclude the potential for agriculture or mineral aggregate operations;”

- *Planning comment:* The subject use is on an active pit license. The pit after use has always been to revert back to agriculture as per the approved rehabilitation plans, this use would impact the approved rehabilitation plans. The soil processing use may be beneficial to the aggregate operations because of the ability to reuse soil and the proximity to the existing pit however the ARA requires excess soils to be processed off active aggregate sites until the soil has been tested. By permanently allowing this use this will affect the rehabilitation plan for the existing aggregate operations.

e) the use will be small scale and take place on one lot and large scale proposals or proposals involving more than on lot will require and official plan amendment;”

Planning comment: The applicant is proposing that due to the size of the office the proposed use is small in scale. Staff do not agree with this assessment and find that this use is better described as a large scale proposal due to the number of trucks, number of employees, size of the area required for soil processing, that each truck visits a different site and that the after use of the soil can be placed on any site not associated with the subject property. Further, if the use is approved the site could accept liquid soils from other vacuum truck businesses in the immediate or extended area.

The applicant has indicated the soil processing use is 2 ha in area which includes all the associated parking for trucks, and employee parking. It is unclear how this area has been established and Planning staff are of the opinion that this use occupies a larger portion of the site. The aerial photo from 2015 roughly captures the 2 ha area but the 2020 aerial shows a much larger area being used for the use as indicated in **Attachment 1**. The Compliance Report provided by Capital Paving also shows an area larger than 2 ha outside of the Progressive rehabilitation area, presumably where this use is occurring. The stormwater management pond, which ultimately accepts the run off from the use and is consistently monitored by the applicant, should be considered in the area of the use. Staff have calculated the area to be closer to 6.3 ha (15.5 ac) which includes the stockpiles, slopes, employee parking, outdoor storage and access roads indicated on the 2020 aerial for the site.

The Secondary Agricultural area allows limited opportunities for industrial uses. The designation is not intended to allow all types and intensity of industrial uses, only those that can demonstrate that the above criteria can be met because the intent is that the area remains Agricultural in nature, the County Official Plan directs industrial uses to sites designated as Rural Employment.

Staff are aware of a few approved sites in Ontario for the liquid soil processing use (Waste ECA for liquid soils) and the applicant has not demonstrated to staff's satisfaction why the use needs to occur on this site. The applicant provided a number of properties where ECA approvals for liquid soils waste have been received or are in process, staff have reviewed these sites and find these are largely in Industrial designated areas and not in agricultural areas.

As the Provincial "Soil Rules" relate to best practices for handling soil, the Township may want to consider allowing the soil processing use under the Temporary Uses provisions of the Planning Act for a prescribed period to allow for this soil to rehabilitate this pit only provided the hydrogeological concerns and applicable Provincial requirements for handling liquid soils can be met.

When considering the proposed use staff have considered the cumulative impacts of both the soil processing and the vacuum truck business. The applicant has indicated that the soil processing is integral to the use of the site. Planning staff do not agree, neither use meets the intent of the Secondary Agricultural Area and would be better suited for industrial zoned sites in Puslinch.

Overall, Planning staff does not share the same opinion as the applicant's Planner that this proposal addresses the criteria of Section 6.5.4. Planning staff are of the opinion that the proposed use as presented does not meet the intent the Official Plan.

ZONING BY-LAW

The applicant is seeking to rezone the EX1 (sp63) portion of the site only. The applicant's proposed by-law would expand the definition of Aggregate Processing Facility to include vacuum truck uses, clarify that the vacuum truck operation is permitted on the site including storing of vehicles, and apply a Holding By-law to ensure the aggregate pit licence is removed on the area used for soil processing, the proposed wording has been included in **Attachment 3**.

Staff have concerns with the use that is not tied to the lifetime of the pit. The proposed use is not included on the aggregate pit license and the zoning amendment as proposed would consider these uses on the property permanently and have no tie to the lifetime of the pit rehabilitation and ultimately pit license surrender process.

The intent of the EX1 zone in the Township is that the zone would be placed on a property for the lifetime of the aggregate pit and license. As part of the pit rehabilitation and licensing surrendering process the lands are typically rezoned back to Agricultural with typical agricultural uses applying to the property. The Township's zoning by-law permits additional uses in the EX1 zone including an Aggregate Processing Facility, accessory Office and accessory Warehouse uses; these presumably would encourage varying after uses for the pit, the additional uses were added when the Township updated their parent zoning by-law in 2018 and inadvertently applied to this site.

The Township's zoning by-law also provides a definition of "Waste" which includes a reference to the EPA which intern would include excess soils and liquid soils. The By-law prohibits a disposal site for waste in all zones. Planning staff are of the opinion that this prohibition for all zones clearly indicates the Township's stance on a use of this nature.

Based on the size of the office building the site will require a minimum 17 parking spaces including barrier free spaces, these have only been shown conceptually to date and a detailed site plan with dimensions has not been provided. Further, should this be approved, the Township will require a Site Plan application which detailed zoning and building information including setbacks, parking, fire routes, grading, stormwater management, servicing and landscaping will be required.

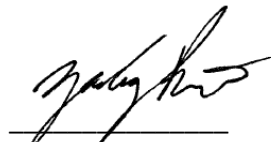
At the public meeting staff raised concern regarding approving a zoning by-law on an active gravel pit. The Township has received a legal opinion that the proposed Holding provision in the zoning by-law would meet the intent of the Aggregate Resources Act. Should council approve this amendment staff would recommend that a Holding provision be applied to the site as indicated in the applicant's proposed wording in **Attachment 3**.

CONCLUSION

The MECP has specific guidelines for excess soils and for liquid soils. These guidelines generally treat liquid soils as a type of waste processing rather than aggregate processing. The final destination for the end product may be used for the rehabilitation of the aggregate pit but the processing is treated as a waste processing site rather than being related to an aggregate use. Planning Staff's opinion is that the soil, once processed, may be beneficial to the aggregate operations but it does not need to occur on the same site as the aggregate operations. Given the additional provincial approval requirements for the use, the size of the use, the number of employees and vehicles on the site, planning staff are not satisfied that the criteria to meet a small scale industrial use in the Secondary Agricultural Area are met. Rural Employment lands are available in the Township of Puslinch which in staff's opinion would be better suited for this use. A number of concerns from the Township's consultant's remain unaddressed or not addressed to their satisfaction. Given the underlying hydrogeological concerns regarding the use, staff are not satisfied that the proposal appropriately mitigates potential risks from this use in the area and is not an appropriate use for this site.

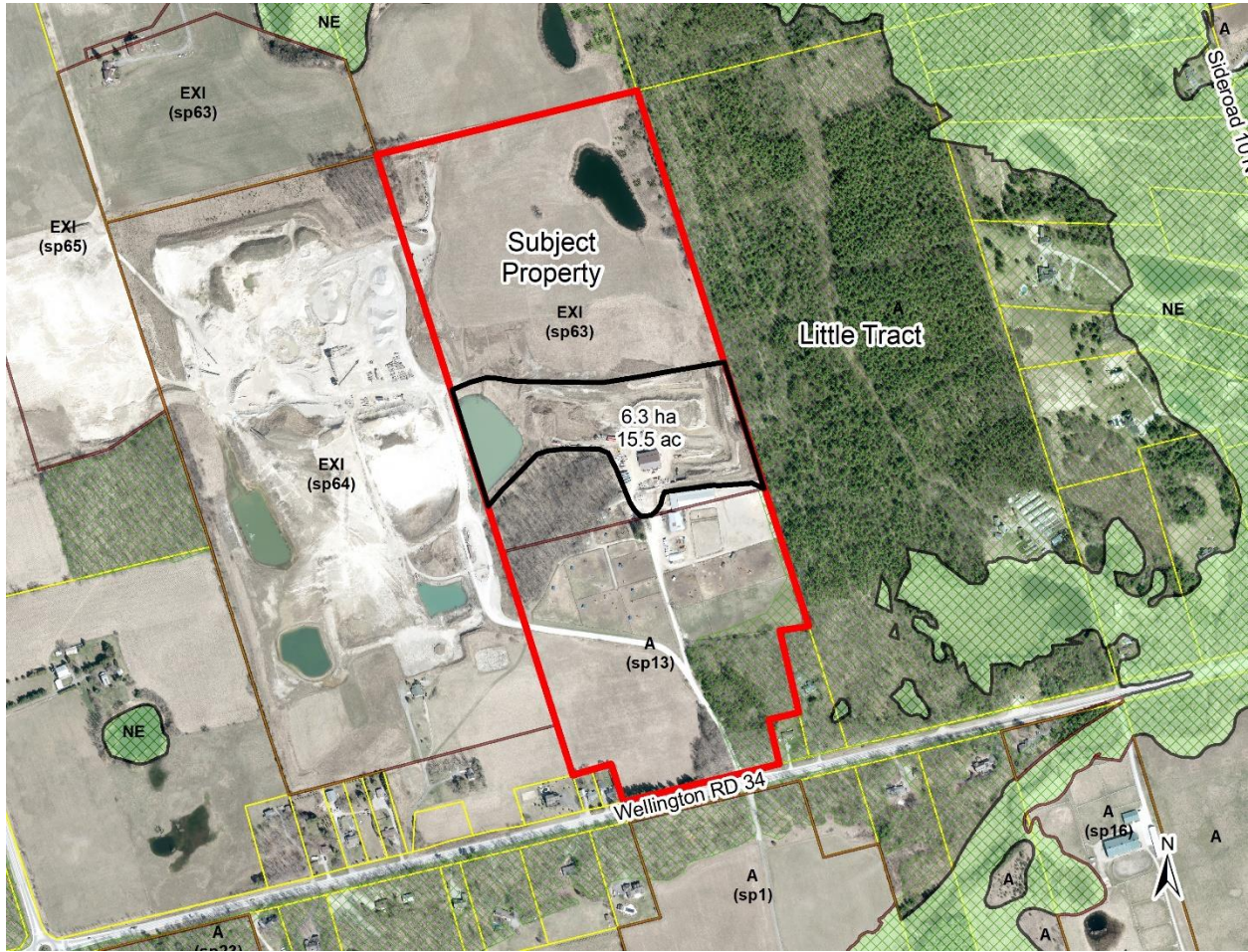
In planning staff's opinion, the applicant has not established that the proposed use is appropriately located on the subject lands and planning staff are not satisfied that the criteria of the Official Plan or Provincial Policy has been addressed and does not meet Provincial Policy or the County Official Plan.

Respectfully submitted,
County of Wellington Planning and Development Department

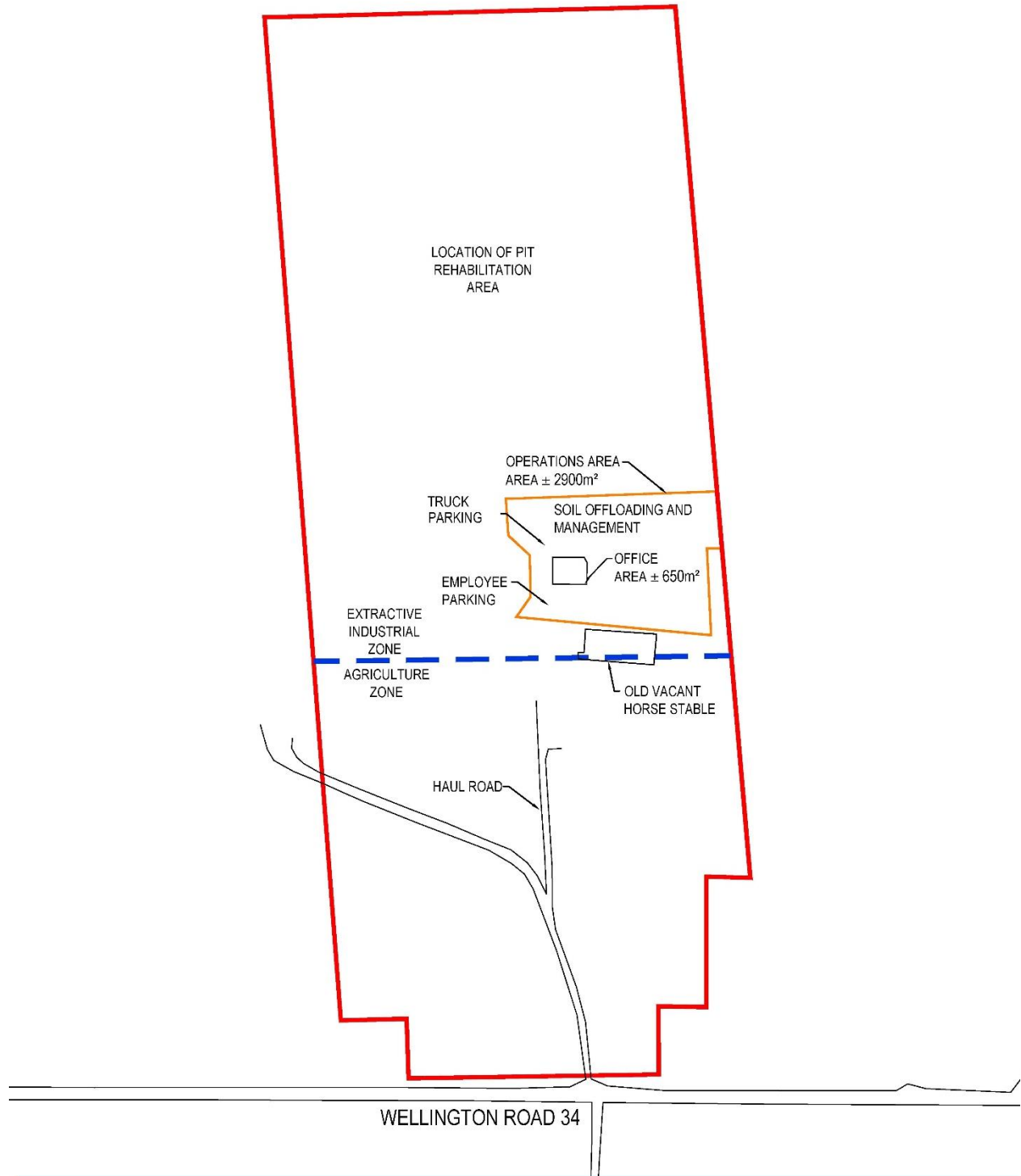



Zach Prince MCIP RPP
Senior Planner

ATTACHMENT 1 – Aerial of Subject Lands



ATTACHMENT 2 - Sketch provided by Applicant



LEGEND
 SITE OPERATION BOUNDARY
 SITE



BADGER CONESTOGA INC.
 6678 WELLINGTON ROAD 35
 CAMBRIDGE ONTARIO
**CONCEPTUAL PLAN OF
 EXISTING SOILS OPERATION**

Job Number | 11210005
 Revision | A
 Date | DEC 2021
Figure 02

Plot Date: 20 December 2021 - 12:13 PM

Plotted by: Jo-Anne Theurer

11 Allstate Parkway, Suite 310, Markham Ontario L3R 9T8 T 1 905 752 4300 F 1 905 752 4301 E ytomail@ghd.com W www.ghd.com
 Cad File No: N:\CA\Waterloo\Projects\662\11210029\Tech\Planning\Planning Report\11210029-PR_FIGURES.dwg

ATTACHMENT 3 – Suggested by-law wording by the applicant

Being a By-law to amend By-law 023-18, as amended, being the Zoning By-law of the Township of Puslinch;

The Council of the Township of Puslinch hereby enacts as follows:

1. General

1.1 That Schedule “A” of By-Law 023-18 is hereby amended by changing the EXI zoning category with special provision 63 (EXI (sp63)) to EXI zoning category with special provision XX and a holding provision ((HX)EXI (spXX)) as shown on Schedule A attached to and forming part of this By-law.

1.2 That notwithstanding any provision of By-law 023-18 to the contrary, the following uses are permitted on lands the lands zoned EXI (spXX):

- a. the use of a Vacuum Truck operation to transfer, store and process soil and aggregate materials.

1.3 That notwithstanding any provision of By-law 023-18 to the contrary, the following uses are prohibited on the lands zoned EXI (spXX):

- a. the disposal of waste.

1.4 That notwithstanding any provisions of By-law 023-18 to the contrary, the definition of an Aggregate Processing Facility on the lands zone EXI (spXX) shall be:

- a. any premises used to process, crush, screen, wash, store/stockpile, and/or sort aggregate, soil and top soil materials and includes an asphalt plant, a concrete batching plant, cement manufacturing plant, a brick and tile manufacturing plant, an aggregate transfer station, the stockpiling/blending of recycled aggregate, and a vacuum truck operation to transfer, store and process materials from other sites, and the storage of vehicles involved in the vacuum truck operation.

1.5 The “H” holding symbol prefixed to the EXI (spXX) Zone shall not be removed by amendment to this By-law until the following matters have been fulfilled to the satisfaction of the Township of Puslinch:

- a. The removal of the existing aggregate license subject to the Aggregate Resources Act.



Harden Environmental Services Ltd.
4622 Nassagaweya-Puslinch Townline
Moffat, Ontario, L0P 1J0
Phone: (519) 826-0099 Fax: (519) 826-9099

Groundwater Studies
Geochemistry
Phase I / II
Regional Flow Studies
Contaminant Investigations
OMB Hearings
Water Quality Sampling
Monitoring
Groundwater Protection
Studies
Groundwater Modeling
Groundwater Mapping
Permits to Take Water
Environmental Compliance
Approvals

Our File: 2135

March 13, 2023

Township of Puslinch
7404 Wellington Road 34
Guelph, ON, N1H 6H9

Attention: Mr. Glenn Schwendinger
CAO

Dear Glenn;

Hydro-Vac Truck Disposal Area: 6678 County Road 34, Puslinch Township

We have received and reviewed additional draft information provided by the applicant. In response to concerns related to the permeable and vulnerable underlying aquifer condition, the following measures are suggested;

- Offloading of slurry on impermeable base
- Drainage of slurry through a lined drainage channel
- Storage of water in a lined pond with a control structure
- Release of water only when tested "clean" in comparison to Table 2 Potable Groundwater Criteria (*Full Depth Generic Site Condition Standards in a Potable Ground Water Condition All Types of Property Use, as provided in the Table 2 of the MECP document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", dated April 15, 2011*).
- Water released to existing aggregate pond for irrigation or infiltration

In comparison to the present ongoing operation, the proposed measures reduces the risk of groundwater contamination from the offloading of untested slurries from the Hydro-Vac Trucks.

It remains our recommendation to the Township of Puslinch to not permit this activity through a zoning amendment. The ongoing and

proposed activity does not fall within the permitted activities for the existing zoning and the requested activities come with risk to the underlying groundwater resources.

The Township and County adopted the Paris and Galt Moraine Policies to protect the groundwater resources lying thereunder. The underlying geological formations are the source areas for local water supplies. The only available water supply comes from the groundwater aquifers and despite all assurances provided to date, the requested activity involves the offloading of untested sediment/water slurries. Although containment, testing and conditional release of water procedures will be in place, it remains our opinion that the hydrogeological setting is inappropriate for this activity given the reliance of local residents on the groundwater resource. In addition, there is continued pressure from the City of Guelph and Region of Waterloo for additional groundwater resources sourced from this area.

There are suitable locations for this type of activity below the escarpment where there are lake-based municipal drinking water systems and low permeability soils. There are also hydrogeologically suitable areas north of Guelph where lower permeability formations at surface do not allow for rapid transmission of contaminants to aquifers.

Given an opportunity to deny this activity, we continue to recommend that the Township prohibit this activity at this site.

Sincerely,

Harden Environmental Services Ltd.



Stan Denhoed, P.Eng., M.Sc.
Senior Hydrogeologist



March 8, 2023

XCG File No. 5-4740-03-01

Mr. Glenn Schwendinger
Chief Administrative Officer
Township of Puslinch
7404 Wellington Road 34
Puslinch, Ontario N0B 2J0

Sent via Email: gschwendinger@puslinch.com

Re: Response to GHD Comments dated February 16, 2023, for 6678 Wellington Rd. 34, Township of Puslinch, Ontario

Dear Mr. Schwendinger:

1. INTRODUCTION, PURPOSE, AND USE

As requested by the Corporation of the Township of Puslinch (the Township), XCG Consulting Limited (XCG) has prepared the following responses to comments received from GHD Limited (GHD) in a document titled “Response to February 1, 2023, XCG Letter, 6678 Wellington Road 34, Township of Puslinch, Ontario (Site or Property),” dated February 16, 2023 (GHD Responses).

For reference purposes, this letter includes XCG’s original comments that were provided in a letter titled “Peer Review of Environmental Documents Submitted in Support of Zoning By-Law Amendment Application for Northern Portion of a Property Located at 6678 Wellington Rd. 34, Township of Puslinch, Ontario,” dated February 1, 2023 (XCG Original Comments), in italic font and the corresponding responses from GHD, which are followed by XCG additional comments and highlighted.

It is noted, that XCG has provided additional comments for the Township in a letter titled “Updated Peer Review of Environmental Documents Submitted in Support of Zoning By-Law Amendment Application for Northern Portion of a Property Located at 6678 Wellington Rd. 34, Township of Puslinch, Ontario,” dated February 6, 2023 (XCG Updated Comments).

The scope of this letter is limited to the matters expressly covered. This letter is prepared for the sole benefit of the Corporation of the Township of Puslinch and may not be relied upon by any other person or entity without the written authorization of XCG Consulting Limited. Any use or reuse of this document by parties other than those listed above is at the sole risk of those parties.



2. COMMENTS AND RESPONSES

XCG Original Comment:

Have the on-site activities conducted by Badger resulted in impacts to soil, surface water, and/or groundwater on the subject property?

According to GHD, an environmental consulting firm retained by Badger, the operations conducted by Badger on the subject property since approximately 2013, have not resulted in impacts to surface water, groundwater, and/or soil on the subject property or its vicinity. GHD based this conclusion on the fact that "... years of extensive surface water, soil and groundwater testing ... demonstrate that all fill received and used for rehabilitation at the Site meets Table 1 (Background) Standards, all surface water meets Drinking Water Standards, and all groundwater meets Table 2 (Potable) Standards."

XCG disagrees with GHD's conclusion. Based on review of the reports prepared by GHD, it is XCG's opinion that the information and data provided in these reports indicates that operations conducted by Badger have resulted in environmental impacts to the subject property. Furthermore, it is XCG's opinion that the information and data provided in the reports prepared by GHD does not support GHD's conclusion that "... years of extensive surface water, soil and groundwater testing ... demonstrate that all fill received and used for rehabilitation at the Site meets Table 1 (Background) Standards, all surface water meets Drinking Water Standards, and all groundwater meets Table 2 (Potable) Standards."

GHD Response 1:

GHD's focus for soil was not an environmental site investigation to evaluate potential impacts to soil or other environmental media due to imported hydrovacced material. Rather it was to review and evaluate historic and ongoing soil data collected from dry soil stockpiles to determine the characterization of the soil and whether it could be used for on-site pit rehabilitation (i.e., meets Table 1 Standards¹). The soil sampling program required for imported soil will be specified by the Ministry of the Environment, Conservation and Parks (MECP or the Ministry²) in an Environmental Compliance Approval (Waste Transfer and Processing) (Waste ECA) to govern ongoing operations. The relatively small percentage of soil that did not meet Table 1 Standards was removed and disposed of at a permitted off-site treatment disposal facility. A similar approach was used to review and evaluate historic and ongoing pond surface water data and all data met Table 2 (Potable) Standards³.

Although background soil samples have not been collected as noted in XCG's letter, it is GHD's opinion that the Table 1 Standards are sufficient for comparison rather than using Site-specific background concentrations. The Table 1 Standards represent background values derived from the Ontario Typical Range values for soils that are not contaminated by point sources.

¹ Table 1 Full Depth Background Site Condition Standards published by the Ministry of the Environment (MOE) in the document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV. 1 of the Environmental Protection Act," dated April 15, 2011 (Table 1 Standards).

² Previously known as the Ministry of the Environment (MOE), Ministry of the Environment and Energy (MOEE), and the Ministry of Environment and Climate Change (MOECC).

³ Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition published by the Ministry of the Environment (MOE) in the document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV. 1 of the Environmental Protection Act," dated April 15, 2011 (Table 2 Standards).



The Hydrogeological Impact Assessment (HIA) (GHD, December 2020) was completed as requested by MECP in support of an application for a Waste ECA. The HIA provided an understanding of Site geological and hydrogeological conditions, including groundwater sampling to determine if there are impacts to groundwater quality from historic and current hydrovac operations. The HIA also included a proposed annual monitoring program to provide an ongoing assessment of groundwater quality. MECP approved the HIA, which allows the Applicant to submit an application for a Waste ECA.

The Applicant intends to design and install an impermeable engineered liner system beneath the soil offloading and management area, water collection pit, ditch, and stormwater pond as detailed in GHD's November 25, 2022, letter and February 17, 2023, responses to comments letter.

As noted in the Excess Soil requirements:

“All liquid soil and process residues that are liquid shall be stored in a leakproof container on an impermeable surface in a manner sufficient to contain and prevent the material from escaping into the natural environment”. The impermeable engineered liners installed in the soil stockpile area, temporary pond, drainage ditch and final pond constitute containers with impermeable surfaces.

During placement of the impermeable engineered liner system, the Applicant will excavate, dewater and stockpile surface soil and sediment from the current soil offloading area, management area, temporary pond, ditch, and final pond. Soil samples from the stockpiles [number of samples and analytical parameters to be determined based on stockpile size and Excess Soil requirements] will be collected and submitted to the laboratory for analysis of petroleum hydrocarbons fractions 1 through 4 (PHC F1 through F4), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals and inorganics, and polychlorinated biphenyls (PCBs). The analytical results will provide an indication of whether hydrovac operations have impacted Site soils.

An operation and maintenance (O&M) program for the liner systems will be included in the updated Waste ECA Design & Operations (D&O) Report. The O&M program will include quarterly inspection of the impermeable liner system to ensure that the integrity of the liner has not been compromised by Site operations, and process soil and water are not being released to, and potentially impacting, soil quality beneath the impermeable liner system.

XCG Comment on GHD's Response:

GHD's response does not address XCG's original comment that the information and data provided by GHD in the various reports reviewed by XCG indicates that operations conducted by Badger have resulted in environmental impacts to the subject property.

As previously stated, the fact the soil surface water and/or groundwater quality meet a regulatory standard or criteria, does not mean that the on-site operations conducted by Badger have not resulted in on-site impacts. The regulatory standards and criteria for soil surface water and groundwater quality were not developed to be used as “pollute-up-to” levels and cannot be treated as the maximum allowable contamination level. Based on GHD's reasoning, it would be allowed to discharge contaminants to the environment, as long as the measured concentrations of these contaminants were below specified criteria.



XCG Original Comment: *Reportedly, fill brought to the site is not sampled prior to being dumped on-site. Fill brought to the site is only sampled after it is processed (mixed, drained, dried, and stockpiled), which reportedly takes up to a week. Based on the reviewed reports, it appears that only one sample was collected from every 100-cubic metre stockpile of the processed/dried fill. No stockpile sampling methodology was provided by GHD, as such, it is not known if the collected samples were representative of a worst case fill quality, or even representative of the overall stockpile quality.*

GHD Response 2:

The D&O Report which provides the soil sampling methodology was first written and submitted to MECP in February 2021. Since that time, Ontario Regulation (O. Reg.) 406/19 (On Site and Excess Soil Management) has progressively come into effect with the requirement for soil sampling and other items required as of January 1, 2023. Prior to 2023, the Applicant combined off-loaded soil into 50 cubic metre (m³) stockpiles of dry soil. Each 50 m³ stockpile was sampled at a frequency of one sample per stockpile. The Site has now increased its frequency of sampling to comply with the sampling frequency outlined in the Rules for Soil Management and Excess Soil Quality Standards, dated December 2022 that accompanies O. Reg. 406/19. For a stockpile up to 130 m³, three samples are required to be collected.

Prior to and during off-site hydrovac operations, the operators note any potential indication of impacted soil by client/site knowledge, visual, and olfactory observations. If there are potential impacts, then hydrovac loads are taken directly to permitted treatment/disposal facilities and not returned to the Site. During off-loading, dewatering, and stockpiling at the Site, the Applicant notes any evidence of potential impact such as staining or odour. During sampling of the stockpiling, samples are collected from worst-case areas of the stockpile where soil indicates potential impact due to visual and olfactory observations. If no evidence of potential impact is present, composite soil samples are collected to provide samples representative of the stockpile. Samples collected for VOCs and PHCs F1 are collected as discrete soil samples due to potential for volatilization losses. These provisions are provided in the D&O Report and will be updated as required in accordance with Excess Soil requirements prior to submission to MECP.

XCG Comment on GHD's Response:

GHD's response does not address XCG's original comment that the past or the currently proposed soil sampling methodology will allow the determination of the actual quality of the soil brought to the site and/or prevent importation of impacted soil to the site. This is because the sampling will be completed only after the soil brought to the site has been processed, by mixing/combining soil from different loads, allowing the soil to drain/dry before it is stockpiled and sampled. Sampling of the soil after it is processed relies on dilution (mixing of "clean" and "dirty soil," and volatilization of organic and some semi-organic compounds from the soil brought to the site. As such, given the soil sampling methodology employed to date, it is unlikely that the reported soil sample analytical results are representative of the actual soil quality brought to the site.

Furthermore, typically neither the full history of the source site(s) nor the soil quality at the source site(s) are known prior to the commencement of hydrovac operations. As such, it is unlikely that the reported analytical results for soil samples to be collected in accordance with



the currently proposed sampling methodology, will be representative of the actual soil quality brought to the site.

It is noted that the field screening methods are useful in determining the presence/absence of gross contamination but cannot be used as a substitute for collecting samples for chemical analyses and should not be relied on when determining if the soil is “impacted” and should not be brought to the site.

XCG Original Comment: *The stockpiled fill was reportedly sampled monthly from January 2017 to July 2020, and once a week from July 2020 to the end of November 2020. Not all fill stockpiles were sampled for by the same parameters. It is noted that according to the D&O Report, sampling of the imported stockpiled soil has been completed since 2014; however, no soil quality data prior to January 2017 was available for review.*

GHD Response 3:

The 2014 reference in the D&O Report was incorrect. The Applicant was conducting soil sampling from 2017 to 2020, when GHD first became involved. Since 2020, the soil sampling procedures and analytical parameters were updated to reflect the expected, pending Excess Soil requirements. Additionally, soil absorption ratio (SAR) and electrical conductivity (EC) were added to the analytical parameter list to provide evaluation in accordance with Aggregate Resources Act (ARA) policy for imported fill use.

GHD notes that the soil quality has been fairly consistent since 2017. All soil analytical data collected from January 2017 to December 2022 are provided in tables included in Attachment A (Site Conditions Summary) to the February 17, 2023, Responses to Township letter. One table provides all data, and one table provides summaries of exceedances of Table 1 Standards. A summary of the number of samples and exceedances also are provided in Attachment A text.

XCG Comment on GHD’s Response:

No further comments.

XCG Original Comment: *Analytical results for samples collected from the stockpiled processed fill after April 2020, indicate that occasionally, some of the tested parameters, including sodium adsorption ratio (SAR); metals, including barium, chromium, chromium VI, cobalt, lead, vanadium; polycyclic aromatic hydrocarbons (PAHs) including anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, fluoranthene, indino(1,2,3-cd)pyrene, phenanthrene, pyrene; petroleum hydrocarbons (PHC) including fractions F2, F3, F4, and F4G, and toluene were detected at concentrations above the Table 1 (Background) generic soil condition standards (SCS) published by the Ministry of the Environment (MOE, or the Ministry) in the document entitled “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act,” dated April 15, 2011 (MOE SCS).*

GHD Response 4:

GHD agrees with this data evaluation. Material that meets the Table 1 Standards is used for rehabilitation on the Property per the Ministry of Natural Resources and Forestry (MNRF) approved 2004 Rehabilitation Plan, O. Reg. 395/22 (Aggregate General), and ARA Policy 6.00.03 (Importation of Inert Fill for the Purpose of Rehabilitation). The Rehabilitation Plan allows for inert fill to be imported, O. Reg. 395/22 allows for excess soil to be imported to



licensed areas, and ARA Policy 6.00.03 states that: At the request of MNR, the licensee/permittee will conduct random sampling of the imported material to ensure that it meets the Ministry of the Environment's (MOE) criteria under Table 1 of MOE's "Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act"... where the imported material is not being placed within 1.5 metres of the surface, the criteria under Table 1 for sodium adsorption ratio and electrical conductivity do not have to be met.

All material that does not meet the Table 1 Standards is shipped off-Site for disposal at a MECPermitted treatment/disposal facility as indicated in the D&O Report. All incoming loads, sampling, and loads sent for off-site disposal are recorded in Site records.

XCG Comment on GHD's Response:

No further comments.

XCG Original Comment: *Samples collected between January 2017 and April 2020, were not sampled for SAR, PAHs, and PHCs. As noted above, samples collected after April 2020, occasionally were reported to have concentrations of these parameters above the Table 1 SCS.*

GHD Response 5:

Concur. Also see Response to Comment 1. GHD updated the parameter list when we became involved in the Site in 2020. All soil samples will be analyzed for PHCs F1 to F4, VOCs, SVOCs metals & inorganics per Excess Soil requirements and as required by the Waste ECA conditions. The data will continue to be compared to Table 1 Standards to verify that it can be used for pit rehabilitation. The current analytical parameter list is provided in Table 1.

XCG Comment on GHD's Response:

No further comments.

XCG Original Comment: *The standard method for determining if on-site operations have resulted in impacts to the surface water quality is to compare the results of the background samples to the results for samples collected from the site and/or downstream from the site. Typically, for the purpose of establishing background conditions, the surface water samples are collected from location(s) upstream of the site and/or upstream of areas affected by the on-site operations. If the concentrations of analyzed parameters in the samples collected from the site and/or downstream of the site are higher than the concentrations for the same parameters in the background samples, then there is a potential the on-site operations have impacted the surface water quality. It is normal for the concentrations of tested parameters to vary from sampling event to sampling; however, consistently higher concentrations in samples collected from the site and/or downstream from the site versus the concentrations in the background samples likely indicate site-related impacts to the surface water quality.*

There is no evidence in the reports prepared by GHD, that any background surface water quality samples have been or are being collected at the site. Therefore, there is no data available to determine if the operations conducted by Badger are impacting the on-site surface water quality.

GHD Response 6:

There are no additional surface water features at the Site that are upstream or downstream of the surface water pond. The major source of water in the pond is from the hydrovac operations



(i.e., water drained from soil stockpiles), storm water runoff, and likely some amount of groundwater infiltration. Based on Site observations, the pond does not overflow and there is no pond discharge structure, also indicating that it is currently acting as an infiltration pond.

GHD's focus for surface water was not an environmental site investigation to evaluate potential impacts to surface water due to due historic imported hydrovac material. Rather, it was to review and evaluate historic and ongoing surface water data, collected on a weekly basis from the pond, to determine the characterization of the water and whether it could be infiltrated to groundwater [i.e., meets Table 2 Standards]. Additionally, the HIA provided an assessment of groundwater conditions and quality beneath the Site and an ongoing monitoring program to assess groundwater conditions to evaluate potential impacts from Site operations, including exfiltration from the pond. The installation of engineered liner system beneath the operation areas and pond will prevent future release of potentially impacted water to underlying soil and groundwater. Surface water monitoring will continue on a more frequent basis once the pond is lined and this monitoring will accurately reflect hydrovac water quality as groundwater will no longer infiltrate into the lined pond. The revised HIA will be developed with the Township's consultants to provide sufficient updated groundwater conditions and a monitoring program to determine if there are impacts to groundwater from Site operations.

XCG Comment on GHD's Response:

GHD's response does not address XCG's original comment. Please refer to XCG's Comment to GHD's Response 1.

Furthermore, the following statement made by GHD is inaccurate/misleading:

"GHD's focus for surface water was not an environmental site investigation to evaluate potential impacts to surface water due to due historic imported hydrovacced material. Rather, it was to review and evaluate historic and ongoing surface water data, collected on a weekly basis from the pond, *to determine the characterization of the water and whether it could be infiltrated to groundwater...*" [emphasis added].

The above-quoted statement is inaccurate/misleading because the surface water samples are collected from the unlined, wet pond. Water draining from the soil brought to the site enters the wet pond where it continuously mixes with groundwater and continuously infiltrates into the ground. Therefore, contrary to the statement made by GHD, the surface water sampling does not determine whether the water could infiltrate, since by the time the surface water sample results are received from the laboratory, the sampled water has already infiltrated into the ground. Furthermore, the surface water samples currently collected from the wet pond are not representative of the water draining from the soil, since the samples are collected from the wet pond, after this water mixed with the groundwater in the pond.

XCG Original Comments regarding surface water sampling and surface water quality.

GHD Responses 7, 8, 9, 10, 11, and 12:

In general, the above-noted GHD responses were to XCG comments regarding surface water sampling and surface water quality.

XCG Comment on GHD's Responses 7, 8, 9, 10, 11, and 12:

The significant issues raised in the above-noted GHD responses were addressed in XCG's Comments 1 and 6, above.



XCG Original Comment: *Per-and Polyfluoroalkyl Substances (PFAS) are a group of manufactured chemicals that have been used in a variety of products, including, amongst others, the insulation of electrical wires. As such, since most of the soil/fill brought to the site by Badger reportedly is generated from daylighting of buried utilities and services, it is possible that the soil and water discharged on the subject site as part of Badger's operations contains PFAS.*

GHD Response 13:

Since there is no regulatory Standard for PFAS, the collection of PFAS data will have minimal benefit. GHD believes that the frequent lack of detection of organic compounds also supports the conclusion that PFAS analysis would have little value. The ECAs issued for other similar operations and pre-consultation with MECP for multiple Badger sites, including this one, do not provide for or indicate that sampling for PFAS are required. MECP has approved the current groundwater monitoring program provided in the HIA, including the analytical parameters to be tested.

XCG Comment on GHD's Response:

Although currently there are no soil, surface water, or groundwater quality standards for PFAS in Ontario, such standards already exist in other jurisdictions in Canada, including Alberta and British Columbia, as well as in the United States and Europe. Ontario does currently have interim advice for PFAS, recommending that drinking water used for human consumption not exceed 70 ng/L, and it is only a question of time before Ontario has its own soil, surface water, and groundwater quality standards for PFAS. Given their ability to move and persist in the environment, and the fact that some PFAS can accumulate in the body over time, since the site and the vicinity of the site rely on groundwater as a source of drinking water, it would be prudent to sample both the on-site groundwater as well as water draining from the soil brought to the site for the presence of PFAS, as a minimum to establish a base line for due diligence purposes.

XCG Original Comment: *The standard method for determining if on-site operations have resulted in impacts to the groundwater quality is to compare the results of the background samples to the results for groundwater samples collected from monitoring wells installed down-gradient from the site/on-site operations and screened in the same water bearing zones. It is normal for the groundwater concentrations of tested parameters to vary from sampling event to sampling event; however, consistently higher concentrations in samples collected from the down-gradient wells versus the concentrations in samples collected from the background well(s) likely indicate site-related impacts to the groundwater quality.*

GHD Response 14:

GHD concurs that a pattern of consistently higher concentrations of parameters related to the Site activities in downgradient monitoring wells, as compared to upgradient monitoring wells, would be evidence of Site-related impacts to groundwater quality. The monitoring program, as revised through consultation with stakeholders, has been designed to monitor for observable alterations to groundwater quality, as described.

XCG Comment on GHD's Response:

No further comments.



XCG Original Comments regarding impacts to groundwater from Badger's operations, and the groundwater quality monitoring program.

GHD Responses 15, 16, and 17:

GHD recognizes that the current monitoring well network could be improved through installation of additional monitoring wells, strategically located to intercept potential groundwater impacts from areas located downgradient of Site operations, and not currently monitored. Accordingly, GHD recommends that the monitoring network is expanded to include a monitoring well to the south of the existing on-Site stormwater management pond and to the south of the main facility operations area along the entrance haul road. These monitoring wells should be installed to monitor the overburden water table aquifer, as this aquifer is the potential receptor to Site-related impacts infiltrating into the subsurface.

Expansion of the monitoring well network as described above will provide more comprehensive groundwater quality monitoring, as well as an expanded understanding of horizontal hydraulic gradients and groundwater flow directions.

XCG Comment on GHD's Responses 15, 16, and 17:

The new/updated monitoring network should include additional wells located up-gradient, cross-gradient, and down-gradient for the areas of the site used for storage and handling of the soil and water brought to the site. In addition to the currently proposed list of groundwater contaminants of potential concern (COPC), the list of COPCs should include the PFAS. Furthermore, the currently proposed frequency of sampling should be increased to monthly during the first three years. The groundwater quality data should be assessed following the third year to determine if there are any trends in groundwater quality. Based on the outcome of this assessment, the frequency and scope of the monitoring program should be reevaluated to determine what changes, if any, should be made to the monitoring program moving forward.

XCG Original Comment: *XCG compared the groundwater results for samples collected on November 24/25, 2020, and on December 4, 2020, from the background monitoring well MW3-20 to the results for samples collected from monitoring wells MW1-20 and MW2-20. Based on this comparison, it is evident that some metal and inorganic parameters were detected and higher concentrations, in some cases significantly higher (i.e., at least one order of magnitude), in samples collected from wells MW1-20 and MW2-20 than in samples collected from well MW3-20. The following Tables 1 and 2 summarize the concentrations of total and dissolved metals/inorganics for samples collected from the monitoring wells MW-1, MW-2, and MW-3.*



Table 1 Comparison of total concentrations for samples collected on November 24/25, 2020, and December 4, 2020

Parameter (Total Concentrations)	MW3-20 November 24, 2020	MW1-20 November 25, 2020	MW2-20 November 24, 2020
Chloride	4800	8170	8110
Aluminum	210	352	6.6
Boron	12	24	70
Copper	0.96	1.39	18
Iron	224	417	<10
Manganese	90.6	114	357
Nickel	1.62	1.46	9.19
Potassium	1910	4100	63700
Sodium	6780	8500	6780
Zinc	<3.0	6.5	25.3

Parameter	December 4, 2020	December 4, 2020	December 44, 2020
Chloride	3980	11700	5400
Aluminum	61	366	9.6
Boron	11	29	43
Copper	1.42	1.43	10.8
Iron	68	439	<10
Manganese	50.9	135	143
Nickel	1.09	8.97	4.93
Potassium	1350	5560	32200
Sodium	4390	9850	5050
Zinc	<3.0	10.2	18.9

Notes: All concentrations are in µg/L.
 Green font indicates concentration lower or equal to the background concentration.
 Red font indicates concentration higher than background concentration.

Table 2 Comparison of dissolved concentrations for samples collected on November 24/25, 2020, and December 4, 2020

Parameter (Dissolved Concentrations)	MW3-20 November 24, 2020	MW1-20 November 25, 2020	MW2-20 November 24, 2020
Arsenic	0.31	0.41	<1.0
Cobalt	0.57	0.39	1.6
Copper	3.02	0.66	17.1
Nickel	1.35	0.88	9.5
Sodium	6870	8450	7340
Thallium	<0.01	<0.01	0.11
Zinc	1.7	1.3	26

Parameter	December 4, 2020	December 4, 2020	December 4, 2020
Arsenic	0.22	0.36	0.46
Cobalt	0.41	0.43	0.64
Copper	0.53	0.70	10.8
Nickel	0.95	1.13	4.94
Sodium	3680	9100	4800
Thallium	<0.01	0.015	0.066



Parameter (Dissolved Concentrations)	MW3-20 November 24, 2020	MW1-20 November 25, 2020	MW2-20 November 24, 2020
Zinc	<1.0	4.3	18.7
Notes: All concentrations are in µg/L. Green font indicates concentration lower or equal to the background concentration. Red font indicates concentration higher than background concentration. The listed concentrations are from Table 4.1 in the HIA Report.			

GHD Responses 18:

The results from Table 2 are more representative of groundwater quality. In GHD’s opinion, the differences between the concentrations presented from MW3 and those presented from MW1 and MW2 in the above Table 2 are not particularly significant. This interpretation is more evident when considering the majority of analytical parameters that were included in the analyses, but not presented in the above tables, for which concentrations at down/cross-gradient wells were similar to or below those at upgradient monitoring well MW3.

XCG Comment on GHD’s Response:

XCG does not agree with GHD’s opinion that “the differences between the concentrations presented from MW3 and those presented from MW1 and MW2 in the above Table 2 are not particularly significant,” given that some of the parameters were detected in wells MW1 and MW2 at concentrations over one order of magnitude higher than in up-gradient well MW3.

The fact that many other parameters were detected in wells MW1 and MW2 at concentrations lower than those reported in samples collected from well MW3, does not change the fact that based on the data provided in Tables 1 and 2, above, there is evidence of impacts to the on-site groundwater quality.

XCG Original Comment: *In summary, it is XCG’s opinion that the environmental monitoring activities undertaken by Badger on the subject site are not adequate to detect and/or monitor the potential and actual impacts to the soil, surface water, and groundwater on the subject property.*

GHD Responses 19:

GHD notes the following key items as discussed in the GHD Responses to Township Comments letter and the above responses:

- a. The Applicant has committed to have impermeable liners beneath the stockpile area, temporary water holding pond, drainage ditch, and final pond.
- b. The Applicant’s focus has been voluntarily collecting hundreds of samples to verify that the soil meets Table 1 Standards so that it can be used for pit rehabilitation.
- c. The Applicant also has voluntarily collected hundreds of surface water samples to assess whether surface water is impacted by operations.
- d. The Applicant has completed a HIA, reviewed and approved by MECP, which provides, among other items, an evaluation that concludes that there have been no unacceptable impacts to groundwater from operations.
- e. The Applicant has committed to review and provide revisions to the HIA, including further groundwater studies, more wells, and evaluation of current groundwater monitoring



program. This review and revision also will be collaboratively developed with the Township's consultants. Although the MECP has already approved the HIA, the HIA Amendment also will be provided to the MECP Guelph office for review and input as discussed with MECP. Based on this approach, the revised monitoring program will incorporate all parties input and satisfy requirements identified by each party.

- f. The MECP Waste ECA will provide a number of specific operations, monitoring, documentation, reporting, and financial assurance conditions that will adequately govern Site operations to prevent potential adverse impacts to the environment.

The Applicant and GHD believe that these measures will satisfy the Township's concern regarding the assessment of potential environmental impacts from the operations on an ongoing basis. The Applicant also has proposed to provide additional Financial Assurance to the Township directly, beyond what will be required by MECP, to ensure that the Township has resources available as needed to address potential environmental concerns.

XCG Comment on GHD's Response:

19 (a) - No further comments.

19(b) – Please refer to XCG's Comment to GHD's Response 2.

19(c) - Please refer to XCG's Comment to GHD's Response 6.

19(d) – The statement that the MECP has “approved” the HIA is inaccurate and misleading. The MECP has reviewed the HIA and provided comments in a memorandum, dated January 21, 2021. However, there is no evidence suggesting that the MECP has “approved” the HIA, or any other documents submitted to the MECP in support of the application for the Waste ECA. Based on XCG's experience dealing with the MECP, the Ministry does not “approve” documents submitted for its review. The Ministry relies on the information provided in the support documents and assumes that the information is correct. The Limitations included in the MECP's January 21, 2021, memorandum state:

“The purpose of the preceding review is to provide advice to the Ministry of the Environment regarding subsurface conditions based on the information provided in the above referenced documents. The conclusions, opinions and recommendations of the reviewer are based on information provided by others, except where otherwise specifically noted. The Ministry cannot guarantee that the information that has been provided by others is accurate or complete [emphasis added]. A lack of specific comment by the reviewer is not to be construed as endorsing the content or views expressed in the reviewed material [emphasis added].”

19(e) – As stated above, the statement “MECP has already approved the HIA” inaccurate and misleading.

19(f) - No further comments.

XCG Original Comments regarding the past, current and the proposed monitoring programs.

GHD Responses 20, 21, 22, 23, 24, and 25:

In general, the above-noted GHD responses were to XCG comments regarding the current and the proposed monitoring programs.



XCG Comment on GHD's Responses 20, 21, 22, 23, 24, and 25:

The significant issues raised in the above-noted XCG original comments and GHD's responses were addressed in the XCG's Comments provided above.

XCG Original Comment: *It is XCG's opinion that the proposed environmental monitoring, if implemented, will not be adequate to detect and/or monitor the potential and actual impacts to the soil, surface water, and groundwater on the subject property. This is because the proposed monitoring is almost the same to the monitoring activities completed on the subject up to end of November 2020. Below are the key points to support XCG's opinion:*

- *There is no plan to sample liquid soil brought to the site before it is discharged onto the site surface;*
- *Each load of imported soil will be sampled, only after it is processed (mixed with other soil) and dried on-site, and consolidated in 100-cubic metre stockpiles, which can be days to over a week after soil load has been delivered to the site;*
- *There is no plan to sample surface water draining from the imported soil before it discharges to the site and/or mixes with the groundwater in the SWM pond;*
- *There is no plan to add additional monitoring wells down-gradient from on-site soil processing and stockpiling area and/or around the SWM pond;*
- *The proposed frequency of sampling/monitoring activities during the first two years following obtaining the required regulatory approvals is similar to that completed in the past; and*
- *After the first two years, the currently proposed monitoring program will be reviewed to determine if any monitoring is required at all.*

GHD Response 27 (there is no GHD Response 26):

- a. The Applicant has committed to design and construction of an impermeable engineered liner system beneath the soil offloading and management area, temporary pond, ditch, and final pond as detailed in GHD's November 25, 2022, letter and our February 17, 2023, responses to Township comments letter. No water will be discharged from the temporary pond to the ditch which discharges to the final pond until the test results of a water sample from the final pond are received. If the water sample meets Table 2 Standards, then the water will be discharged from the final pond for use in irrigation of the agricultural crops in the rehabilitation area. If the water sample does not meet Table 2 Standards, then the water will be removed and either disposed of a permitted off-site treatment or disposal facility and/or treated on site and resampled until it meets the Table 2 Standards.
- b. The imported soil is only sampled after it has been processed, dried on-Site, and consolidated into stockpiles as required and with any additional requirements specific in the Waste ECA.
- c. With the new liners and temporary pond in place, surface water draining from the imported soils will be able to be sampled.
- d. The revisions to the HIA to be prepared in consultation with the Township and their consultants will provide the specific additional studies and actions (e.g., additional monitoring wells) that will be completed to update the understanding of geological and



hydrogeological conditions. The revised HIA also will include appropriate and agreed upon changes to the groundwater and surface water monitoring program including monitoring frequencies, analytical parameter lists and reporting intervals.

XCG Comments on GHD's Response 27:

27(a) – More information/a clarification is needed with regards to the on-site operations during the time when the analytical results for the sample(s) collected from the temporary pond are pending. Since, after the temporary pond is sampled, no water can be added or discharged from this pond until results are received, what happens to the soil processing (dewatering) activities? The analytical results will take a minimum of 24 hours from the time the sample(s) are collected, to the time the results are available/reviewed, and a decision is made with regards to the disposal option for the water stored in the temporary pond.

27(b) – No further comments.

27(c) – See XCG Comment 27(a).

27(d) – No further comments.

XCG Original Comments: *During the November 30, 2022, Public Information Meeting (Meeting), GHD has made several statements related to the sampling of the liquid soil brought to the site, including:*

- *Every load of soil delivered to the site by Badger is sampled;*
- *Every load of soil that comes onto the site is tested in accordance with all current practices, procedures, and analytical methods; and*
- *All soil brought to the site is sampled for all parameters.*

GHD Responses 28, 30, 31, and 32 (there is no GHD Response 29):

GHD Response 28:

See also Responses to Comments 1, 2, and 11.

The quantities of imported soil range from 52 to 62 tonnes (average 57 tonnes) or 39 to 46 m³ (average 43 m³) per day based on the following:

- 19 trucks;
- Each truck is physically restricted by a level float device from holding more than a maximum of about 12 cy. Typically, trucks have no more than 10 cy in a load;
- The water/soil mixture ranges from 60 to 90% water and 10 to 40% soil;
- Water density 62.5 pounds/cubic foot (lb/cf) or 0.76 tonnes/cubic yard (tonnes/cy)
- Soil density is on the order of 2 tonnes/m³.

GHD Response 30:

See Response to Comment 2 which is copied here:

Prior to 2023, the Applicant combined off-loaded soil into 50 m³ stockpiles of dry soil. Each 50 m³ stockpile was sampled at a frequency of 1 sample per stockpile. The Site has now increased its frequency of sampling to comply with the sampling frequency outlined in the Rules for Soil Management and Excess Soil Quality Standards, dated December 2022 that



accompanies O. Reg. 406/19. For a stockpile up to 130 m³, three samples are required to be collected.

GHD Response 31:

See Response to Comment 30:

GHD Response 32:

As detailed in the responses above, the parameter list for the soil samples will be standardized going forward and will include PHCs, VOCs, metals & inorganics, SVOCs, and PCBs. The Waste ECA will establish a specific analytical parameter list for soil.

XCG Comments on GHD's Responses 28, 30, 31, and 32:

GHD's Responses 28, 30, and 31, and the other responses referenced therein, do not address any of XCG's Original comments. In fact, the responses provided by GHD indicate that, contrary to the statements made by GHD during the November 30, 2022, public meeting:

- Not every load of soil delivered to the site by Badger is sampled;
- Not every load of soil that comes onto the site is tested in accordance with all current practices, procedures, and analytical methods; and
- Not all soil brought to the site is sampled for all parameters.

XCG Original Comment: *The most significant issues identified by XCG during this review include:*

1. *The potential for the liquid soil brought to the site by Badger to result in impacts to the on-site soil, surface water, and groundwater quality; and*
2. *The deficiencies in the past, current, and the proposed monitoring programs associated with the on-site operations conducted by Badger.*

The following steps/actions could be taken in order to minimize the potential for on-site impacts from the liquid soil brought to the site:

- *Every load of liquid soil brought to the site is sampled (soil and water) and the results reviewed to determine compliance prior to processing/dewatering and stockpiling of the soil on site.*
- *Constructing water-tight area(s)/cell(s) on-site for the liquid soil brought to the site. Once the liquid soil is placed in the cell, it can be sampled, and once it is determined that the soil and the water meet the Table 1 SCS or other applicable regulatory requirement, the soil can be processed/dewatered on-site prior to use as backfill on the adjacent pit. Soil and/or water not meeting the applicable quality criteria should be removed from the site for off-site processing or disposal at a Ministry-licensed facility.*
- *Liquid soil brought to the site could be processed/solidified using suitable amendments in the designated water-tight area(s)/cell(s). Once the soil is dry enough to be stockpiled, the stockpiled soil can be relocated and sampled in accordance with the applicable regulatory requirements.*

GHD Response 33:

The Applicant has committed to design and construction of an impermeable engineered liner system beneath the soil offloading and management area, temporary pond, ditch, and final



pond as detailed in GHD's November 25, 2022, letter and our February 17, 2023, responses to Township comments letter. No water will be discharged from the temporary pond to the ditch which discharges to the final pond until the test results of a water sample from the final pond are received. If the water sample meets Table 2 Standards, then the water will be discharged from the final pond for use in irrigation of the agricultural crops in the rehabilitation area. If the water sample does not meet Table 2 Standards, then the water will be removed and either disposed of a permitted off-site treatment or disposal facility and/or treated on site and resampled until it meets the Table 2 Standards.

The MECP Excess Soil Rules provide for the following regarding liquid waste management.

Liquid waste that is stored at a project area or a local waste transfer facility shall be managed in accordance with the following:

1. All storage and processing locations of liquid soil processed or dewatered or solidified soil and process residues shall be readily accessible for inspection by a provincial officer.
2. No more than 10,000 cubic metres of liquid soil and process residues that are liquid may be present at the site at any one time.
3. All liquid soil and process residues that are liquid shall be stored in a leakproof container on an impermeable surface in a manner sufficient to contain and prevent the material from escaping into the natural environment.

The D&O Report provided to MECP, and the Township provides detailed information regarding the design, operation, management, record keeping, and reporting activities for the Site. Township staff have visited the Site and the Waste ECA also will provide for provincial officer inspection of the Site at any time.

The proposed Waste ECA provides for the maximum storage of 5,000 m³ of dry soil and 250 m³ of water at any one time, well below the 10,000 m³ maximum.

The Applicant intends to design and install an engineered impermeable liner system beneath the soil offloading and management area, soil screening area, temporary pond, ditch, and final pond. The engineered liner system complies with Item 3 of the above requirements.

XCG Comments on GHD's Response 33:

For comment regarding sampling of water in the temporary pond please see XCG Comment 27(a). XCG has no further comments with regards to GHD's Response 33.

XCG Original Comment: *In order to monitor the soil, surface water, and groundwater quality for potential or actual impacts related to Badger's on-site operations, XCG recommends the following amendments to the current/proposed monitoring program:*

- *On an annual basis collect in-situ soil samples from the area(s) of the site affected by soil processing and stockpiling activities to determine if the on-site operations resulted in impacts to the on-site soil. Impacted soil should be removed from the site for off-site processing or disposal;*
- *Require every load of liquid soil brought to the site to be sampled (soil and water) prior to the liquid soil being discharged to the ground surface for processing;*



- *Water draining from the soil brought to the site should be sampled before it discharges to the on-site SWM pond;*
- *Install additional monitoring wells along the south and west (down-gradient) subject property boundaries, including two monitoring wells between the existing wells MW1-20 and MW2-20, and one well between MW1-20 and the water supply well EX1, and three monitoring wells around the SWM pond;*
- *During the first year, surface and groundwater samples should be tested on a monthly basis. Depending on the analytical results, the sampling frequency could be reduced, for example to once every two months or quarterly. The frequency and the scope of the ongoing monitoring program should be reviewed on an annual basis; and*
- *During the first year of monitoring, in addition to the currently proposed list of analytical parameters, the surface water and groundwater should also be sampled for PFAS.*

GHD Response 34:

- As indicated above, during placement of the impermeable engineered liner system, separate stockpiles of surface soil from the soil offloading and management area, temporary pond, ditch, and final pond will be generated. Soil samples from the stockpiles [number of samples to be determined based on stockpile size(s)] will be collected and submitted to the laboratory for analysis of PHC F1 through F4, VOCs, SVOCs, metals & inorganics, and PCBs as per the attached Table 1. The analytical results will provide an indication of the impacts from historical operations on soil and sediment. The Applicant will inspect the impermeable liner on a quarterly basis to ensure that the integrity of the liner has not been compromised by Site operations to verify that liquid soil is not being released to soil beneath the liner.
- No water will be discharged from the temporary pond to the ditch which discharges to the final pond until the test results of a water sample from the final pond are received. If the water sample meets Table 2 Standards, then the water will be discharged from the final pond for use in irrigation of the agricultural crops in the rehabilitation area. If the water sample does not meet Table 2 Standards, then the water will be removed and either disposed of a permitted off-site treatment or disposal facility and/or treated on site and resampled until it meets the Table 2 Standards.
- The revisions to the HIA to be prepared in consultation with the Township and their consultants will provide the specific additional studies and actions (e.g., additional monitoring wells) that will be completed to update the understanding of geological and hydrogeological conditions. The revised HIA also will include appropriate and agreed upon changes to the groundwater and surface water monitoring programs.

XCG Comments on GHD's Response 34:

Sampling for PFAS is discussed in XCG Comment 13. XCG has no further comments with regards to GHD's Response 34.



3. LIMITATIONS

The scope of this letter is limited to the matters expressly covered. This letter is prepared for the sole benefit of the Corporation of the Township of Puslinch and may not be relied upon by any other person or entity without the written authorization of XCG Consulting Limited. Any use or reuse of this document by parties other than those listed above is at the sole risk of those parties.

The opinions provided herein were based on the information and data generated by others. The reviewed information and data were assumed to be accurate, unless otherwise stated, and was not independently verified by XCG. As such, XCG cannot be held responsible for environmental conditions at the subject site that were not apparent from the reviewed information and data or due to errors and/or omissions in the information and data reviewed.

4. CLOSURE

We trust this information is sufficient for your use at this time. If you require additional information, please do not hesitate to contact the undersigned.

Yours very truly,

XCG CONSULTING LIMITED

A handwritten signature in black ink, appearing to read "Thomas Kolodziej". The signature is written in a cursive, flowing style.

Thomas Kolodziej, B.A.Sc., P.Eng., QP_{ESA}
Senior Project Manager

March 13, 2023

Memorandum

To: Courtenay Hoytfox – Municipal Clerk, Township of Puslinch

Cc: Meagan Ferris – Manager of Planning and Environment, Wellington County
Lynne Banks – Development and Legislative Coordinator, Township of Puslinch

From: Kyle Davis – Risk Management Official, Township of Puslinch

**RE: Zoning By-law Amendment Application D14-ONT,
6678 Wellington Road 34, Township of Puslinch**

On June 8, 2022, Wellington Source Water Protection staff provided comments and a Section 59 notice related to this Zoning By-law Amendment application. The Section 59 notice was provided to allow the Zoning By-law Amendment application to be deemed complete, as required by the *Clean Water Act* and *Planning Act*. The June 8, 2022 Wellington Source Water Protection staff comments provided an initial review of municipal source protection related submissions by the applicant including a Drinking Water Threat Disclosure Report and indicated that further detail and review would be deferred until the site plan application process. At this time, that conclusion still applies and the remaining municipal source protection requirements and review should be deferred until the site plan application process, if that process proceeds.

Although the documents submitted by the applicant, including the most recent 2023 submissions, indicate activities that may pose potential concern to groundwater, the scope of the Wellington Source Water Protection review is related only to the protection of groundwater for municipal drinking water purposes as outlined in the *Clean Water Act* and associated regulations. We understand that the Township Hydrogeologist, Harden Environmental and other Township consultants have provided significant comments as it relates to this application and for the protection of groundwater for private drinking water purposes and hydrogeologic function. Private or domestic drinking water wells are located in close proximity to the site whereas the nearest municipal well is approximately 5 kilometres from the site



I trust that this meets your current needs, if you require further information, please contact the undersigned.

Sincerely,

A handwritten signature in black ink that reads "Kyle Davis".

Kyle Davis, Risk Management Official
519-846-9691 ext 362
kdavis@centrewellington.ca

March 14, 2023

Lynne Banks
Development and Legislative Coordinator
Township of Puslinch
7404 Wellington Rd. 34, Puslinch, Ontario
N0B 2J0

RE: P11/6678 Ecology Peer Review of: Environmental Impact Assessment (EIA) – Zoning Bylaw Amendment 6678 Wellington Rd 34 (Badger Farms) Resubmission Dated August 10, 2022

INTRODUCTION

Dougan & Associates (D&A) was retained by Puslinch Township in May 2022 to complete a peer review of an EIA report prepared by GHD (original submission dated May 9, 2022). D&A's comments were provided to the Township on June 29, 2022 and circulated to GHD.

GHD prepared an updated EIA dated August 10, 2022 in response to comments which was circulated to D&A for review on March 7, 2023. D&A has reviewed this second submission in relation to our original comments and provided an updated review presented below.

It is recommended that an EIA addendum be prepared to address the outstanding comments outlined. Please do not hesitate to contact the undersigned with any questions or concerns regarding this review.

Regards,



Christina Olar, HBSc, Eco. Mgmt. Tech., ISA
Ecology Manager, Ecologist, Arborist



Todd Fell, OALA, CSLA, CERP
Director, Landscape Arch., Rest. Ecologist

GENERAL COMMENTS

Table 1: Updated general comments on second submission EIA – Zoning Bylaw Amendment 6678 Wellington Rd. 34 (GHD, August 10 2022)

D&A Original Comment (June 29, 2022)	Comment Addressed in EIA dated Aug 10, 2022? (Y/N)	Additional Comments and Clarification
<p>1. The Wellington County Official Plan (OP) - Schedule A7 Puslinch - designates the Subject Lands as "Greenlands". Section 5.6.1 of the OP, Permitted Uses, does not allow Commercial Uses in the Greenlands designation and under Section 5.6.4, Zoning, it suggests Greenlands be given a restrictive zoning by a municipal council. Please demonstrate how the proposed Zoning Amendment is compatible with the portions of the site designated as Core Greenlands.</p>	<p>No</p>	<p>Please demonstrate how the proposed Zoning Amendment is compatible with relevant Core Greenlands policies.</p>
<p>2. There are insufficient details on the proposed land use as a hydrovac operation to demonstrate the proposed land use will not result in negative impacts to the natural heritage features. Standard information provided to support a By-Law amendment would include, but not be limited to, the following:</p> <p>a. What is the "proposed" use(s) of the subject lands?:</p> <ul style="list-style-type: none"> o Footprint area o Intended duration o All associated activities with the operation of the proposed use <ul style="list-style-type: none"> • Buildings or structures (existing and proposed) • Buildings or structures (size and height) • Parking, Loading • Services (water, waste, source and destination) • Services (electrical, gas, roads) 	<p>Yes</p>	<p>Comment resolved.</p>

D&A Original Comment (June 29, 2022)	Comment Addressed in EIA dated Aug 10, 2022? (Y/N)	Additional Comments and Clarification
<ul style="list-style-type: none"> • SWM (how is storm drainage provided?) • Other activities: <ul style="list-style-type: none"> ○ Location of soil stockpiles ○ Duration of stockpiles remaining on site ○ Watering and dewatering details ○ Sedimentation and erosion control measures • Traffic (site access and vehicle frequency) 		
<p>3. Breeding bird surveys (summer 2022) and a two-season vegetation survey during peak growth season (spring and summer 2022) were included in the TOR. These surveys were not completed for the EIS. Please provide the rationale for the omission and demonstrate the surveys are not required to make a determination of no negative impacts.</p>	Yes	Comment resolved.
<p>4. The report identifies two ponds adjacent to wooded areas representing potential amphibian habitat. Please characterize the potential presence of amphibian habitat and assess the potential impacts and associated mitigation measures for proposed land uses and activities.</p>	Partially; discussed in sections 5.2.2 and Table 2. See additional comment.	Table 2 notes that “Marsh Monitoring surveys were not completed for the Subject Lands, however these ponds may provide suitable habitat for breeding amphibians in the absence of surveys.” We are in agreement with this statement. Potential impacts (including any indirect impacts) and mitigation strategies related to amphibian breeding SWH are not discussed in the EIS. Please provide a clear impact assessment and mitigation strategies regarding potential amphibian breeding SWH.

D&A Original Comment (June 29, 2022)	Comment Addressed in EIA dated Aug 10, 2022? (Y/N)	Additional Comments and Clarification
5. Potential impacts arising from proposed land use changes and site alterations should be associated with their corresponding features and functions. For each species included in the plant/wildlife appendices, please indicate which ELC polygon(s) they were recorded in.	Yes	Comment resolved.
6. Please provide a figure showing the limit of disturbance for all activities in relation to natural heritage constraints and applicable buffers. Please include proposed mitigation including buffers and sedimentation and erosion control measures.	Partially; provided in Figure 3. See additional comments related to Figure 3.	Figure 3 identifies the proposed extraction area and a 10 m buffer to the Oil Well Bog Little Tract ANSI. Given the significance of the feature (Significant Woodland, Greenlands, ANSI) and its function as candidate and confirmed SWH, additional rationale is requested to support the recommended 10 m woodland buffer and fencing is sufficient, including an assessment of potential indirect impacts. Figure 3 does not show a buffer or other mitigative measures (e.g. silt fencing, permanent fencing) applied to the FOD5 community in the southwest portion of the study area. This feature is included in the Township's Environmental Protection Overlay, and based on the ELC description, it appears this woodland is of relatively high quality and contains a high proportion of native species. It is unclear if this woodland has been assessed for significance. Please

D&A Original Comment (June 29, 2022)	Comment Addressed in EIA dated Aug 10, 2022? (Y/N)	Additional Comments and Clarification
		provide an assessment of the FOD5 woodland significance, describe potential impacts, and, where applicable, proposed mitigation strategies to demonstrate no negative impact to the feature or its ecological functions.
7. The EIS report identifies wildlife habitat in adjacent significant woodlands. The potential for conflict with wildlife entering an active construction site has not been addressed. Please identify mitigation measures to exclude wildlife from construction zones as well as the protocols for workers to follow if wildlife, especially SAR, are encountered.	Partially; Figure 3 and section 5.2.6.2. See additional comment.	While silt and permanent fencing is recommended along the eastern boundary of the site, it is recommended that permanent wildlife exclusion fencing be installed along the entire operational perimeter to prevent wildlife entering the operational area from the ANSI and/or southwest woodlot during construction and during the operational phase. Additionally, the EIS should provide recommended timing for installation of fencing. To prevent construction and post-construction wildlife mortality, it is recommended that silt and permanent fencing be installed pre-construction.
8. Please provide a Monitoring and Adaptive Management Plan for both construction and post construction phases to ensure compliance and effectiveness of mitigation measures.	Yes; provided in section 5.2.6.3.	Comment addressed.
9. Greenland System features identified in the EIA include: environmentally sensitive areas and significant woodlands. Floodplain and wetlands are also present on abutting lands owned by the County. Please review and demonstrate compliance with all of the applicable	No	Please demonstrate how the proposed Zoning Amendment is compatible with relevant Greenlands policies.

D&A Original Comment (June 29, 2022)	Comment Addressed in EIA dated Aug 10, 2022? (Y/N)	Additional Comments and Clarification
policies in Part 5 of the County Official Plan (i.e. 5.4.1, 5.4.3, 5.5.4, 5.5.5).		

DETAILED COMMENTS

Detailed comments on the EIA are outlined in Table 2 by section and page number according to the original comments prepared by D&A dated June 29, 2022.

Table 2: Updated key comments on second submission EIA – Zoning Bylaw Amendment 6678 Wellington Rd. 34 (GHD, August 10 2022)

EIA Section Heading	EIA Page Number	D&A Original Comment (June 29, 2022)	Comment Addressed in revised EIA dated Aug 10, 2022 (Y/N)	D&A Comment (March 14, 2022)
1.3 Study Rationale	2	This section states that the closest PSW is 30 m east of the subject lands, when previously in the Executive Summary (Page i) it was stated the closest PSW is 120 m from the subject lands. Please correct/clarify.	Yes	None; comment addressed.
1.3.2 Provincial Legislation	5	Reference is made to “OMMAH, 2020” under “A Place to Grow”. According to your reference list, the citation is for OMMAH, 2019. Please correct the in-text citation or reference list.	Yes	None; comment addressed.
1.3.3 Local and other regulatory bodies	7	The County of Wellington Forest Conservation Bylaw 5115-09 is not included in the policy review. There are not enough details for either the proposed future land use or the site alteration to confirm whether or not tree removal	Yes	None; comment addressed.

EIA Section Heading	EIA Page Number	D&A Original Comment (June 29, 2022)	Comment Addressed in revised EIA dated Aug 10, 2022 (Y/N)	D&A Comment (March 14, 2022)
		is required. Please review and demonstrate compliance with relevant sections of the bylaw.		
1.3.3 Local and other regulatory bodies	7	Under the section concerning the Wellington County Official Plan (2021), the EIS fails to demonstrate how the proposed Zoning Bylaw Amendment to Commercial Zoning is in compliance with Schedule “5.6.1 – Permitted Uses” in regard to Greenland areas. Please elaborate.	No	This comment has not been addressed. Please demonstrate that the proposed ZBA is in compliance with Wellington County Official Plan policy 5.6.1.
1.4 Scope and Limitations	7	Section for client information (“[Client]”) has not been completed properly. Please correct.	No	Not addressed.
2.1 General Approach	9	It is unclear why Breeding Bird Surveys were not completed when they were committed to in the TOR (Appendix A). Please provide detailed justification for this deviation from the TOR.	Yes	Breeding Bird Surveys were completed in June and are now included in the report. Please note the sentence on page 10 stating that they are not included should be amended.
2.1 General Approach	9	According to the TOR (Appendix A) vegetation surveys were to be completed over two visits during peak growing seasons (late spring and summer). The two visits completed in November and April do not fulfil this requirement. Please provide detailed justification for this deviation from the TOR.	Yes	None; comment addressed.

EIA Section Heading	EIA Page Number	D&A Original Comment (June 29, 2022)	Comment Addressed in revised EIA dated Aug 10, 2022 (Y/N)	D&A Comment (March 14, 2022)
3.2.1.1 ELC Code Descriptions	11	Please add in botanical names for red pine (under FOC1-2) and Willow (under OAO) for consistency. Alternatively, update references to consistently include botanical names for only the first reference of a species in this section.	Yes	None; comment addressed.
4.1.2 Birds	14	Reference is made to "GHD's area search for birds" when previously bird records were noted as being only incidental. Please clarify if targeted bird surveys were completed on site.	Yes	None; comment addressed.
4.2.1 Woodlands	16	Reference is made to plantation forest being present when previously only deciduous, coniferous, and mixed forest was described. It is possible this is a carry-over left from the Fill Application EIS which does mention plantation. Please clarify or remove.	Yes	None; comment addressed.
4.2.3 Ponds	17	Spelling error in second sentence: "vegetatioin". Please correct.	Yes	None; comment addressed.
5.2.4 Wildlife Corridors/ Connectivity	23	Woodland to the east is referred to in past tense (was part... provided a movement corridor...). Please clarify.	Yes	None; comment addressed.
5.2.6 General Mitigation Measures	23	Point 4 contains a duplicate word (includes/include). Please correct.	Yes	None; comment addressed.
6. Policies and Legislative Compliance	24	Table 3 should include a review of existing Greenland features and demonstration of compliance with all of the applicable policies in Part 5 of the County Official Plan (i.e. 5.4.1, 5.4.3, 5.5.4, 5.5.5).	No	Please demonstrate how the proposed Zoning Amendment is compatible with relevant Greenlands policies.

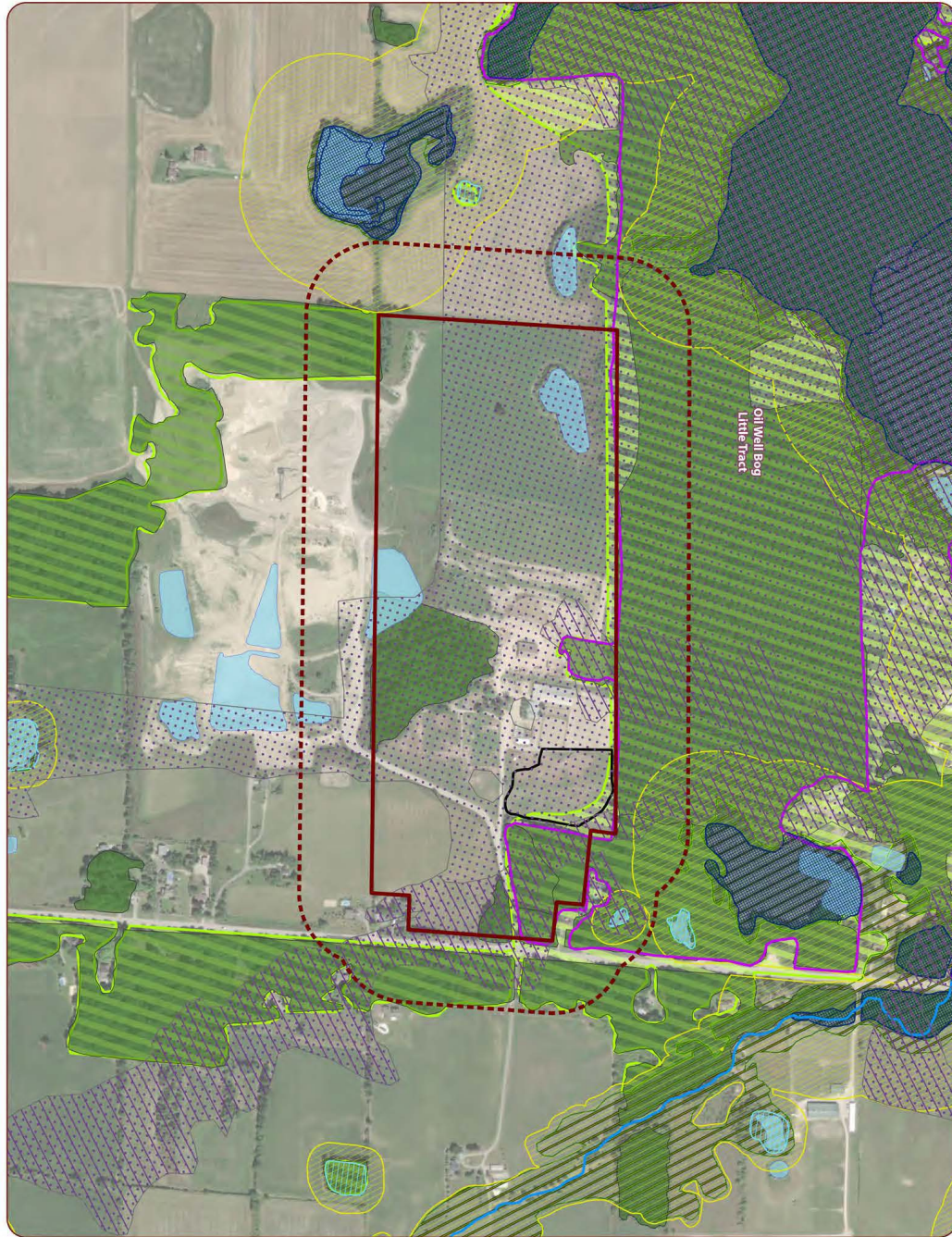
Map 1. Preliminary Natural Heritage Constraints (D&A, May 2022)

DRAWN BY: J.Sauder/N.White

DATE: 16, March 2022

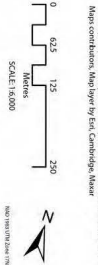
CLIENT: Township of Puslinch

PROJECT: DA21-034-09



Map 1: Preliminary Constraints
Preliminary Ecology and Natural Heritage Review for Badger Farms, Puslinch, ON

- Approximate Study Area
- Adjacent Lands (120 metres)
- Approximate Limit of Disturbance (GLD, 2021)
- MNR Wetland - Not Evaluated
- MNR Provincially Significant Wetland
- MNR Wooded Area
- Greenbelt - Protected Countryside
- ANS (Life Science)
- GRCA Regulation Limit
- Watercourse
- Waterbody
- Wellington County OP Designation
- Puslinch Zoning Bylaw Schedule A
- Core Greenland
- Greenland
- Natural Environment
- Environmental Protection Overlay



This information developed by this map has been prepared from sources which are not guaranteed to be accurate. While every effort has been made to ensure the accuracy of the information, the user should not rely on it as a basis for any legal or other action. The user should consult the appropriate authorities for more information. The user should also consult the appropriate authorities for more information. The user should also consult the appropriate authorities for more information.



March 10, 2023
Our File: 120006-017

Township of Puslinch
7404 Wellington Road 34
Guelph, ON N0B 2J0

Attention: Ms. Lynne Banks

Re: Response Letter
6678 Wellington Road 34, Township of Puslinch

Dear Ms. Banks:

GM BluePlan Engineering (GMBP) received a second Zoning Bylaw Amendment submission on September 12, 2022 related to a portion of the subject lands at 6678 Wellington Road 34, in the Township of Puslinch. GMBP provided correspondence through email with the Township on October 3, 2022 regarding the submission. In 2023, several responses from the applicant were received on January 27, February 17, and February 22, 2023 furthering the discussion of the second submission for Zoning Bylaw Amendment. The intent of the applicant's responses was to respond to GMBP's and other reviewing parties' comments on the first Zoning Bylaw Amendment submission submitted on September 12, 2022, and to provide a formal response to ongoing email discussions between the applicant and reviewing parties.

Of the files received on January 27, 2023, three files were submitted in draft format and updated during the later responses provided on February 17, and February 22, 2023. The following are the other files submitted on January 27, 2023 that were reviewed and considered for this letter:

- Figure A-1, prepared by Capital Paving Inc, dated 2019.
- Figure A-2, prepared by GHD, dated November 2022.

The following files were received on February 17, 2023 for review and consideration in this letter:

- Response to February 1, 2023, XCG Letter, prepared by GHD, dated February 16, 2023.
- Response to Zoning By-law Amendment (ZBA) Application Comments, prepared by GHD, dated February 16, 2023.
- Response to Comments – February 8 Council Meeting Update, prepared by GHD, dated February 16, 2023.

The following file was received on February 22, 2023 for review and consideration in this letter:

- Response to Summary of Issues Zoning By-law Amendment Application, prepared by GHD, dated February 16, 2023.

To address groundwater quality concerns, the applicant has provided a written description of a site specific concept including pre-treatment (treatment train) measures, stormwater testing and maintenance protocols, and lining aspects of the stormwater management and drainage system with an impermeable liner.

The proposed site specific concept described by the applicant includes for:

- a lined impermeable stockpile processing area
- lined drainage ditch
- lined holding pond with discharge controls
- controlled release to the existing receiving and infiltration pond
- preliminary processes for soil and water quality testing along with protocols for permitting releasing of water from holding pond
- proposed monitoring and document retention

While the proposed concept appears to have some validity from a site grading and drainage perspective, further comment from an engineering perspective cannot be provided until formal detail design plans and a SWM report is provided.

We defer comment on zoning and planning concerns of the property to the Township Planning and Development department.

We defer comment on potential hydrogeological and groundwater contamination concerns by proposed activities to the retained Township Hydrogeologist and/or the retained Environmental Consultant.


If you have any questions or require additional information, please do not hesitate to contact us. We are happy to discuss the above comments in more detail prior to resubmission if required.

Yours truly,

GM BLUEPLAN ENGINEERING
Per:

A handwritten signature in black ink, appearing to read 'Srdjan Malicevic'.

Srdjan Malicevic, E.I.T

A handwritten signature in blue ink, appearing to read 'Steve Conway'.

Steve Conway, C.E.T., rcsi, PMP

**Ministry of the Environment,
Conservation and Parks**

Client Services and Permissions Branch
1st Floor
135 St Clair Ave W
Toronto ON M4V 1P5
Fax: (416) 314-8452
Telephone: (437) 882-3273

**Ministère de l'Environnement, de la
Protection de la nature et des Parcs**

Direction des services à la clientèle et
des permissions
135 av St Clair O
Toronto ON M4V 1P5
Télécopieur : (416) 314-8452
Téléphone : (437) 882-3273



May 13, 2024

City Clerk
City of Cambridge
50 Dickson Street
P.O. Box 669
Cambridge, ON
N1R 5W8
Email: clerks@cambridge.ca

Regional Clerk
Region of Waterloo
PO Box 9051, Station C
Kitchener, ON
N2G 4J3
Email: regionalclerk@regionofwaterloo.ca

Dear Municipal and Regional Clerks:

Re: Application for Approval of Waste Disposal Sites
New ECA for a Waste Disposal Site for hydrovac soil processing facility
Cambridge, Ontario
Reference Number 1000277837

The Ministry of the Environment and Climate Change has received an application from 2374868 Ontario Inc. seeking a new Environmental Compliance Approval for a Waste Disposal Site (processing) located at 6678 Wellington Rd 34, Cambridge, Ontario. The application, if approved, will permit the processing of hydrovac soil at the site.

Additional details relating to the application can be found at the Environmental Registry of Ontario (ERO) at <https://ero.ontario.ca/notice/019-8678>.

It is requested that City of Cambridge and Region of Waterloo make comments with respect to the application including a confirmation of whether the property is appropriately zoned for the proposed use. Please ensure the report is signed and dated by the Commissioner of Planning or the Commissioner of Works, or their respective equivalent. Please respond to the attention of

Manager/Part V Director, Waste Approvals, Environmental Permissions Branch, Ministry of the Environment, Conservation and Parks at wasteproposalcomments@ontario.ca within six weeks of the date of this letter. If no response is received by this date, we will assume that you have no objections to the issuance of the Environmental Compliance Approval.

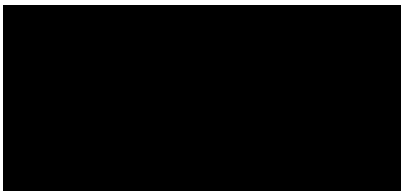
Should you require further details of the site's operation, including copies of the Site Plan drawings that were included with the application, please contact Eric Nafziger (2374868 Ontario Inc.) at (519) 998-4602/ eric@waterloobadger.com.

As you are aware, the Director has the discretion under section 20.15(1), Part II.1 of the Environmental Protection Act (EPA) to hold a public hearing regarding applications for Environmental Compliance Approvals. Municipalities or affected members of the public have the right to request that the Director consider calling a hearing with respect to any application submitted under Part V of the EPA. Any submissions in this regard must be accompanied by valid reasons and supporting technical justification.

Please make reference to the file number 1000277837 and indicate "Municipal Comments" in the subject line of all related correspondence.

If you have any questions regarding the above, please contact me at the above phone number.

Yours truly,



Ricki Allum
Application Assessment Officer



REPORT PW-2024-004

TO: Mayor and Members of Council

PREPARED BY: Mike Fowler, Director of Public Works, Parks and Facilities

PRESENTED BY: Mike Fowler, Director of Public Works, Parks and Facilities

MEETING DATE: May 22, 2024

SUBJECT: Consideration for Hard- Surfacing Gravel Roads

RECOMMENDATION

That Report PW-2024-004 regarding the Consideration for Hard-Surfacing Gravel Roads be received; and

That Council give consideration to staff's recommendations as outlined in the report; and

That Council select the following Township road for hard-surfacing _____; and

That Council direct staff to work with the Township Engineer on the design in order for construction to commence in 2026.

Purpose

The purpose of this report is to present staff's recommendation regarding the hard surfacing of candidate gravel roads.

Background

Council has prioritized the hard surfacing of eligible gravel roads by establishing the gravel roads discretionary reserve. With the current balance standing at \$864,338, staff anticipate that the reserve will be sufficiently funded by 2026 to support the construction of one of the three road work projects detailed in the report. The reserve balance at the end of 2025 is currently projected at \$1,235,138. In accordance with previous Council direction from 2021, prior to the establishment of the Roads Management Plan, that staff be requested to provide a report to Council which:

1. Identifies several gravel roads suitable for upgrade in an upcoming budget, of which Council will select one;
2. Outlines the criteria staff used to propose these roads;

- Includes all-in costs associated with each proposed gravel road and the associated financial impact.

Staff have prepared the following information for Council’s consideration:

Criteria in accordance with the Roads Management Plan:

- Road Project 1: Asset ID 91 & 92
- Road Project 2: Asset ID 98
- Road Project 3: Asset ID 27B, 71 & 81

Table 1

Asset ID	Street Name	From Street	To Street	Times Re-graded*	Average Daily Traffic (ADT)	Isolated from the Township Yard**	Paved Connection	Future Development	High Rural Pop. Density
91	Sideroad 10 S	Gore Rd	Concession 1	<4	50-199	Y	Y	N	N
92	Sideroad 10 S	Concession 1	Concession 2	<4	200-499	Y	Y	N	N
98	Sideroad 10 N	County Rd 34	Concession 4	<4	50-199	N	Y	Y	N
27B	Carter Rd	Arkell Rd	Cooks Mill Rd	<4	200-499	Y	Y	N	N
71	Farnham Rd	Arkell Rd	Carter Rd	<4	50-199	Y	Y	N	N
81	Cooks Mill Rd	Carter Rd	Bridge	<4	200-499	Y	Y	N	N

*Regrading is completed more than 4 times during each of the two consecutive non-winter periods May 1-November 1

**Travel time to the road section from the Public Works Yard

Based on the Township’s Roads Management Plan, the following criteria, as outlined in Table 1, should be used for assessing the need to convert a gravel road to hard surfacing:

- Is full regrading completed more than four times during each of two consecutive non-winter periods (May 1 to November 1)?
- Does the traffic volume (average daily traffic, ADT) exceed 200 vehicles?
- Is the road section isolated from the Public Works Yard?
- Is the road connected to other paved roads?

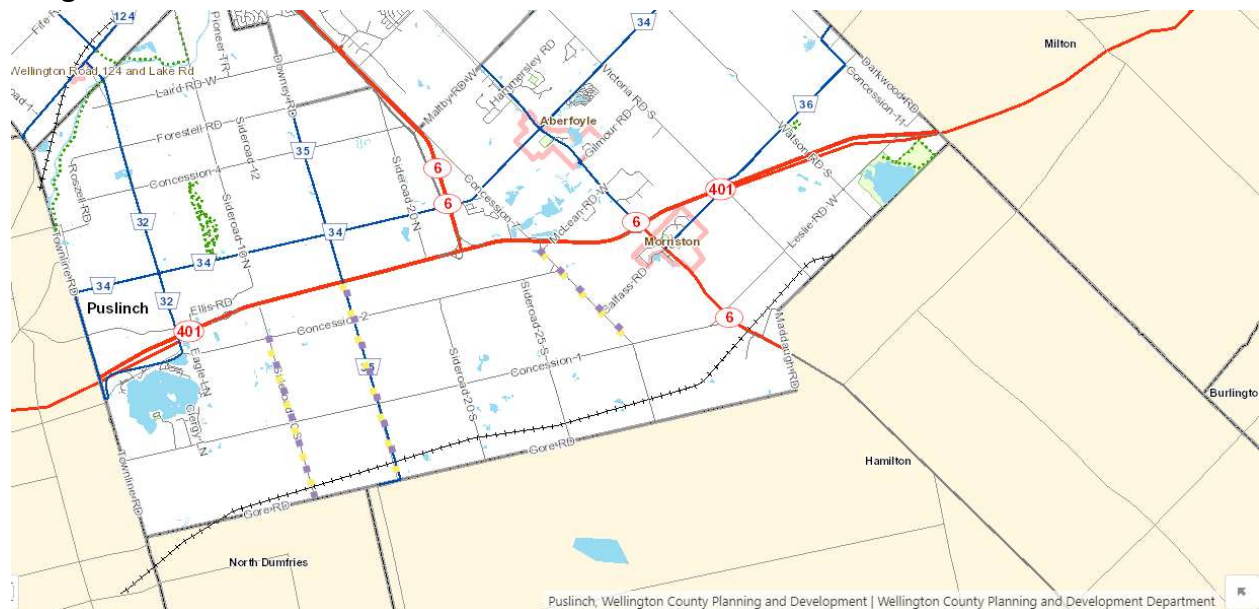
- Is there future development planned on the road section that would affect the current use of the road (e.g., Upper-tier or Provincial Road Network expansions)?
- Is there a high relative rural population density?

Other considerations that should be used to evaluate whether to hard-surface a road are as follows:

- Condition of existing drainage, ditches and shoulders;
- Existing platforms/shoulder width;
- Sightlines at intersections and driveways;
- Horizontal/vertical alignment of the existing road and associated speed limits;
- Type of traffic;
- Existing infrastructure on the road such as bridges and culverts.

Based on the technical criteria staff recommend Road Project 1, Sideroad 10 S, due to the Township's potential benefit from an additional north-south paved route in this area. Presently, County Road 35 serves as the main commuter route, with Concession 7 serving as an alternative paved option. See Image 1 below with the paved routes identified in yellow/purple dotted lines.

Image 1



Financial Implications

Staff estimate the following cost savings if Sideroad 10 S were hard-surfaced:

- Estimated equipment and operator time 50 hours annually or approximately \$9,750 in wages;
- Estimated budget for water or calcium chloride for dust suppression \$2,600 annually

Staff recommend that if Sideroad 10 S is considered for hard surfacing, that it receive the standard 60 mm. Hard-surfacing Sideroad 10 S would require the following:

- Pulverize existing gravel base and additional granular A material for approximately 60 metres to improve small sections of poor subbase;
- Grade and compact the existing subbase;
- Apply 60 mm of HL-4 asphalt.

The Township Engineer estimates the total cost to hard surface Sideroad 10 S is \$1,140,000 +HST.

Applicable Legislation and Requirements

Township Roads Management Plan

Engagement Opportunities

None

Attachments

Schedule "A" GM BluePlan Cost Estimate for Road Project 1

Schedule "B" GM BluePlan Cost Estimate for Road Project 2

Schedule "C" GM BluePlan Cost Estimate for Road Project 3



Date: September 8, 2023 File: 123018-6
To: Mike Fowler, Township of Puslinch
From: Matt Scott
Project: Sideroad 10 South Surface Works
Subject: Preliminary Cost Estimate

TECHNICAL MEMO

The purpose of this technical memo is to accompany the attached pre-engineering cost estimate provided by GM BluePlan Engineering Limited (GMBP) to the Township of Puslinch (Township) for hard-surfacing Sideroad 10 South between Concession 2 and Gore Road.

The Township has identified two segments of Sideroad 10 South that are being considered for a hard-surfacing. Based on information provided by the Township, we understand the following about each section of road:

- Sideroad 10 South (Concession 2 to Concession 1)
 - Township Asset ID 92
 - AADT = 240
 - Posted speed limit = 60 km/h
- Sideroad 10 South (Concession 1 to Gore Road)
 - Township Asset ID 91
 - AADT = 120
 - Posted speed limit = 60 km/h

GMBP visited the site on June 29, 2023 to observe the existing condition of each road section and take preliminary measurements for the purposes of providing a preliminary cost estimate. No preliminary or detailed design has been completed at this stage. Notes from our sites visit are attached to this memo.

Our total estimated total cost to hard surface Sideroad 10 South is approximately \$1,140,000 +HST. This includes for:

- Construction Costs
- Allowance for Asphalt Cement Index Payment Adjustment
- Allowance for one Utility Pole Replacement
- Allowance for Geotechnical Investigation
- Engineering, Contract Administration and Construction Inspection (10%)
- Contingency (10%)

Additional discussion and considerations are provided in the following sections.

Platform and Road Width

The existing road platform on Sideroad 10 South is generally of sufficient width to accommodate the Township's standard rural cross-section of a 7.0m paved surface and 0.5m shoulders (8.0m total width). We note that the Township's development standards require an 8.0m wide paved surface with minimum 1.0m wide shoulders and 0.6m wide rounding (minimum platform width of 11.2m) in residential applications; however, for recent capital road projects, the 8.0m platform width has been used.

Bridge 7

The existing road platform was measured to be generally between 7.0m and 8.0m, except for the approaches and deck of Bridge 7 (French's Bridge). The approach guide rails narrow towards the bridge deck, which is only 5.75m wide. We have not accounted for any road widening or structure widening at Bridge 7 as part of our preliminary cost estimate. The Township would need to acknowledge the substandard road width at Bridge 7 for one lane of traffic in each direction and ensure appropriate signage is provided.

With the addition of an asphalt wearing surface over the bridge and approaches, the approach guide rail and barrier over the bridge may need to be adjusted to ensure they are at the required height above the driving surface.

Structural Adequacy of Road

Based on discussions with the Township, we understand that there are sections of Sideroad 10 South that can rut and are susceptible to frost boils when the road is saturated. We have budgeted for minor raising the road profile throughout the site through addition of granular, and isolated areas of more substantial raising (i.e., up to 300 mm); however, we recommend a geotechnical investigation in these sections as well as additional boreholes spread out throughout the project to assess the existing subsurface condition of the road. Preliminary costs for a geotechnical investigation have been included in the total estimate.

Consultation will be required with the Grand River Conservation Authority, as some of the areas identified for potential raising are within the floodplain.

Hard-surface Method

The method of hard-surfacing chosen for this road is a single lift of 60mm surface asphalt to align with recent capital works projects within the Township and for the purposes of budgeting. Depending on market conditions at the time of tendering, and preference of the Township, surface treatment could also be considered.

Culvert Replacements

Two small diameter culverts were observed during our site visit. The culvert immediately north of Gore Road requires replacement, while the culvert approximately 330 m north of Gore Road requires extensions. Both culverts are within regulated areas and will require consultation with the Grand River Conservation Authority and Department of Fisheries and Oceans Canada.

Vertical Profile, Alignment and Site Stopping Distances

We have not completed a review of the vertical profile, alignment or site stopping distance requirements for this section of road. The Township should review whether there are locations on these sections of road that are prone to accidents and consider whether adjustments to the road alignment and configuration are warranted or require specific review.

Canadian Pacific Kansas City (CPKC) Railway

Any work that is being done near an active railway line is anticipated to require a qualified employee (Flagperson) from the railway company. A minimum 90 days notice anticipated to be required to CPKC before the start of any work. An allowance for daily flagging for the duration of construction is included in the preliminary cost estimate.

Utilities

We have not completed any consultation with local utility companies to determine whether any utility infrastructure is in conflict with the anticipated scope of work. An allowance has been provided for potential utility relocations. During design, formal discussions with local utility companies are recommended.

One utility pole approximately 330 m north of Gore Road is anticipated to require replacement due to widening and raising of the road.

END OF MEMO

Attachments:

- Preliminary Cost Estimate
- Site Visit Notes

TOWNSHIP OF PUSLINCH
SIDEROAD 10 SOUTH SURFACE WORKS

PROJECT No. 123018-6

Preliminary Cost Estimate

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	EST. QTY.	EST. UNIT PRICE	TOTAL AMOUNT
1		Bonding and Insurance	1.0	L.S.	\$ 20,000.00	\$ 20,000.00
2		Mobilization and Miscellaneous Project Costs	1.0	L.S.	\$ 10,000.00	\$ 10,000.00
3		Traffic Control - Road Closed	1.0	L.S.	\$ 15,000.00	\$ 15,000.00
4		Soil Management Plan	1.0	L.S.	\$ 3,000.00	\$ 3,000.00
5		Allowance for Contractor Qualified Person	30.0	hr	\$ 150.00	\$ 4,500.00
6		Close Cut Clearing and Grubbing	1.0	L.S.	\$ 10,000.00	\$ 10,000.00
7		Light-Duty Sediment Barrier	100.0	m	\$ 16.00	\$ 1,600.00
8		Temporary Worksite Isolation and Diversion	2.0	ea	\$ 7,000.00	\$ 14,000.00
9		Fish Rescue	2.0	ea	\$ 3,000.00	\$ 6,000.00
10		Dewatering Structure Excavations	2.0	ea	\$ 5,000.00	\$ 10,000.00
11		Earth Excavation, Grading (Culvert, Offsite Disposal)	95.0	m3	\$ 25.00	\$ 2,375.00
12		Earth Excavation, Grading (Ditching, Offsite Disposal)	590.0	m3	\$ 35.00	\$ 20,650.00
13		Asphalt Swale	100.0	m	\$ 50.00	\$ 5,000.00
14		Removal of Asphalt Pavement (Driveways)	160.0	m2	\$ 20.00	\$ 3,200.00
15		Removal of Granular from Bridge Deck	1.0	L.S.	\$ 2,000.00	\$ 2,000.00
16		Removal of Pipe and Culverts	1.0	ea	\$ 1,500.00	\$ 1,500.00
17		Extend Existing Culvert with 450Ø, HDPE, 320kPa Pipe Culvert with Class 'B' Bedding and Couplings (Maximum 2.0m length)	2.0	ea	\$ 1,500.00	\$ 3,000.00
18		450Ø, Circular Concrete, Class 65-D Pipe Culvert (including Class 'B' Bedding)	14.0	m	\$ 700.00	\$ 9,800.00
19		Biaxial Geogrid with Geotextile	4,300.0	m2	\$ 10.00	\$ 43,000.00
20		In-Place Full Depth Reclamation of Bituminous Pavement and Underlying Granular (Existing Gravel Road)	30,864.0	m2	\$ 1.50	\$ 46,296.00
21		In-Place Full Depth Reclamation of Bituminous Pavement and Underlying Granular (Existing Asphalt Road)	400.0	m2	\$ 1.50	\$ 600.00
22		Granular 'A' (Culvert)	220.0	tonne	\$ 20.00	\$ 4,400.00
23		Granular 'A' (Road Base)	6,820.0	tonne	\$ 20.00	\$ 136,400.00
24		Granular 'A' (Driveways)	120.0	tonne	\$ 40.00	\$ 4,800.00
25		50% Granular 'A' / 50% RAP (Shoulders)	570.0	tonne	\$ 30.00	\$ 17,100.00
26		Restoring Roadway Surfaces	31,264.0	m2	\$ 1.00	\$ 31,264.00
27		Concrete Removal - Partial Depth Type A (Bridge Deck)	1.0	L.S.	\$ 2,000.00	\$ 2,000.00
28		Concrete Patches - Unformed Surface (Bridge Deck)	1.0	L.S.	\$ 3,000.00	\$ 3,000.00
29		Bridge Deck Waterproofing	1.0	L.S.	\$ 8,000.00	\$ 8,000.00
30		Hot Mix HL 4 (Surface Course, 60mm)	4,390.0	tonne	\$ 85.00	\$ 373,150.00
31		Hot Mix HL 4 (Surface Course, 2 x 40mm at Bridge)	15.0	tonne	\$ 500.00	\$ 7,500.00
32		Tack Coat	1.0	L.S.	\$ 1,000.00	\$ 1,000.00
33		MTU - Material Transfer Unit	4,405.0	tonne	\$ 3.00	\$ 13,215.00
34		Hot Mix HL 4 (Surface Course, 50mm Driveways)	25.0	tonne	\$ 140.00	\$ 3,500.00
35		Form and Fill Grooves (at Bridge)	15.0	m	\$ 250.00	\$ 3,750.00
36		Adjust Steel Beam Guide Rail. Steel Posts (including End Treatments)	110.0	m	\$ 150.00	\$ 16,500.00
37		Adjust Thrie Beam Barrier on Bridge Deck	19.4	m	\$ 300.00	\$ 5,820.00
38		R-10 Rip-Rap on Geotextile	600.0	tonne	\$ 85.00	\$ 51,000.00
39		Import Topsoil and Hydroseed	300.0	m2	\$ 10.00	\$ 3,000.00
40		Pavement Marking (Double Application, 10cm Solid Yellow Single Centreline)	3,924.0	m	\$ 2.00	\$ 7,848.00
41		Pavement Marking (Double Application, 10cm Solid White Edge Line)	7,848.0	m	\$ 2.00	\$ 15,696.00
42		Pavement Marking, Durable (Double Application, 60cm Stop Bar)	4.0	ea	\$ 200.00	\$ 800.00
43		Railway Flagging (Provisional)	14.0	day	\$ 1,500.00	\$ 21,000.00

TOWNSHIP OF PUSLINCH
SIDEROAD 10 SOUTH SURFACE WORKS
PROJECT No. 123018-6
Preliminary Cost Estimate

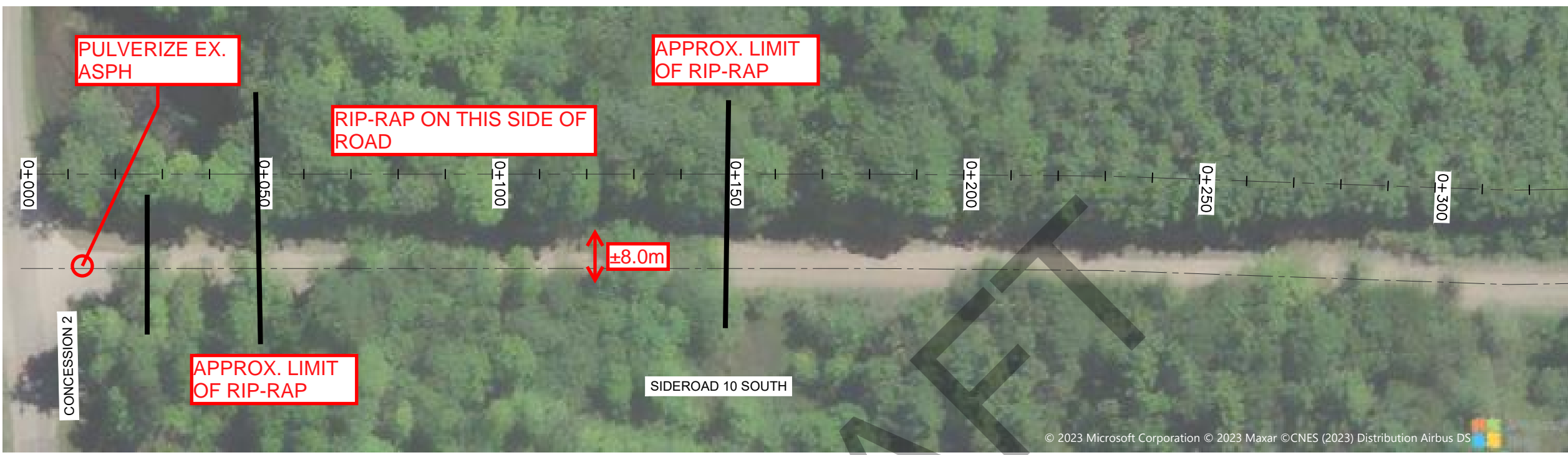
ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	EST. QTY.	EST. UNIT PRICE	TOTAL AMOUNT
44		Mailbox Relocation (Provisional)	26.0	ea	\$ 200.00	\$ 5,200.00
45		Street Sweeper with Operator (Provisional)	20.0	hr	\$ 140.00	\$ 2,800.00
46		Water for Compaction and Dust Suppression (Provisional)	500.0	m3	\$ 16.00	\$ 8,000.00
47		Hydrovac Excavation (Provisional)	10.00	hr	\$ 500.00	\$ 5,000.00
48		Gradall with Operator (or Equivalent, Ditching, Provisional)	10.00	hr	\$ 200.00	\$ 2,000.00
49		Allowance for Incidental Scope	1.0	L.S.	\$ 60,000.00	\$ 30,000.00
ESTIMATED CONSTRUCTION COST						\$1,015,264.00
AC Index Adjustment (No Bid Required)						\$ 30,000.00
Utility Pole Replacement Replacement Allowance						\$ 15,000.00
Geotechnical Investigation						\$ 25,000.00
Engineering, Contract Administrator and Construction Inspection						\$ 50,000.00
Contingency Allowance						\$ 80,000.00
TOTAL ESTIMATED COST						\$1,135,264.00
TOTAL ESTIMATED COST (ROUNDED)						\$1,140,000.00

DRAFT

FILE:W:\Guephh\123-2023\123018 Puslinch Asphalt Program\5 Work In Progress\Drafting\Sheets\123018 - GEN.dwg LAYOUT:FIGURE No. 11
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CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM

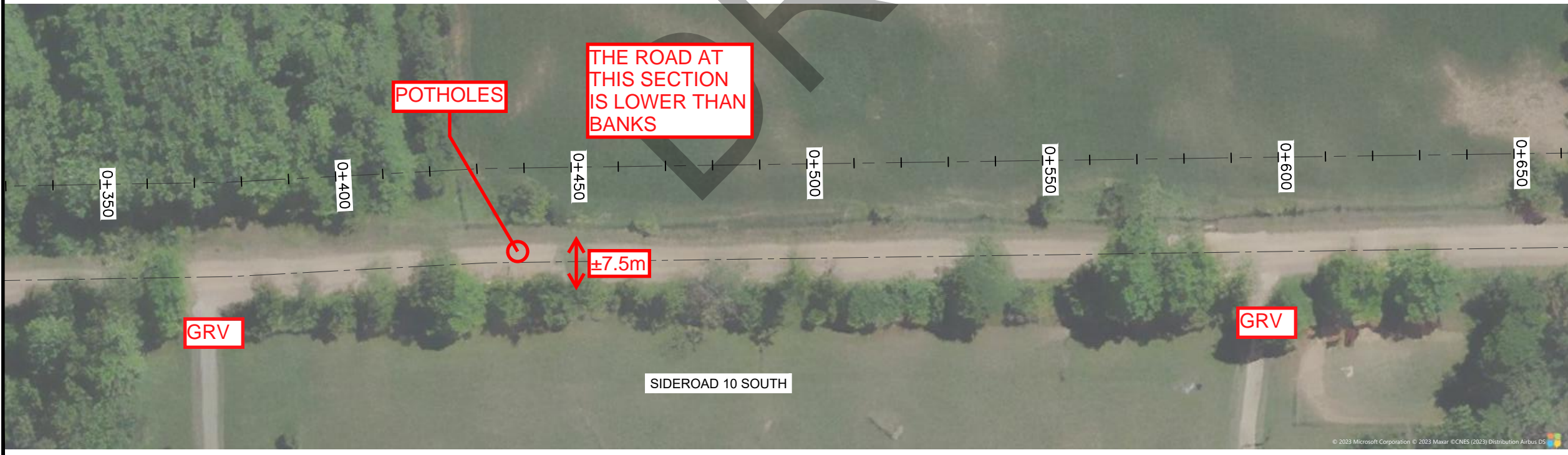


MATCHLINE STA. 0+330
SEE FIGURE No. 11

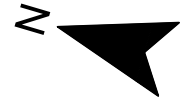


FIGURE No. 11
SIDEROAD 10 SOUTH

SEE FIGURE No. 11
MATCHLINE STA. 0+310



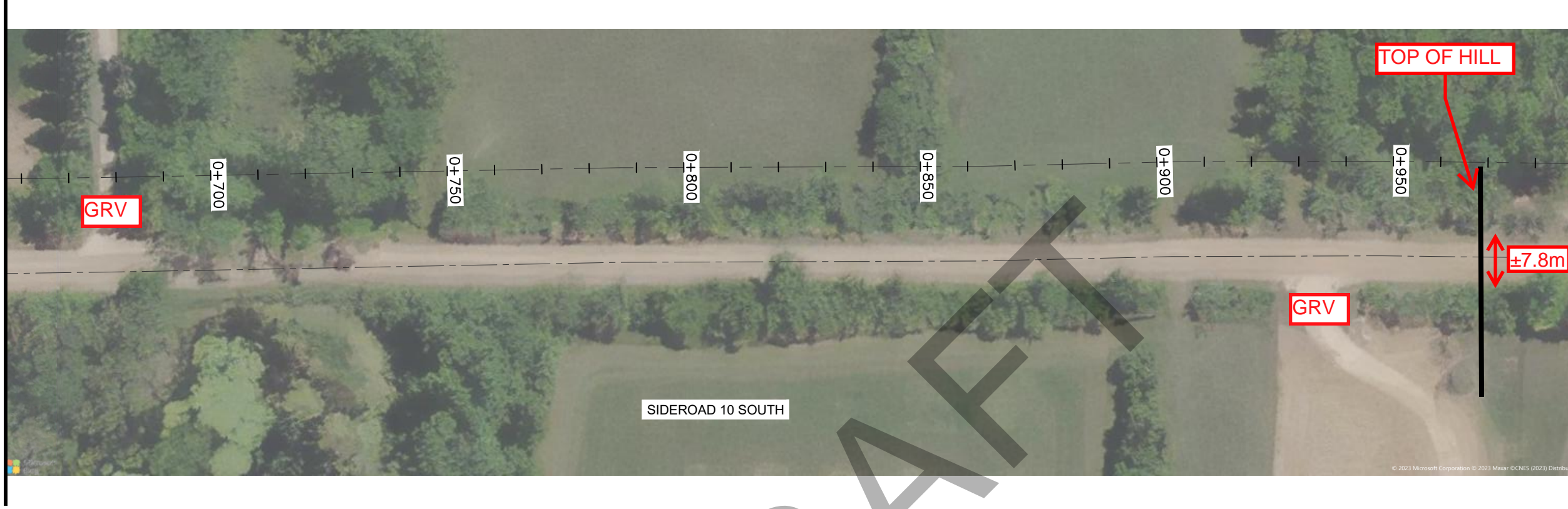
MATCHLINE STA. 0+660
SEE FIGURE No. 12



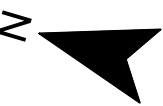
123018
MAY 2023
Scale: 1:1000 | NAD 1983 UTM Zone 17N

FILE:W:\Guephh\123-2023\123018 Pulinch Asphalt Program\5 Work in Progress\Drafting\Sheets\123018 - GEN.dwg LAYOUT:FIGURE No. 12
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SEE FIGURE No. 11
MATCHLINE STA. 0+660



MATCHLINE STA. 0+990
SEE FIGURE No. 12



CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM



SEE FIGURE No. 12
MATCHLINE STA. 0+990



MATCHLINE STA. 1+320
SEE FIGURE No. 13

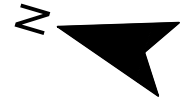


FIGURE No. 12
SIDEROAD 10 SOUTH



123018
MAY 2023
Scale: 1:1000 | NAD 1983 UTM Zone 17N

FILE:W:\Guep\123-2023\123018 Puslinch Asphalt Program\5 Work In Progress\Drafting\Sheets\123018 - GEN.dwg LAYOUT:FIGURE No. 13
LAST SAVED BY:nbaltazar, 5/5/2023 9:50:14 AM PLOTTED BY:Neil Baltazar - GM BluePlan 5/6/2023 9:52:20 AM

SEE FIGURE No. 12
MATCHLINE STA. 1+320



MATCHLINE STA. 1+640
SEE FIGURE No. 13



SEE FIGURE No. 13
MATCHLINE STA. 1+640



MATCHLINE STA. 1+950
SEE FIGURE No. 14

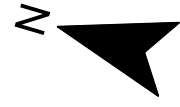
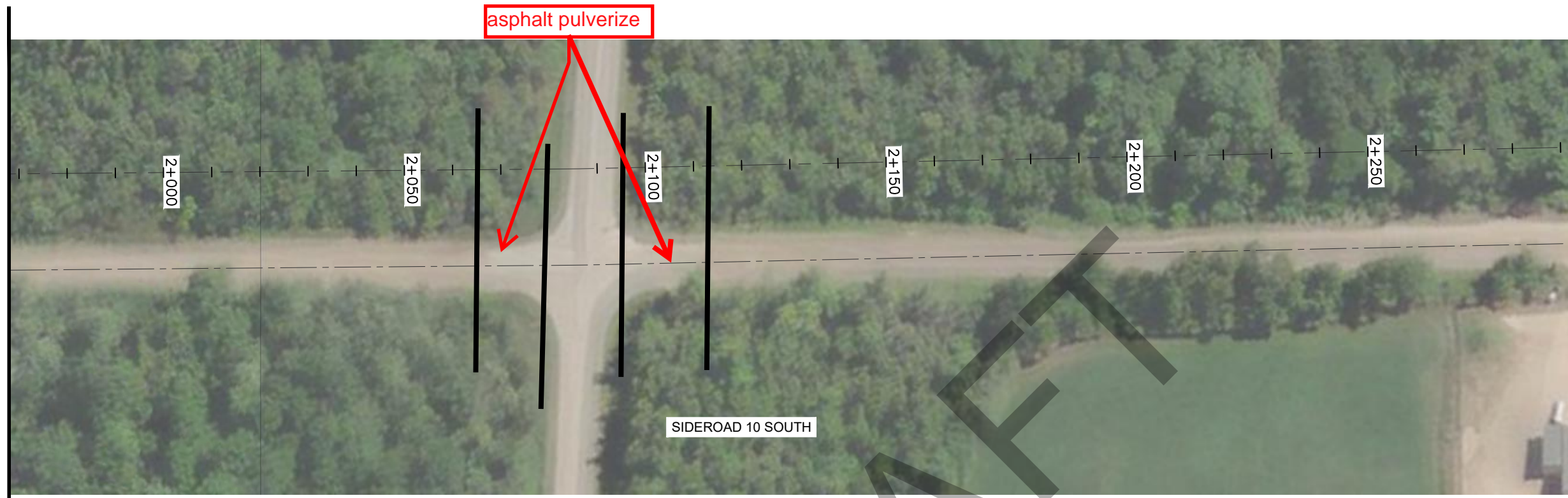


FIGURE No. 13
SIDEROAD 10 SOUTH

FILE:W:\Guephh\123-2023\123018 Puslinch Asphalt Program\5 Work In Progress\Drafting\Sheets\123018 - GEN.dwg LAYOUT:FIGURE No. 14
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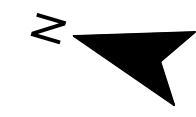
SEE FIGURE No. 13
MATCHLINE STA. 1+950



MATCHLINE STA. 2+290
SEE FIGURE No. 14



CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM



SEE FIGURE No. 14
MATCHLINE STA. 2+290



MATCHLINE STA. 2+610
SEE FIGURE No. 15

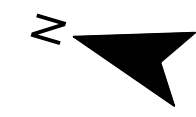


FIGURE No. 14
SIDEROAD 10 SOUTH



123018
MAY 2023
Scale: 1:1000 | NAD 1983 UTM Zone 17N

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CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM

SEE FIGURE No. 14
MATCHLINE STA. 2+610



MATCHLINE STA. 2+930
SEE FIGURE No. 15



SEE FIGURE No. 15
MATCHLINE STA. 2+930



MATCHLINE STA. 3+250
SEE FIGURE No. 16

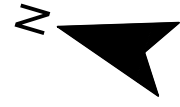


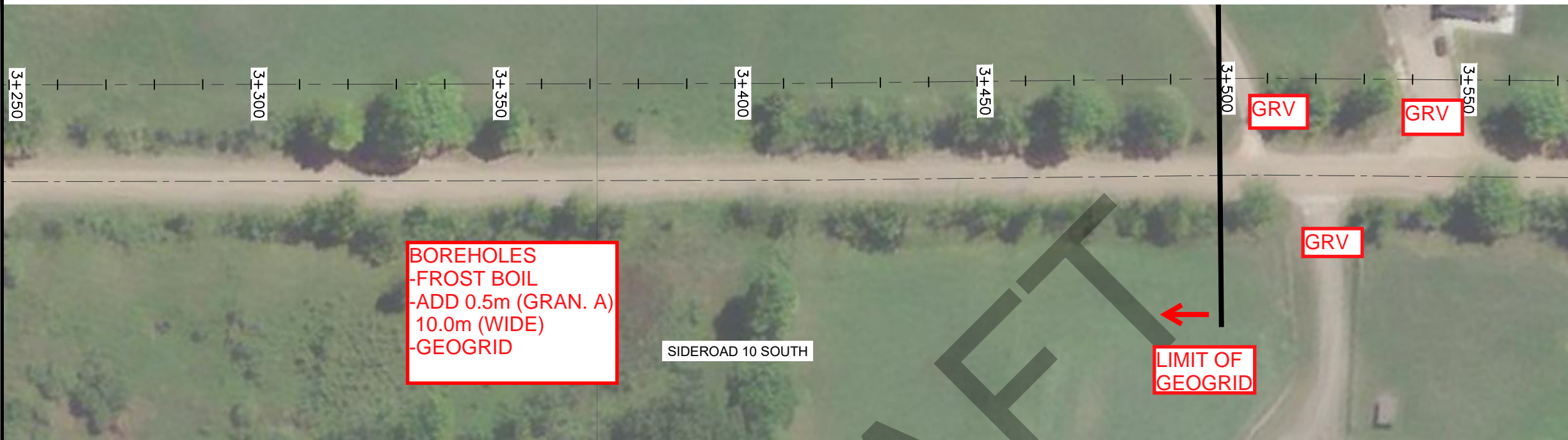
FIGURE No. 15
SIDEROAD 10 SOUTH



123018
MAY 2023
Scale: 1:1000 | NAD 1983 UTM Zone 17N

FILE:W:\Gueph\123-2023\123018 Puslinch Asphalt Program\5 Work In Progress\Drafting\Sheets\123018 - GEN.dwg LAYOUT:FIGURE No. 16
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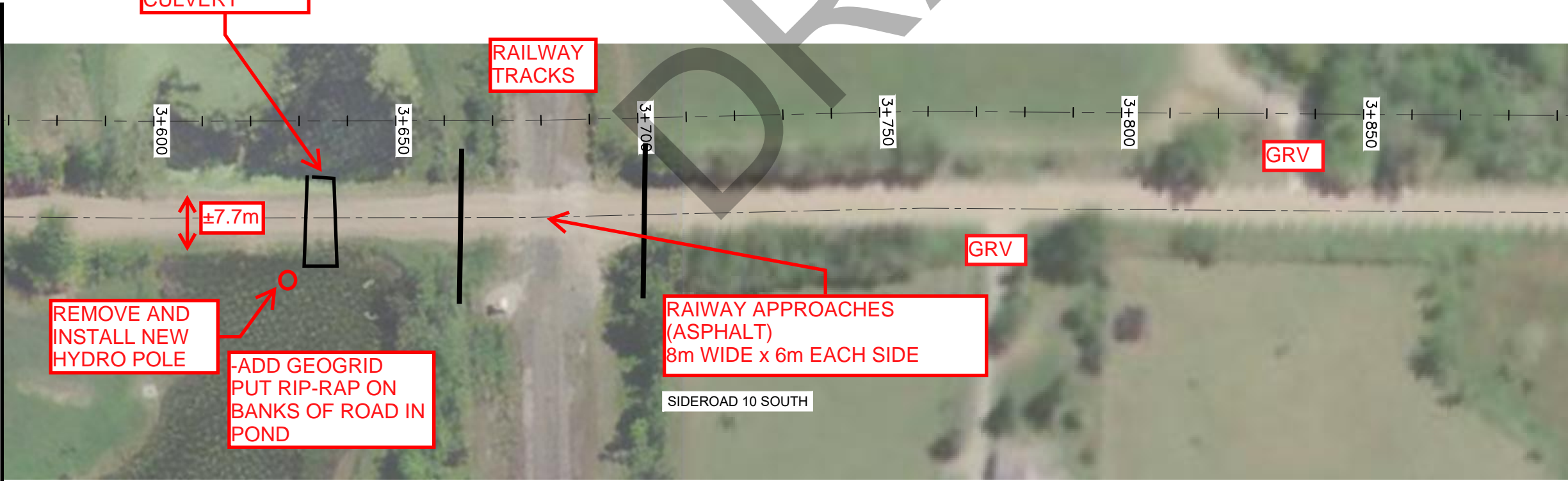
SEE FIGURE No. 15
MATCHLINE STA. 3+250



MATCHLINE STA. 3+570
SEE FIGURE No. 16



SEE FIGURE No. 16
MATCHLINE STA. 3+570



MATCHLINE STA. 3+890
SEE FIGURE No. 17

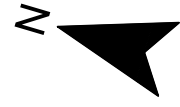


FIGURE No. 16
SIDEROAD 10 SOUTH



TOWNSHIPS OF
PUSLINCH
EST. 1852

CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM

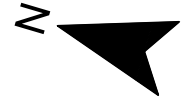


FIGURE No. 17
SIDEROAD 10 SOUTH



123018
MAY 2023
Scale: 1:1000 | NAD 1983 UTM Zone 17N



Date: September 11, 2023 File: 123018-6
To: Mike Fowler, Township of Puslinch
From: Matt Scott
Project: Sideroad 10 North Surface Works
Subject: Preliminary Cost Estimate

TECHNICAL MEMO

The purpose of this technical memo is to accompany the attached pre-engineering cost estimate provided by GM BluePlan Engineering Limited (GMBP) to the Township of Puslinch (Township) for hard-surfacing Sideroad 10 North between Wellington County Road 34 and Concession 4.

Based on information provided by the Township, we understand the following about this section of road:

- Sideroad 10 North (Wellington Road 34 to Concession 4)
 - Township Asset ID 95a & 95b
 - AADT = 159
 - Posted speed limit = 60 km/h

GMBP visited the site on June 29, 2023 to observe the existing condition of the road and take preliminary measurements for the purposes of providing a preliminary cost estimate. No preliminary or detailed design has been completed at this stage. Notes from our site visit are attached to this memo.

Our total estimated total cost to hard surface Sideroad 10 North is approximately \$780,000 + HST. This includes for:

- Construction Costs
- Allowance for Asphalt Cement Index Payment Adjustment
- Allowance for Geotechnical Investigation
- Engineering, Contract Administration and Construction Inspection (10%)
- Contingency (10%)

Additional discussions and considerations are provided in the following sections.

Platform and Road Width

The existing road width on Sideroad 10 North does not provide a sufficient platform width to accommodate the Township's standard rural cross-section of a 7.0m paved surface and 0.5m shoulders (8.0m total width). We note that the Township's development standards require an 8.0m wide paved surface with minimum 1.0m wide shoulders and 0.6m wide rounding (minimum platform width of 11.2m) in residential applications; however, for recent capital road projects, the 8.0m platform width has been used.

The existing road platform was measured to be between 6.5m and 8.0m. At the request of Township, we considered a 6.5m paved driving roadway with 0.5m paved shoulders and edge lines. This substandard road cross-section would require Council Approval.

Alternatively, the Township could consider widening out the existing road surface to provide an 8.0m wide platform similar to other rural roads within the Township. This may impact existing private property and would require a legal survey, which has not been included in our estimated costs.

Structural Adequacy of Road

Based on discussions with the Township and our site visit, there are sections of Sideroad 10 North that have standing water at the sides of the road and nearly up to the road edge. We recommend a geotechnical investigation in these sections as well as additional boreholes spread out throughout the project to assess the existing subsurface condition of the road. Preliminary costs for a geotechnical investigation have been included in the total estimate.

Consultation will be required with the Grand River Conservation Authority, as some of the areas identified for potential raising are within the floodplain.



Hard-surface Method

The method of hard-surfacing chosen for this road is a single lift of 60mm surface asphalt to align with recent capital works projects within the Township and for the purposes of budgeting. Depending on market conditions at the time of tendering, and preference of the Township, surface treatment could also be considered.

Surface Runoff Maintenance

There is an area approximately 100 m long, approximately 800 m south of Concession 4, that has inadequate platform width (approximately 6.5m) and has standing water that is within 0.3m of the road edge. We understand that, at times, this water can nearly overtop the road edge and onto the road platform. Our preliminary cost estimate has attempted to account for the addition of granular material and biaxial geogrid to raise the existing road profile in some locations as well as installing rip-rap along the road embankments; however, a geotechnical investigation may determine that additional work to provide a stable road base is required. Additionally, as this area appears to be within the floodplain, it may not be permissible to raise the road significantly.

Culvert Replacements

Two small diameter culverts were observed during our site visit that require replacement. Both culverts are within regulated areas and will require consultation with the Grand River Conservation Authority and Department of Fisheries and Oceans Canada.

Vertical Profile, Alignment and Site Stopping Distances

We have not completed a review of the vertical profile, alignment or site stopping distance requirements for this section of road. The Township should review whether there are locations on these sections of road that are prone to accidents and consider whether adjustments to the road alignment and configuration are warranted or require specific review.

Utilities

We have not completed any consultation with local utility companies to determine whether any utility infrastructure is in conflict with the anticipated scope of work. An allowance has been provided for potential utility relocations. During design, formal discussions with local utility companies are recommended.

END OF MEMO

Attachments:

- Preliminary Cost Estimate
- Site Visit Notes

TOWNSHIP OF PUSLINCH
SIDEROAD 10 NORTH SURFACE WORKS

PROJECT No. 123018-6

Preliminary Cost Estimate

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	EST. QTY.	EST. UNIT PRICE	TOTAL AMOUNT
1		Bonding and Insurance	1.0	L.S.	\$ 15,000.00	\$ 15,000.00
2		Mobilization and Miscellaneous Project Costs	1.0	L.S.	\$ 10,000.00	\$ 10,000.00
3		Traffic Control - Road Closed	1.0	L.S.	\$ 15,000.00	\$ 15,000.00
4		Soil Management Plan	1.0	L.S.	\$ 3,000.00	\$ 3,000.00
5		Allowance for Contractor Qualified Person	30.0	hr	\$ 150.00	\$ 4,500.00
6		Light-Duty Sediment Barrier	400.0	m	\$ 16.00	\$ 6,400.00
7		Close Cut Clearing and Grubbing	60.0	m2	\$ 200.00	\$ 12,000.00
8		Mechanical Stump Removal	4.0	ea	\$ 1,000.00	\$ 4,000.00
9		Temporary Worksite Isolation and Diversion	2.0	ea	\$ 10,000.00	\$ 20,000.00
10		Fish Rescue	2.0	ea	\$ 3,000.00	\$ 6,000.00
11		Dewatering Structure Excavations	2.0	ea	\$ 5,000.00	\$ 10,000.00
12		Earth Excavation, Grading (Culvert, Offsite Disposal)	150.0	m3	\$ 25.00	\$ 3,750.00
13		Earth Excavation, Grading (Ditching, Offsite Disposal)	200.0	m3	\$ 35.00	\$ 7,000.00
14		Removal of Asphalt Pavement (Driveways)	545.0	m2	\$ 20.00	\$ 10,900.00
15		Removal of Concrete (Driveways, Stamped)	40.0	m2	\$ 80.00	\$ 3,200.00
16		Removal of Pipe and Culvert	2.0	ea	\$ 5,000.00	\$ 10,000.00
17		300Ø, HDPE, 320 kPa Pipe Culvert	14.0	m	\$ 350.00	\$ 4,900.00
18		450Ø, HDPE, 320kPa Pipe Culvert	14.0	m	\$ 500.00	\$ 7,000.00
19		Biaxial Geogrid with Geotextile	1,470.0	m2	\$ 10.00	\$ 14,700.00
20		In-Place Full Depth Reclamation of Bituminous Pavement and Underlying Granular (Existing Gravel Road)	17,990.0	m2	\$ 1.50	\$ 26,985.00
21		In-Place Full Depth Reclamation of Bituminous Pavement and Underlying Granular (Existing Asphalt Road)	910.0	m2	\$ 1.50	\$ 1,365.00
22		Granular 'A' (Culvert)	330.0	tonne	\$ 25.00	\$ 8,250.00
23		Granular 'A' (Road Base)	2,575.0	tonne	\$ 23.00	\$ 59,225.00
24		Granular 'A' (Driveways)	125.0	tonne	\$ 40.00	\$ 5,000.00
25		50% Granular 'A' / 50% RAP (Shoulders)	410.0	tonne	\$ 30.00	\$ 12,300.00
26		Concrete Pavement (Driveway, Stamped)	40.0	m2	\$ 200.00	\$ 8,000.00
27		Restoring Roadway Surfaces	18,900.0	m2	\$ 1.50	\$ 28,350.00
28		Hot Mix HL 4 (Surface Course, 60mm)	2,770.0	tonne	\$ 85.00	\$ 235,450.00
29		MTU - Material Transfer Unit	2,770.0	tonne	\$ 3.00	\$ 8,310.00
30		Hot Mix HL 4 (Surface Course, 50mm Driveways)	70.0	tonne	\$ 140.00	\$ 9,800.00
31		R-10 Rip-Rap on Geotextile	250.0	tonne	\$ 85.00	\$ 21,250.00
32		Import Topsoil and Hydroseed	200.0	m2	\$ 10.00	\$ 2,000.00
33		Pavement Marking (Double Application, 10cm Solid Yellow Single Centreline)	2,700.0	m	\$ 2.00	\$ 5,400.00
34		Pavement Marking (Double Application, 10cm Solid White Edge Line)	5,400.0	m	\$ 2.00	\$ 10,800.00
35		Pavement Marking, Durable (Double Application, 60cm Stop Bar)	2.0	ea	\$ 200.00	\$ 400.00
36		Mailbox Relocation (Provisional)	21.0	ea	\$ 200.00	\$ 4,200.00
37		Street Sweeper with Operator (Provisional)	20.0	hr	\$ 140.00	\$ 2,800.00
38		Water for Compaction and Dust Suppression (Provisional)	500.0	m3	\$ 16.00	\$ 8,000.00
39		Hydrovac Excavation (Provisional)	10.00	hr	\$ 500.00	\$ 5,000.00
40		Gradall with Operator (or Equivalent, Ditching, Provisional)	10.00	hr	\$ 200.00	\$ 2,000.00
41		Allowance for Incidental Scope	1.0	L.S.	\$ 30,000.00	\$ 30,000.00
ESTIMATED CONSTRUCTION COST						\$ 662,235.00

TOWNSHIP OF PUSLINCH
SIDEROAD 10 NORTH SURFACE WORKS
PROJECT No. 123018-6
Preliminary Cost Estimate

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	EST. QTY.	EST. UNIT PRICE	TOTAL AMOUNT
		AC Index Adjustment (No Bid Required)				\$ 15,000.00
		Geotechnical Investigation				\$ 15,000.00
		Engineering, Contract Administration and Construction Inspection				\$ 80,000.00
		Contingency Allowance				\$ 70,000.00
TOTAL ESTIMATED COST						\$ 772,235.00
TOTAL ESTIMATED COST (ROUNDED)						\$ 780,000.00

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PUSLINCH

CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM



MATCHLINE STA. 0+330
SEE FIGURE No. 7



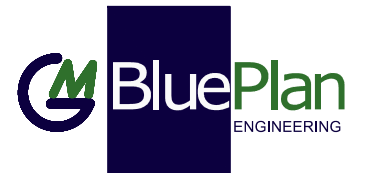
- ACCOUNT FOR MAILBOX RELOCATION FOR EVERY DRIVEWAY
- LINEPAINTING
 - EDGE LINE
 - CENTRELINE
 - STOP BAR?

FIGURE No. 7
SIDEROAD 10 NORTH

SEE FIGURE No. 7
MATCHLINE STA. 0+330

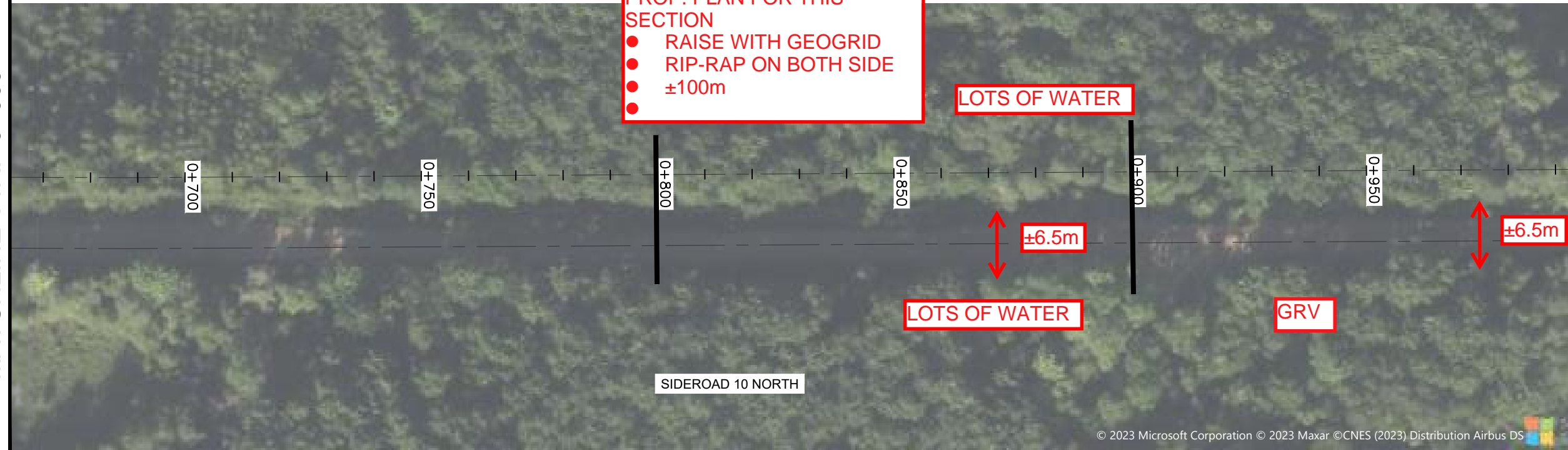


MATCHLINE STA. 0+660
SEE FIGURE No. 8



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SEE FIGURE No. 7
MATCHLINE STA. 0+660

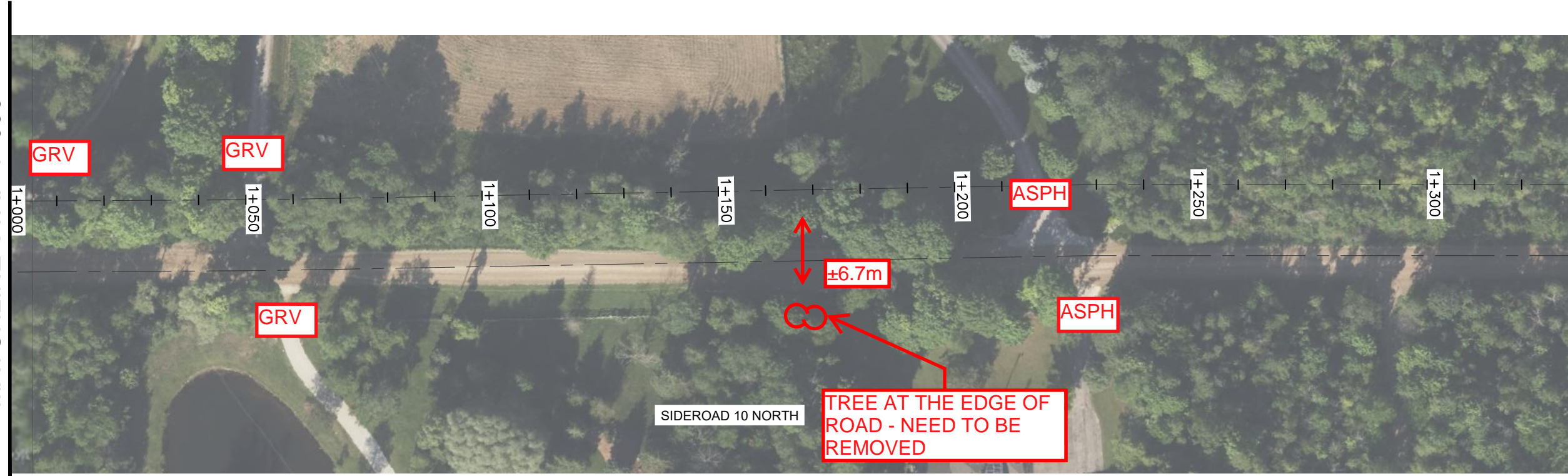


MATCHLINE STA. 1+000
SEE FIGURE No. 8

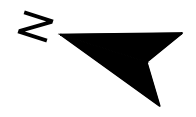


FIGURE No. 8
SIDEROAD ROAD 10
NORTH

SEE FIGURE No. 8
MATCHLINE STA. 1+000

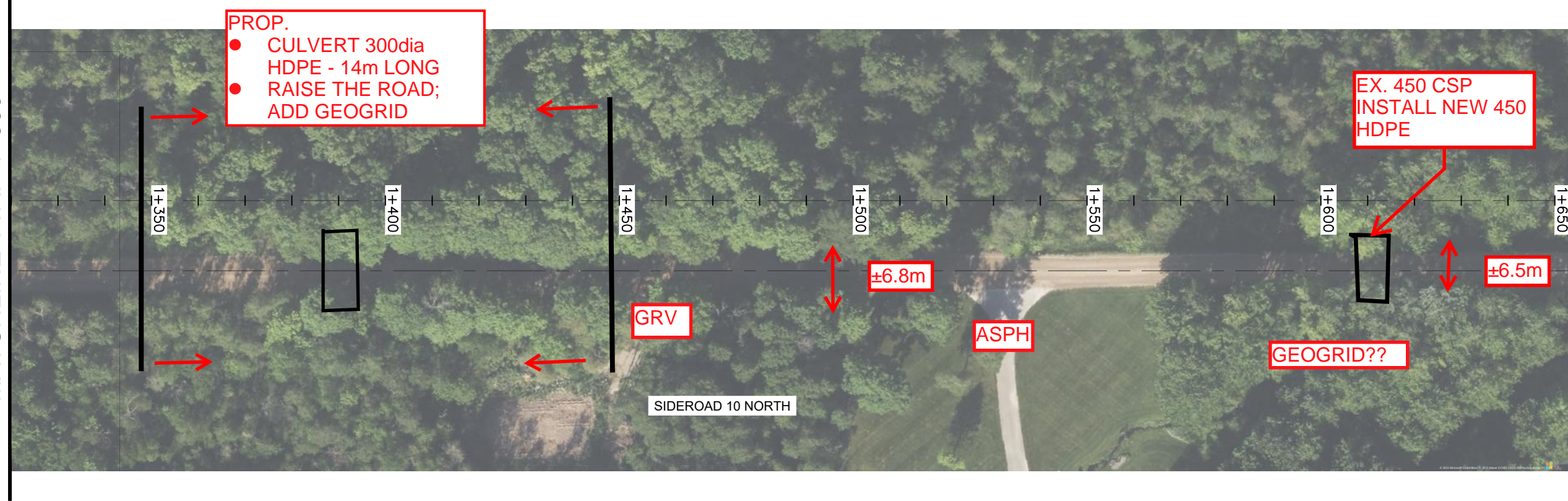


MATCHLINE STA. 1+330
SEE FIGURE No. 9



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SEE FIGURE No. 8
MATCHLINE STA. 1+330



MATCHLINE STA. 1+650
SEE FIGURE No. 9

FIGURE No. 9
SIDEROAD 10 NORTH

SEE FIGURE No. 9
MATCHLINE STA. 1+650



MATCHLINE STA. 1+970
SEE FIGURE No. 10

FILE:W:\Gueph\123-2023\123018 Puslinch Asphalt Program\5 Work In Progress\Drafting\Sheets\123018 - GEN.dwg LAYOUT:FIGURE No. 10
LAST SAVED BY:nbaltazar, 5/5/2023 9:50:14 AM PLOTTED BY:Neil Baltazar - GM BluePlan 5/5/2023 9:52:04 AM



TOWNSHIP OF
PUSLINCH
EST. 1852

CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM

SEE FIGURE No. 9
MATCHLINE STA. 1+970

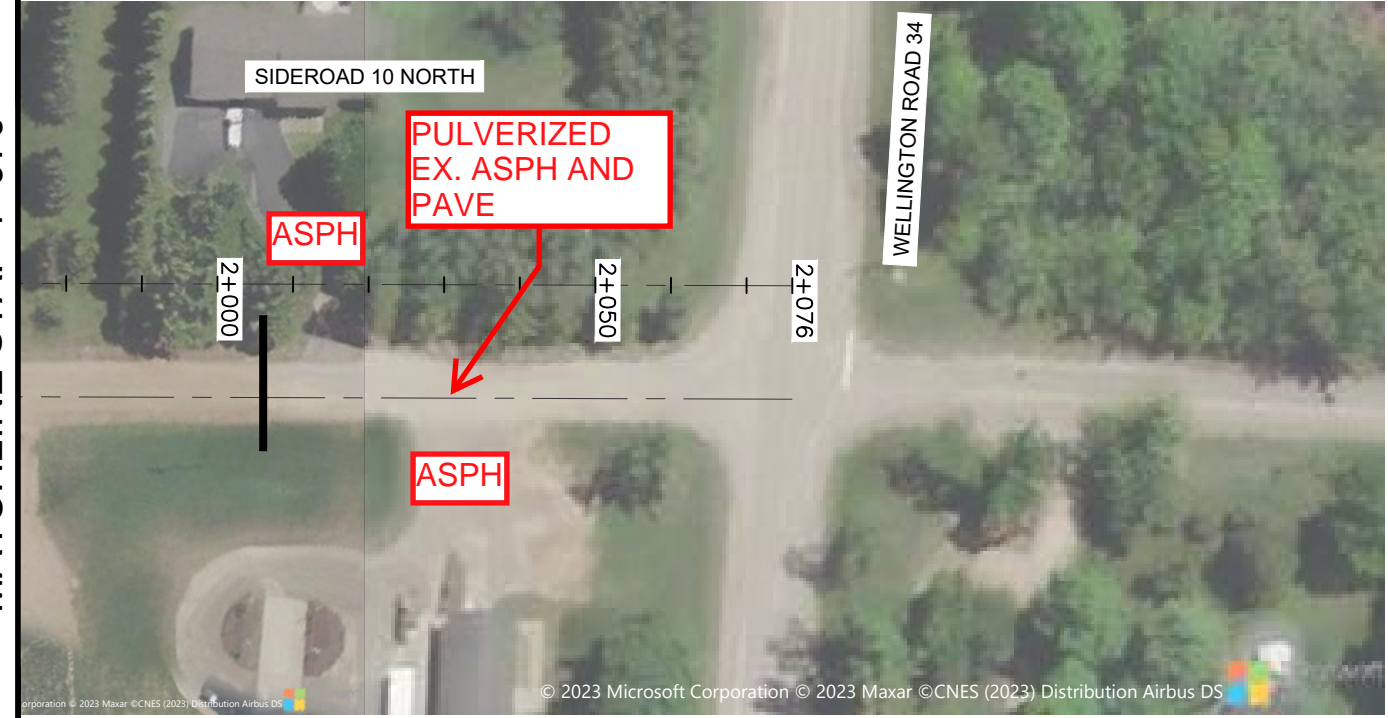


FIGURE No. 10
SIDEROAD 10 NORTH



123018
MAY 2023
Scale: 1:1000 | NAD 1983 UTM Zone 17N



Date: August 28, 2023 File: 123018
To: Mike Fowler, Township of Puslinch
From: Matt Scott
Project: Carter Road and Farnham Road Surface Works
Subject: Preliminary Cost Estimate

TECHNICAL MEMO

The purpose of this technical memo is to accompany the attached pre-engineering cost estimate provided by GM BluePlan Engineering Limited (GMBP) to the Township of Puslinch (Township) for hard-surfacing Carter Road and Farnham Road.

The Township has identified three existing sections of gravel road that are being considered for hard-surfacing. Based on information provided by the Township, we understand the following about each section of road:

- Carter Road (Arkeil Road to Cooks Mill Road)
 - Township Asset ID 129
 - AADT = 190 vehicles
 - Posted speed limit = 50 km/h
- Farnham Road (Arkeil Road to Carter Road)
 - Township Asset ID 79
 - AADT unknown (assumed to be less than 200 vehicles)
 - Posted speed limit = 50 km/h
- Cook's Mill Road (Carter Road to Paved Limit)
 - Township Asset ID 8
 - AADT = 190 vehicles
 - Posted speed limit = 50 km/h

GMBP visited the site on June 29, 2023 to observe the existing condition of each road section and take preliminary measurements for the purposes of providing a preliminary cost estimate. No preliminary or detailed design has been completed at this stage. Notes from our site visits are attached to this memo.

Our total estimated total cost to hard surface Carter Road, Farnham Road, and the remaining gravel section of Cook's Mill Road is approximately \$1,130,000 +HST. This includes for:

- Construction Costs
- Legal Survey and Property Acquisition Costs at the north end of Carter Road
- Allowance for Utility Relocations
- Allowance for Geotechnical Investigation
- Allowance for Asphalt Cement Index Payment Adjustment
- Engineering, Contract Administration and Construction Inspection (10%)
- Contingency (10%)

Additional discussions and considerations provided in the following sections.

Platform and Road Width

All sections of road currently do not provide a sufficient platform width to accommodate the Township's standard rural road cross-section of a 7.0m paved surface and 0.5m shoulders (8.0m total width). We note that the Township's development standards require an 8.0m wide paved surface with minimum 1.0m wide shoulders and 0.6m wide rounding (minimum platform width of 11.2m) in residential applications; however, for recent capital road projects, the 8.0m platform width has been used.

The existing road platform was measured to be between 6.0m and 7.5m on Carter Road, Cook's Mill Road and Farnham Road, with some sections of the gravel surface being as narrow as 5.0m. At the request of Township, we considered a 6.0m paved driving roadway with 0.5m paved shoulders and edge lines. This substandard road cross-section would require Council Approval.

Alternatively, the Township could consider widening out the existing road surface to provide an 8.0m wide platform similar to other rural roads within the Township. This may impact existing private property and would require a legal survey to confirm the limits of the existing Right-of-Way and magnitude of property acquisitions.

Structural Adequacy of Road

Based on discussions with the Township, we understand that there are sections of Carter Road can rut when the road is saturated. We have accounted for minor raising the road profile throughout the site, installing new culverts at the north end of Carter Road and west end of Farnham Road, and ditching. The Township also noted that roughly 570.0m of Carter Road is thought to have poor subbase. Therefore, we recommend a geotechnical investigation to inform any subbase improvements as well as additional boreholes spread out throughout the project to assess the existing subsurface condition of the road. Preliminary costs for a geotechnical investigation have been included in the cost estimate.

Hard-surface Method

The method of hard-surfacing chosen for this road is a single lift of 60mm surface asphalt to align with recent capital works projects within the Township and for the purposes of budgeting. Depending on market conditions at the time of tendering, and preference of the Township, surface treatment could also be considered.

Surface Runoff Maintenance

Previous site visits by GMBP staff have noted standing water at the north end of Carter Road. Our preliminary cost estimate has attempted to account for the addition of granular material to raise the existing road profile in some locations as well as provide ditching in others; however, we note that there may be no formal outlet for the runoff in some locations, which is likely to lead to standing water and issues with the road base material.

Under these conditions, we would expect to see a reduced service life of a hard-surfaced road. An example of how the Township could expect the road to perform would be Cook's Mill Road east of the Eramosa River, which was paved in 2013.

There are areas where ditches are not provided, and the residential lawn is maintained up to the edge of the gravel road surface. If the Township wishes to maintain this configuration, then subdrain and curbs may be required. This work has not been included in the cost estimate provided. We understand based on discussions with Township staff that some areas have previously had subdrains installed to manage drainage.

We also note that ditching, subdrain and other methods would require an appropriate outlet for the water. Without a proper outlet, the road base would remain saturated until the water evaporates or is absorbed through the native material. There are several areas along Carter Road and Farnham Road where we believe this is currently happening after rainfall events, and the performance of the road may not improve once the road is hard-surfaced.

Culvert Replacements

We noted during our site visit that there is a small diameter culvert regulated by the GRCA on Carter Road approximately 1.3km north of Arkell Road, as well as two small diameter culverts on Farnham Road that appear to convey runoff from the road surface. These culverts should be replaced and elongated as part of the surface works. A permit would be required from the GRCA for the culvert on Carter Road.

As part of the proposed works, we note that some of the existing driveway culverts will require replacement and some driveways that currently do not have a culvert will require one to be installed. Modifications may be required to some driveways to provide adequate cover to the driveway culvert, as some existing driveway culverts were noted to have substandard cover.

New culverts have been proposed at the north end of Carter Road and west end of Farnham Road for drainage purposes.

Vertical Profile, Alignment and Site Stopping Distances

We have not completed a review of the vertical profile, alignment or site stopping distance requirements for this section of road. The Township should review whether there are locations on these sections of road that are prone to accidents and consider whether adjustments to the road alignment and configuration are warranted or require specific review.

Guelph Junction Railway

Any work that is being done near an active railway line is anticipated to require a qualified employee (Flagperson) from the railway company. A minimum 90 days notice is anticipated to be required to Guelph Junction Railway before the start of any work. An allowance for daily flagging for the duration of construction is included in the preliminary cost estimate.

Utilities

We have not completed any consultation with local utility companies to determine whether any utility infrastructure is in conflict with the anticipated scope of work. An allowance has been provided for potential utility relocations. During design, formal discussions with local utility companies are recommended.

END OF MEMO

Attachments:

- Preliminary Cost Estimate
- Site Visit Notes

DRAFT

TOWNSHIP OF PUSLINCH

CARTER ROAD AND FARNHAM ROAD SURFACE WORKS

PROJECT No. 123018-6

Preliminary Cost Estimate

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	EST. QTY.	EST. UNIT PRICE	TOTAL AMOUNT
1		Bonding and Insurance	1.0	L.S.	\$ 20,000.00	\$ 20,000.00
2		Mobilization and Miscellaneous Project Costs	1.0	L.S.	\$ 10,000.00	\$ 10,000.00
3		Traffic Control - Road Closed	1.0	L.S.	\$ 15,000.00	\$ 15,000.00
4		Soil Management Plan	1.0	L.S.	\$ 3,000.00	\$ 3,000.00
5		Allowance for Contractor Qualified Person	30.0	hr	\$ 150.00	\$ 4,500.00
6		Close Cut Clearing and Grubbing	1.0	L.S.	\$ 10,000.00	\$ 10,000.00
7		Light-Duty Sediment Barrier	100.0	m	\$ 16.00	\$ 1,600.00
8		Temporary Worksite Isolation and Diversion	1.0	L.S.	\$ 10,000.00	\$ 10,000.00
9		Fish Rescue	1.0	L.S.	\$ 3,000.00	\$ 3,000.00
10		Dewatering Structure Excavations	1.0	L.S.	\$ 5,000.00	\$ 5,000.00
11		Earth Excavation, Grading (Culvert, Offsite Disposal)	560.0	m3	\$ 25.00	\$ 14,000.00
12		Earth Excavation, Grading (Ditching, Offsite Disposal)	245.0	m3	\$ 35.00	\$ 8,575.00
13		Earth Excavation, Grading (Road, Offsite Disposal)	565.0	m3	\$ 25.00	\$ 14,125.00
14		Removal of Asphalt Pavement (Driveways)	1,180.0	m2	\$ 20.00	\$ 23,600.00
15		Removal of Interlocking Brick (Driveways, Salvage Brick)	70.0	m2	\$ 20.00	\$ 1,400.00
16		Removal of Concrete (Driveways, Stamped)	25.0	m2	\$ 30.00	\$ 750.00
17		Removal of Pipe and Culverts	7.0	each	\$ 1,500.00	\$ 10,500.00
18		300Ø, HDPE, 320 kPa Pipe Culvert	30.0	m	\$ 350.00	\$ 10,500.00
19		300Ø, Circular Concrete, Class 65-D Pipe Culvert (including Class 'B' Bedding)	17.0	m	\$ 500.00	\$ 8,500.00
20		450Ø, HDPE, 320kPa Pipe Culvert	21.0	m	\$ 450.00	\$ 9,450.00
20		600Ø, HDPE, 320kPa Pipe Culvert	33.0	m	\$ 500.00	\$ 16,500.00
21		Biaxial Geogrid with Geotextile	1,800.0	m2	\$ 10.00	\$ 10,800.00
22		Pipe Subdrain (150Ø Complete with Clear stone, Geotextile, Coupling, Connectors and Outlets)	150.0	m	\$ 60.00	\$ 9,000.00
23		In-Place Full Depth Reclamation of Bituminous Pavement and Underlying Granular (Existing Gravel Road)	22,470.0	m2	\$ 1.50	\$ 33,705.00
24		In-Place Full Depth Reclamation of Bituminous Pavement and Underlying Granular (Existing Asphalt Road)	1,575.0	m2	\$ 1.50	\$ 2,362.50
25		Granular 'B' (Road Base)	930.0	tonne	\$ 20.00	\$ 18,600.00
26		Granular 'A' (Culvert)	1,285.0	tonne	\$ 25.00	\$ 32,125.00
27		Granular 'A' (Road Base)	2,135.0	tonne	\$ 23.00	\$ 49,105.00
28		Granular 'A' (Driveways)	145.0	tonne	\$ 40.00	\$ 5,800.00
29		Interlocking Brick (Driveways, Salvaged Brick)	70.0	m2	\$ 20.00	\$ 1,400.00
30		Concrete Pavement (Driveway, Stamped)	25.0	m2	\$ 16.00	\$ 400.00
31		Restoring Roadway Surfaces	24,045.0	m2	\$ 1.50	\$ 36,067.50
32		Hot Mix HL 4 (Surface Course, 60mm)	3,540.0	tonne	\$ 85.00	\$ 300,900.00
33		MTU - Material Transfer Unit	3,540.0	tonne	\$ 3.00	\$ 10,620.00
34		Hot Mix HL 4 (Surface Course, 50mm Driveways)	160.0	tonne	\$ 140.00	\$ 22,400.00
35		R-10 Rip-Rap on Geotextile	225.0	tonne	\$ 85.00	\$ 19,125.00
36		Concrete Curb and Gutter	80.0	m	\$ 80.00	\$ 6,400.00
37		Import Topsoil and Hydroseed	2,185.0	m2	\$ 10.00	\$ 21,850.00
38		Pavement Marking (Double Application, 10cm Solid Yellow Single Centreline)	3,435.0	m	\$ 2.00	\$ 6,870.00
39		Pavement Marking (Double Application, 10cm Solid White Edge Line)	6,870.0	m	\$ 2.00	\$ 13,740.00
40		Pavement Marking, Durable (Double Application, 60cm Stop Bar)	4.0	ea	\$ 200.00	\$ 800.00
41		Railway Flagging (Provisional)	10.0	day	\$ 1,500.00	\$ 15,000.00

TOWNSHIP OF PUSLINCH

CARTER ROAD AND FARNHAM ROAD SURFACE WORKS

PROJECT No. 123018-6

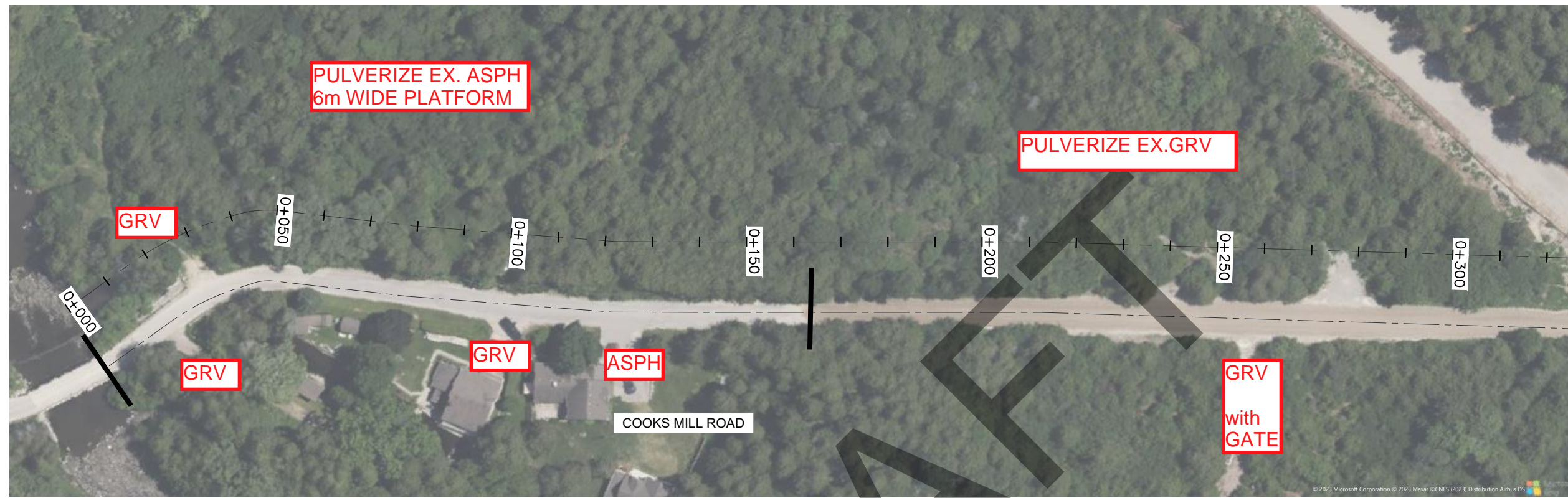
Preliminary Cost Estimate

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	EST. QTY.	EST. UNIT PRICE	TOTAL AMOUNT
42		Mailbox Relocation (Provisional)	67.0	ea	\$ 200.00	\$ 13,400.00
43		Install Traffic Sign (Provisional)	1.0	ea	\$ 150.00	\$ 150.00
44		Remove and Replace Existing Wood Fence (Provisional)	20.0	m	\$ 60.00	\$ 1,200.00
45		Street Sweeper with Operator (Provisional)	20.0	hr	\$ 140.00	\$ 2,800.00
46		Water for Compaction and Dust Suppression (Provisional)	500.0	m3	\$ 16.00	\$ 8,000.00
47		Hydrovac Excavation (Provisional)	20.00	hr	\$ 500.00	\$ 10,000.00
48		Gradall with Operator (or Equivalent, Ditching, Provisional)	10.00	hr	\$ 200.00	\$ 2,000.00
49		Allowance for Incidental Scope	1.0	L.S.	\$ 30,000.00	\$ 30,000.00
ESTIMATED CONSTRUCTION COST						\$ 884,620.00
Legal Survey and Property Acquisition Allowance						\$ 20,000.00
AC Index Adjustment (No Bid)						\$ 30,000.00
Contingency Allowance						\$ 80,000.00
Utility Relocation Allowance						\$ 15,000.00
Geotechnical Investigation						\$ 25,000.00
Engineering, Contract Administrator and Construction Inspection						\$ 70,000.00
TOTAL ESTIMATED COST						\$1,124,620.00
TOTAL ESTIMATED COST (ROUNDED)						\$1,130,000.00

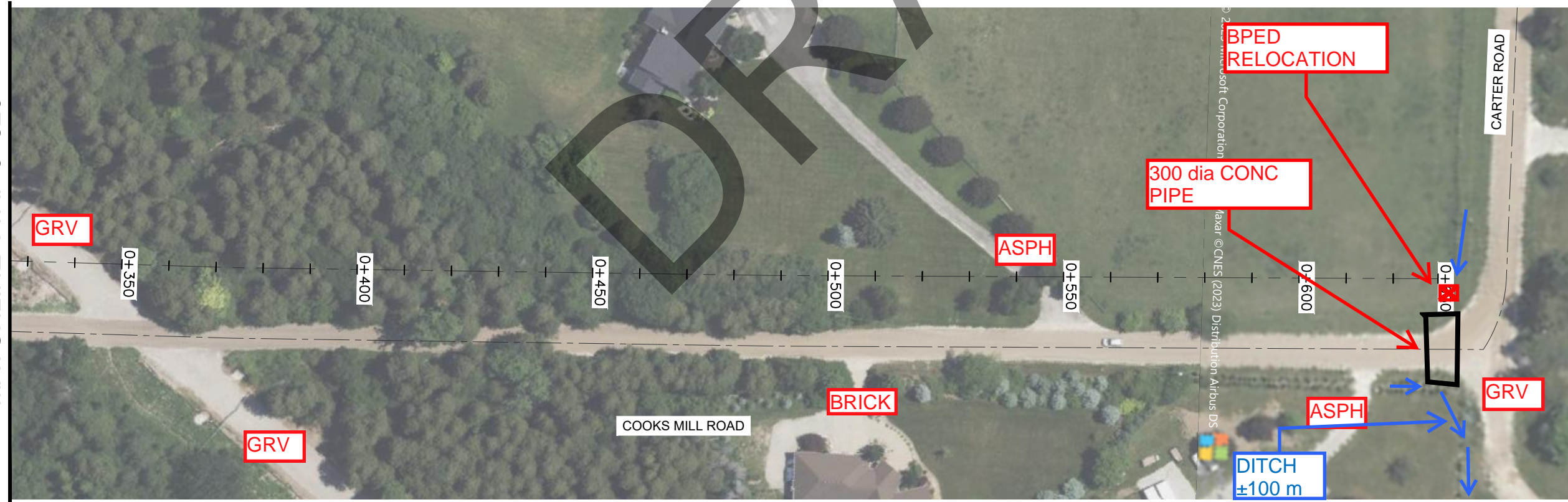
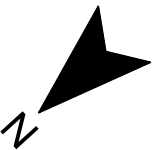


PUSLINCH

CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM



MATCHLINE STA. 0+320
SEE FIGURE No. 1



SEE FIGURE No. 1
MATCHLINE STA. 0+320

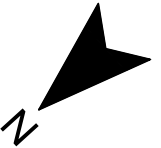


FIGURE No. 1
CARTER ROAD

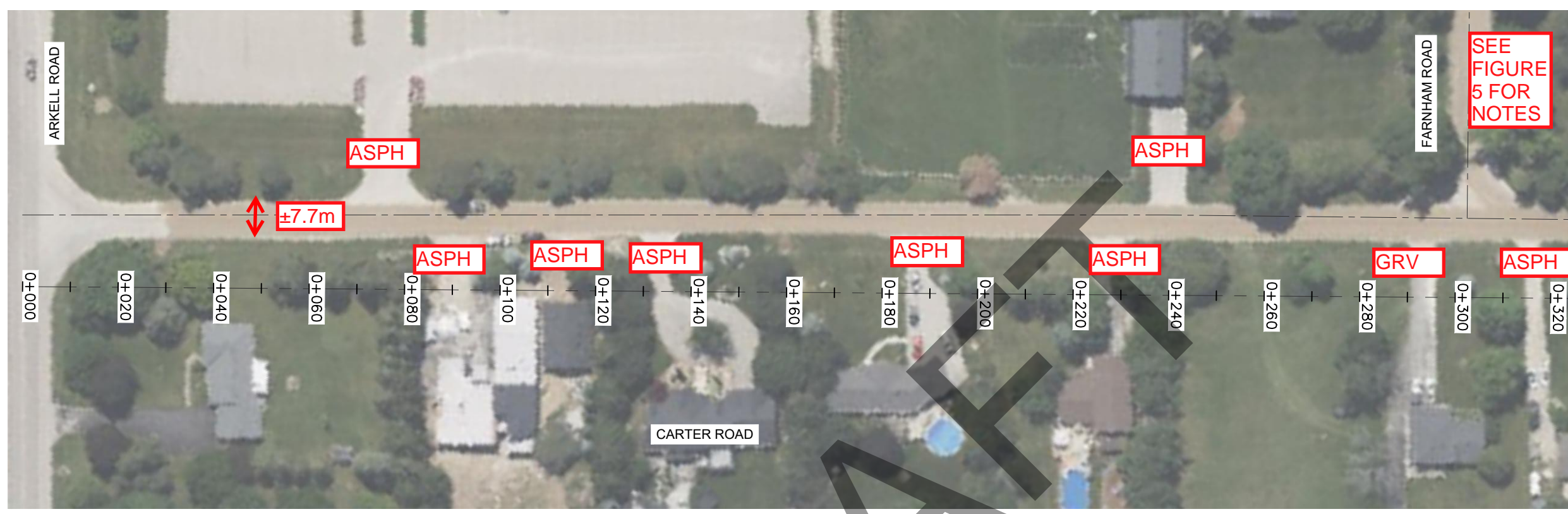
- CLEAR AND GRUB AT THE ILLEGAL TRAIL OF THIS PROPERTY
- DITCH RUNS IN THE ILLEGAL TRAIL
- PUT BACK GRANULAR A BESIDES DITCH

FILE:W:\Gueph\123-2023\123018 Puslinch Asphalt Program\5 Work in Progress\Drafting\Sheets\123018 - GEN.dwg LAYOUT:FIGURE No. 2
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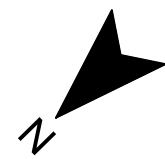


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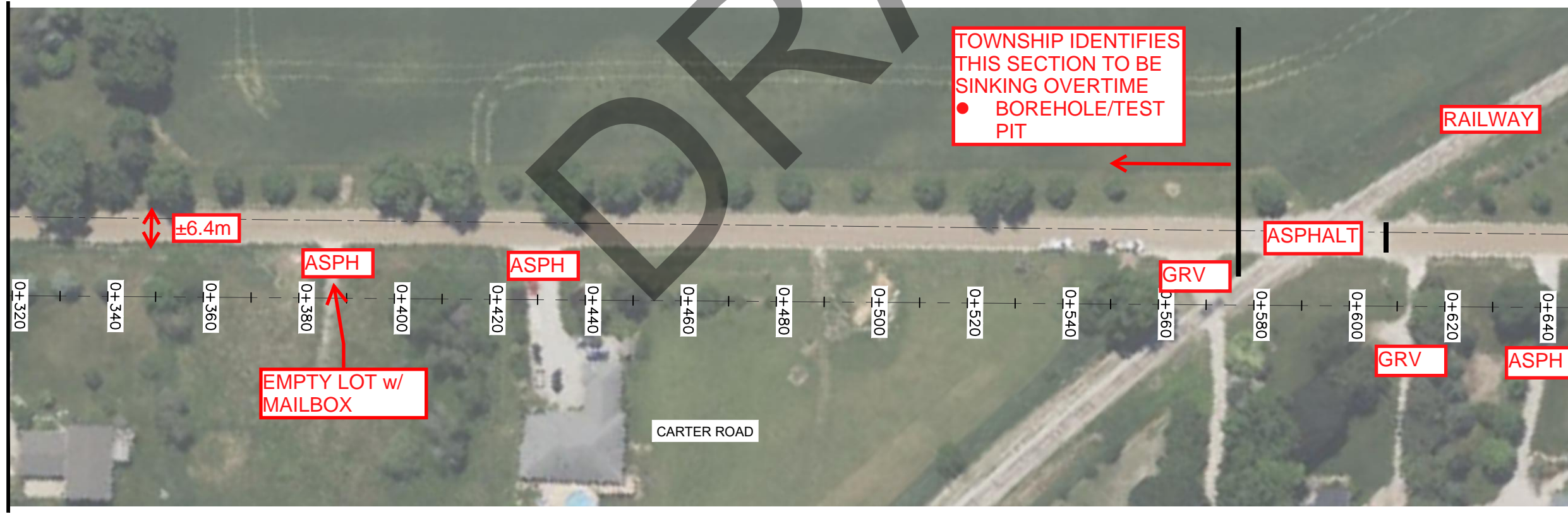
CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM



MATCHLINE STA. 0+320
SEE FIGURE No. 2



- ACCOUNT FOR MAILBOX RELOCATION FOR EVERY DRIVEWAY
- PAVED FROM GRASS TO GRASS (CONSISTENT WIDTH, TOPSOIL AND HYDROSEED ON THE SHOULDER OF WIDER AREA)
- LINEPAINTING
 - EDGE LINE
 - CENTRELINE
 - STOP BAR?



SEE FIGURE No. 2
MATCHLINE STA. 0+320

MATCHLINE STA. 0+640
SEE FIGURE No. 2

FIGURE No. 2
CARTER ROAD

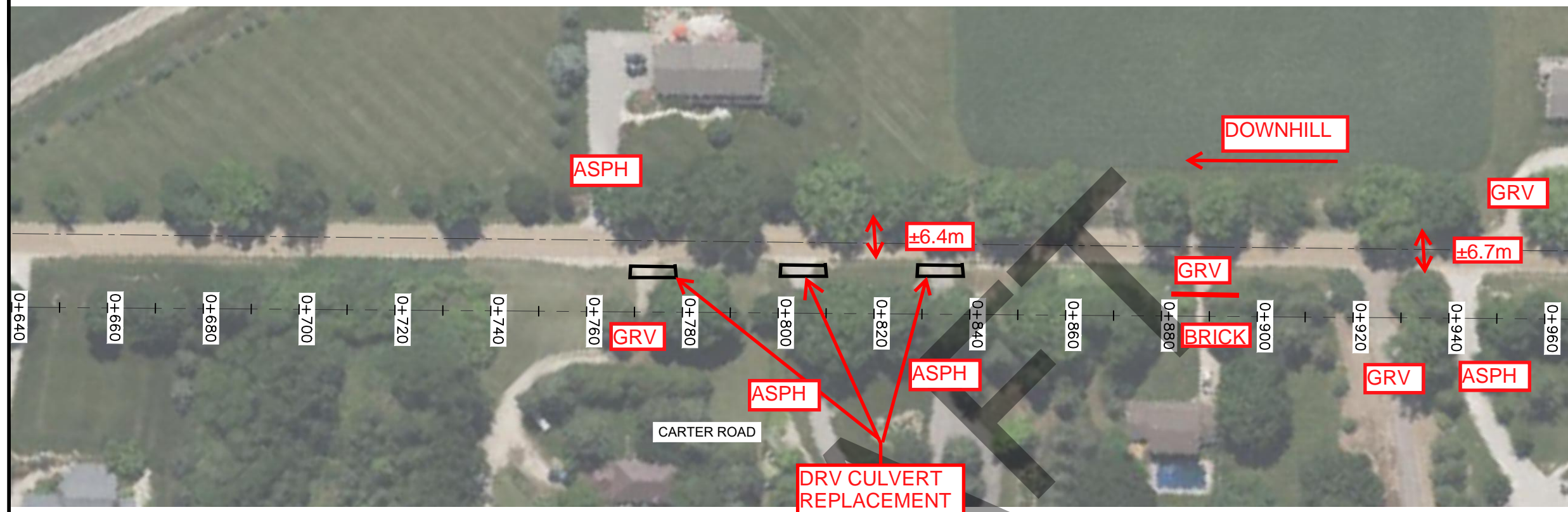




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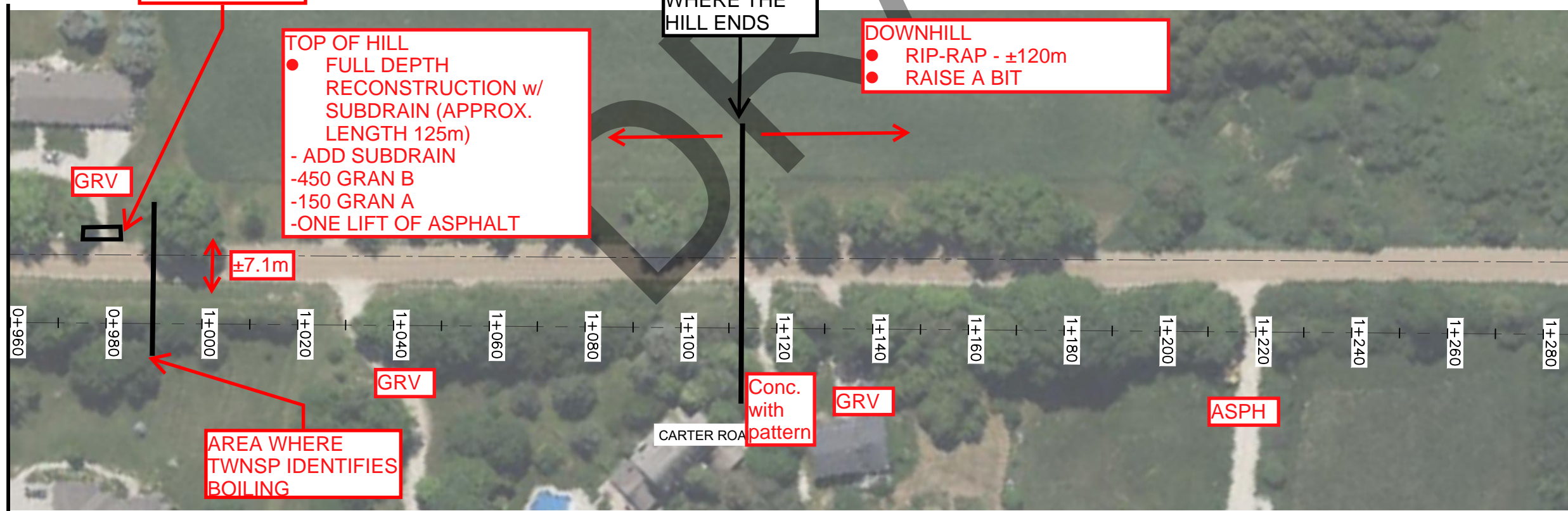
CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM

SEE FIGURE No. 2
MATCHLINE STA. 0+640



MATCHLINE STA. 0+960
SEE FIGURE No. 3

SEE FIGURE No. 3
MATCHLINE STA. 0+960



MATCHLINE STA. 1+280
SEE FIGURE No. 4

FIGURE No. 3
CARTER ROAD



123018
MAY 2023
Scale: 1:1000 | NAD 1983 UTM Zone 17N



PUSLINCH

CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM

SEE FIGURE No. 3
MATCHLINE STA. 1+280



MATCHLINE STA. 1+600
SEE FIGURE No. 4

SEE FIGURE No. 4
MATCHLINE STA. 1+600

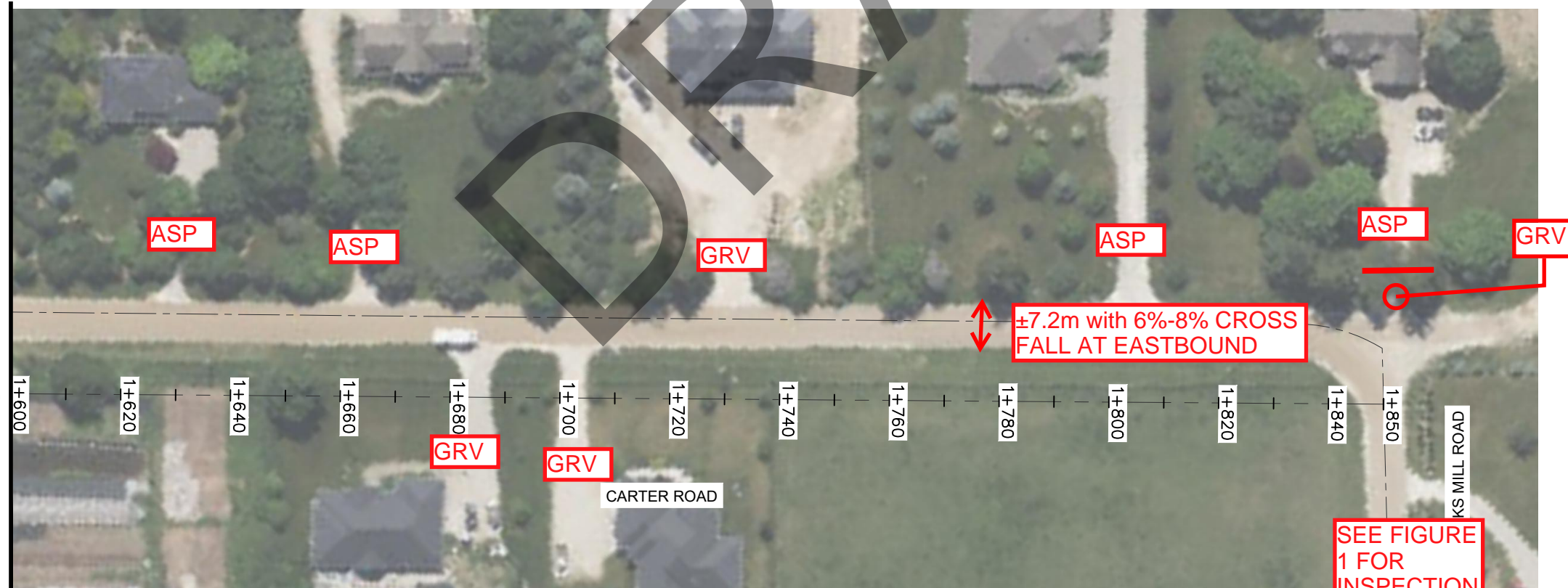


FIGURE No. 4
CARTER ROAD

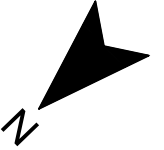


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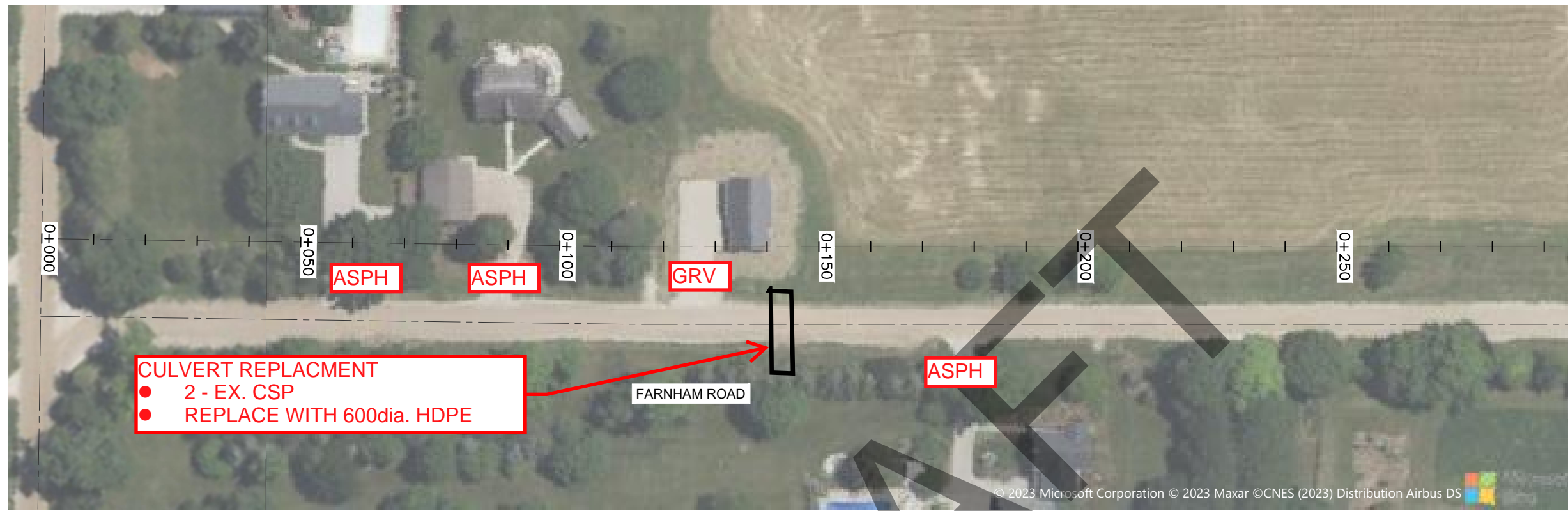


TOWNSHIP OF
PUSLINCH
EST. 1852

CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM

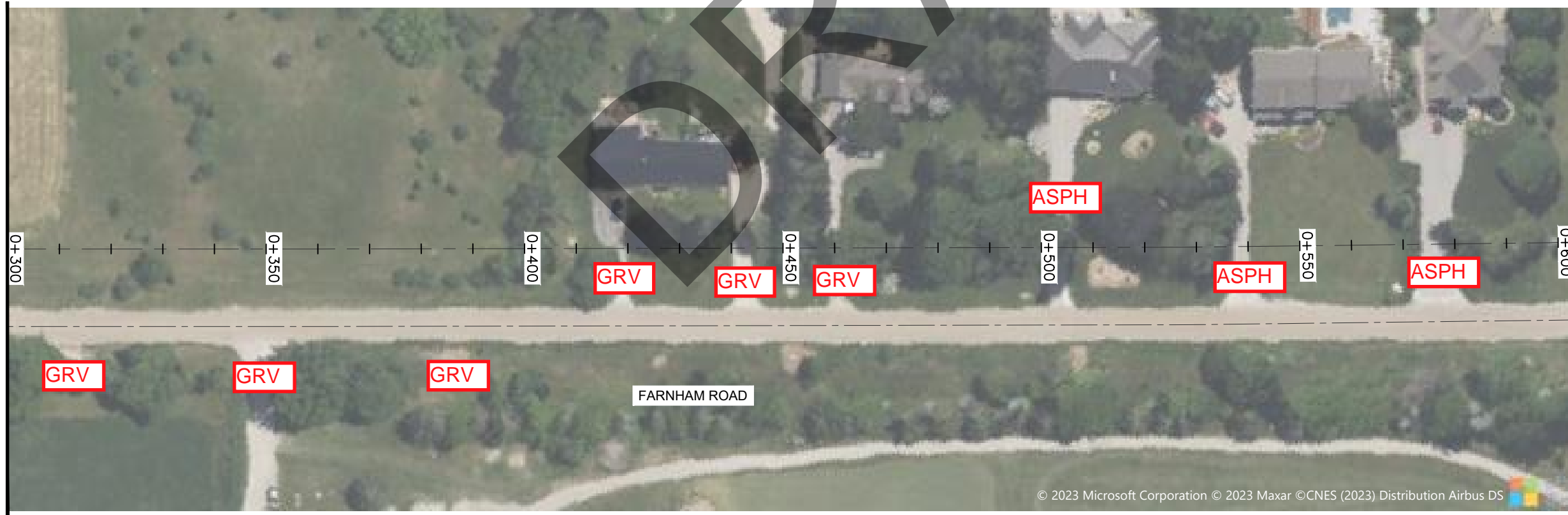


MATCHLINE STA. 0+300
SEE FIGURE No. 5



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SEE FIGURE No. 5
MATCHLINE STA. 0+300



© 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS

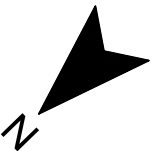


FIGURE No. 5
FARNHAM ROAD

SEE FIGURE No. 6

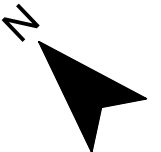


123018
MAY 2023
Scale: 1:1000 | NAD 1983 UTM Zone 17N



PUSLINCH

CONTRACT No. PW##-###
PUSLINCH ASPHALT PROGRAM



450dia. HDPE
FLOWING TO
WEST

SEE FIGURE No. 5
MATCHLINE STA. 0+600

at least 80m long

FLOWERBED

CURB AND GUTTER
(ASPH???) UNTIL
FLOWER BED
VS
RIP-RAP DITCH
FLOWING NORTH

PULVERIZE EX.
ASPH AND
PAVED

PROP. TO
SUPERELEVATE
GOING EAST

MATCHLINE STA. 0+260
SEE FIGURE No. 6

BRICK

GRV

GRV

ASPH

BRICK

GRV

FARNHAM ROAD

ARKELL ROAD

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FIGURE No. 6
FARNHAM ROAD



123018
MAY 2023 Scale: 1:1000 | NAD 1983 UTM
Zone 17N

FILE:W:\Gueph\123-2023\123018 Pulinch Asphalt Program\5 Work In Progress\Drafting\Sheets\123018 - GEN.dwg LAYOUT:FIGURE No. 6
LAST SAVED BY:nbaltazar, 5/5/2023 9:50:14 AM PLOTTED BY:Neil Baltazar - GM BluePlan 5/5/2023 9:51:44 AM

FOT
COOKS MILLS ROAD SURFACE WORKS
PROJECT No. 124001

Preliminary Cost Estimate

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	EST. QTY.	EST. UNIT PRICE	TOTAL AMOUNT
1		Bonding and Insurance	1.0	L.S.	\$ 7,000.00	\$ 7,000.00
2		Mobilization and Miscellaneous Project Costs	1.0	L.S.	\$ 7,000.00	\$ 7,000.00
3		Traffic Control - Road Closed	1.0	L.S.	\$ 5,000.00	\$ 5,000.00
4		Soil Management Plan	0.0	L.S.	\$ 3,000.00	\$ -
5		Allowance for Contractor Qualified Person	0.0	hr	\$ 150.00	\$ -
6		Close Cut Clearing and Grubbing	1.0	L.S.	\$ 5,000.00	\$ 5,000.00
7		Light-Duty Sediment Barrier	100.0	m	\$ 16.00	\$ 1,600.00
8		Earth Excavation, Grading (Ditching, Offsite Disposal)	50.0	m3	\$ 35.00	\$ 1,750.00
9		Removal of Interlocking Brick (Driveways, Salvage Brick)	20.0	m2	\$ 20.00	\$ 400.00
10		Granular 'A' (Road Base)	350.0	tonne	\$ 23.00	\$ 8,050.00
11		Granular 'A' (Driveways)	10.0	tonne	\$ 40.00	\$ 400.00
12		Interlocking Brick (Driveways, Salvaged Brick)	20.0	m2	\$ 20.00	\$ 400.00
13		Restoring Roadway Surfaces	3,000.0	m2	\$ 1.50	\$ 4,500.00
14		Hot Mix HL 4 (Surface Course, 60mm)	400.0	tonne	\$ 85.00	\$ 34,000.00
15		MTU - Material Transfer Unit	400.0	tonne	\$ 3.00	\$ 1,200.00

16		Hot Mix HL 4 (Surface Course, 50mm Driveways)	10.0	tonne	\$ 250.00	\$ 2,500.00
17		Import Topsoil and Hydroseed	150.0	m2	\$ 10.00	\$ 1,500.00
18		Pavement Marking (Double Application, 10cm Solid Yellow Single Centreline)	0.0	m	\$ 2.00	\$ -
19		Pavement Marking (Double Application, 10cm Solid White Edge Line)	0.0	m	\$ 2.00	\$ -
20		Pavement Marking, Durable (Double Application, 60cm Stop Bar)	1.0	ea	\$ 200.00	\$ 200.00
21		Mailbox Relocation (Provisional)	3.0	ea	\$ 400.00	\$ 1,200.00
22		Install Traffic Sign (Provisional)	1.0	ea	\$ 250.00	\$ 250.00
23		Remove and Replace Existing Wood Fence (Provisional)	0.0	m	\$ 60.00	\$ -
24		Street Sweeper with Operator (Provisional)	4.0	hr	\$ 140.00	\$ 560.00
25		Water for Compaction and Dust Suppression (Provisional)	100.0	m3	\$ 16.00	\$ 1,600.00
26		Gradall with Operator (or Equivalent, Ditching, Provisional)	10.00	hr	\$ 200.00	\$ 2,000.00
27		Allowance for Incidental Scope	1.0	L.S.	\$ 15,000.00	\$ 15,000.00
ESTIMATED CONSTRUCTION COST						\$ 101,110.00
AC Index Adjustment (No Bid)						\$ 5,000.00
Contingency Allowance						\$ 15,000.00
Utility Relocation Allowance						
Geotechnical Investigation						\$ 10,000.00
Engineering, Contract Administration and Construction						\$ 15,000.00

TOTAL ESTIMATED COST	\$ 146,110.00
TOTAL ESTIMATED COST (ROUNDED)	\$ 150,000.00

Date 4/18/2024

Council Update Meeting

Puslinch by Design: Employment Lands Study

County of Wellington and
Township of Puslinch

June 12th, 2024

Consulting Team



Process

Project Initiation

01

Initial meetings, confirming data, and finalizing project schedule.



Spring/Summer 2024



Report on Township's website



Report on County's website

Spring/Summer 2024



02

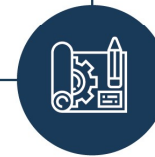
Research and analysis of topics to consider for Puslinch's employment lands (examples: transportation, land-use) which will establish the background context.

Existing Conditions

Detailed Planning Study

03

Bring together the background conditions and key information necessary to form land-use options for the future employment lands.



Summer/Fall 2024



Report on County's website



Report on Township's website



Township Council Meeting

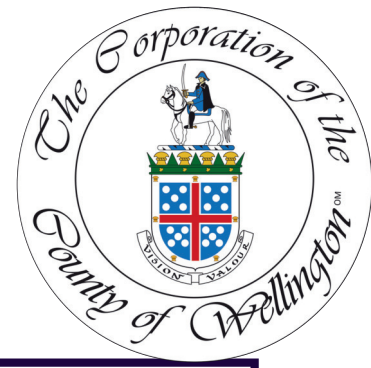
Process





TOWNSHIP OF
PUSLINCH
EST. 1850

Puslinch By Design: Employment Land Study

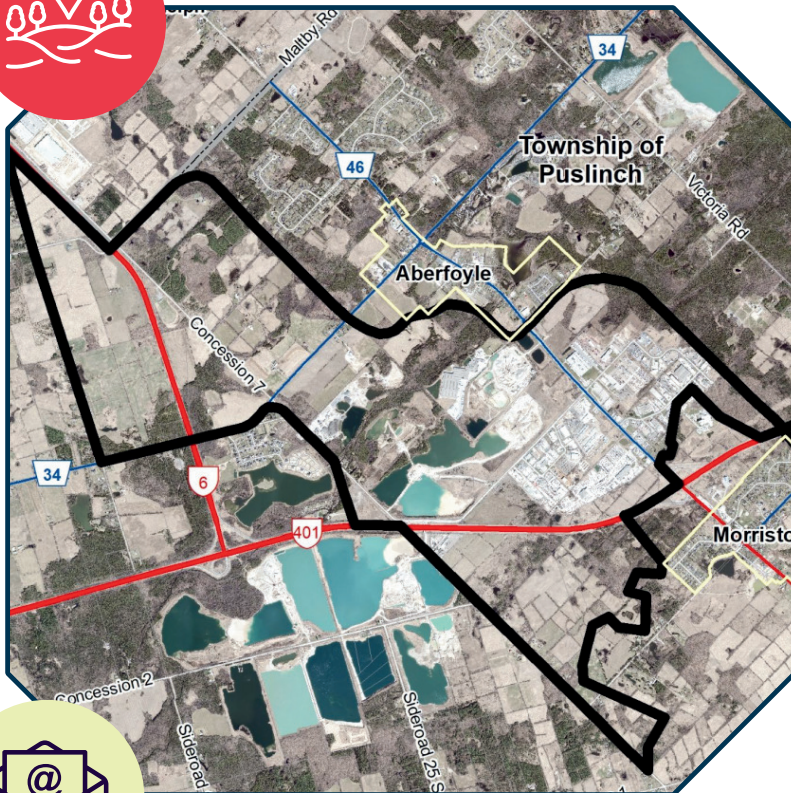


WHAT IS PUSLINCH BY DESIGN?

This important planning study will be completed in partnership between the Township and County of Wellington to identify employment lands in Puslinch.

WHY AM I RECEIVING THIS NOTICE?

Notices have been sent to all properties within the black bolded study area, as well as to properties adjacent to the study area, in order to establish an Interested Party List for this study.



WHY THIS BOUNDARY?

This study area boundary has been selected as a suitable location to look at options for additional employment lands due to its proximity to Highway 401 and 6. It is vital to the economic sustainability of Puslinch and is significant to Wellington County as a whole.



WHAT ARE THE NEXT STEPS IN THE STUDY?

This is a multi phase study with various stages and engagement opportunities. All steps will be shared directly with the Interested Party List and be available to the public through the Township's website, County of Wellington's website, as well as through the Township's social media.



DO YOU WANT TO BE ON THE INTERESTED PARTY LIST?

To be added to the interested party list and be notified of each phase during the study, use this QR code and fill out the 'Puslinch By Design Interested Party List' form. This form is also available at Puslinch.ca/PuslinchByDesign.



WHERE CAN I FIND MORE INFORMATION?

- Puslinch.ca/PuslinchByDesign
- Wellington.ca/en/resident-services/puslinch-by-design-employment-land-study.aspx



THANK YOU

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

BY-LAW NUMBER 042-2024

Being a by-law to confirm the proceedings of the Council of the Corporation of the Township of Puslinch at its Council meeting held on JUNE 12, 2024.

WHEREAS by Section 5 of the *Municipal Act, 2001, S.O. 2001, c.25* the powers of a municipal corporation are to be exercised by its Council;

AND WHEREAS by Section 5, Subsection (3) of the *Municipal Act*, a municipal power including a municipality's capacity, rights, powers and privileges under section 8, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

AND WHEREAS it is deemed expedient that the proceedings of the Council of the Corporation of the Township of Puslinch at its Council meeting held on JUNE 12, 2024 be confirmed and adopted by By-law;

NOW THEREFORE the Council of the Corporation of the Township of Puslinch hereby enacts as follows:

- 1) The action of the Council of the Corporation of the Township of Puslinch, in respect of each recommendation contained in the reports of the Committees and each motion and resolution passed and other action taken by the Council at said meeting are hereby adopted and confirmed.
- 2) The Head of Council and proper official of the Corporation are hereby authorized and directed to do all things necessary to give effect to the said action of the Council.
- 3) The Head of Council and the Clerk are hereby authorized and directed to execute all documents required by statute to be executed by them, as may be necessary in that behalf and the Clerk authorized and directed to affix the seal of the said Corporation to all such documents.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 12 DAY OF JUNE, 2024.

James Seeley, Mayor

Justine Brotherston, Interim Municipal Clerk