

#### **MUNICIPALITY OF MORRIS-TURNBERRY**

#### **COUNCIL AGENDA**

Tuesday, January 16th, 2024, 7:30 pm

The Council of the Municipality of Morris-Turnberry will meet in Council Chambers in regular session on the 16<sup>th</sup> day of January 2024, at 7:30 pm.

# 1.0 CALL TO ORDER

Disclosure of recording equipment.

# 2.0 ADOPTION OF AGENDA

Moved by ~ Seconded by ~

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the agenda for the meeting of January 16<sup>th</sup>, 2024, as circulated.

~

#### 3.0 DISCLOSURE OF PECUNIARY INTEREST / POTENTIAL CONFLICT OF INTEREST

# 4.0 MINUTES

Moved by ~ Seconded by ~

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the December 19<sup>th</sup>, 2023, and January 9<sup>th</sup>, 2024, Council Meeting Minutes as written.

~

# 5.0 ACCOUNTS

Moved by ~ Seconded by ~

THAT the Council of the Municipality of Morris-Turnberry hereby approves for payment the January 16<sup>th</sup> accounts in the amount of \$\$381,930.84.

~

# 6.0 PUBLIC MEETINGS AND DEPUTATIONS

None.

#### 7.0 STAFF REPORTS

#### 7.1 CLERK

# 7.1.1 Municipal Building Designated Substance Surveys

A report has been prepared in this regard by CAO/Clerk Trevor Hallam for the information of Council.

#### 7.1.2 Lowertown Sewage Impact Assessment Interim Report

A report has been prepared in this regard by CAO/Clerk Trevor Hallam for the information of Council.

#### 7.1.3 Planning Update – Q3 and Q4 2023

A report has been prepared by Deputy Clerk Kim Johnston in this regard for the information of Council.

# 7.1.4 Use of Delegated Authority 2023

A report has been prepared in this regard by CAO/Clerk Trevor Hallam for the information of Council.

#### 7.2 PUBLIC WORKS

#### 7.2.1 Operations Report

A report has been prepared by Director of Public Works Mike Alcock to providing an update on Public Works activities for the information of Council. Mr. Alcock will be in attendance.

# 8.0 BUSINESS

#### 8.1 EARLY TENDER APPROVAL

A report has been prepared by Director of Public Works Mike Alcock in this regard.

Moved by ~ Seconded by ~

THAT the Council of the Municipality of Morris-Turnberry hereby gives approval to the Director of Public Works to commence the tender process for maintenance gravel, dust control, roadside mowing, surface treatment, repairs to structure M070, and a shoulder spreader.

~

#### 8.2 WIGNHAM GOLF AND CURLING CLUB FISCAL PARTNERSHIP AGREEMENT

A report has been prepared in this regard by CAO/Clerk Trevor Hallam.

Moved by ~ Seconded by ~

THAT leave be given to introduce By-Law 3-2024, being a bylaw to, and that it now be read severally a first, second, and third time, and finally passed this 16<sup>th</sup> day of January 2024.

~

# 9.0 COUNCIL REPORTS

Kevin Freiburger

Jamie McCallum

Sharen Zinn

Jodi Snell

Jamie Heffer

#### 10.0 CORRESPONDENCE, MINUTES, ITEMS FOR INFORMATION

- 10.1 Media Release Erik Downing Appointment SVCA
- 10.2 Correspondence SVCA Letter to Ministry re fee structure
- 10.3 Inspection Report Belgrave Water System
- 10.4 Monthly Report Belgrave Water System November 2023
- 10.5 Monthly Report Belgrave Water System December 2023
- 10.6 Financial Indicator Review 2023
- 10.7 Municipal Financial Profile 2023
- 10.8 Remuneration and Expense Statement SVCA Appointed Member 2023
- 10.9 Minutes Community Safety and Well Being Plan Oversight Committee November 28, 2023
- 10.10 Minutes Coalition for Huron Injury Prevention December 13, 2023
- 10.11 Minutes Bluevale Community Committee December 6, 2023
- 10.12 Outstanding Action Items

# 11.0 NEW BUSINESS

None.

# 12.0 BY-LAWS AND AGREEMENTS

#### 12.1 THOMPSON LAMONT DEYELL MUNICIPAL DRAIN FINAL BY-LAW

Work has been completed on the Thompson Lamont Deyell Municipal Drain, and all associated costs have been accounted for. By-Law 2-2024 provides for the levying of assessments as provided by the engineer.

Moved by ~ Seconded by ~

THAT leave be given to introduce By-Law 2-2024, being a by-to amend by-law 48-2020 of the Municipality of Morris-Turnberry based on actual costs incurred for improving the Thompson Lamont Deyell Municipal Drain 2020, and that it now be read severally a first, second, and third time, and finally passed this 16<sup>th</sup> day of January 2024.

~

# 13.0 CLOSED SESSION

#### 13.1 Enter closed session.

Moved by ~ Seconded by ~

THAT the Council of the Municipality of Morris-Turnberry enter a closed session at \_\_\_\_ p.m., with the CAO/Clerk and Director of Public Works remaining in attendance, for the purpose of discussing confidential matters pursuant to the following sections of the Municipal Act:

a) Section 239 (2) (c) regarding a proposed disposition of land.

~

#### 13.2 Return to open session.

Moved by ~ Seconded by ~

THAT the Council of the Municipality of Morris-Turnberry rise from a closed session at \_\_\_\_ p.m.

~

13.3 Report and Action from Closed Session.

# 14.0 CONFIRMING BY-LAW

Moved by ~ Seconded by ~

THAT leave be given to introduce By-Law 4-2024, being a bylaw to confirm the proceedings of the Municipality of Morris-Turnberry meeting of Council held on January 16<sup>th</sup>, 2024, and that it now be read severally a first, second, and third time, and finally passed this 16<sup>th</sup> day of January 2024.

~

# 15.0 ADJOURNMENT

Moved by ~ Seconded by ~

THAT the Council of the Municipality of Morris-Turnberry does now adjourn at \_\_\_\_ pm.

~

# **NEXT MEETINGS:**

Regular Meeting of Council – Tuesday, February  $6^{th}$ , 2024, 7:30 pm Regular Meeting of Council – Tuesday, February  $20^{th}$ , 2024, 7:30 pm



#### **MUNICIPALITY OF MORRIS-TURNBERRY**

#### **COUNCIL MINUTES**

# Tuesday, December 19th, 2023, 7:30 pm

The Council of the Municipality of Morris-Turnberry met in Council Chambers in regular session on the 19<sup>th</sup> day of December 2023, at 7:30 pm.

#### **Council in Attendance**

Mayor Jamie Heffer Deputy Mayor Kevin Freiburger Councillor Sharen Zinn Councillor Jodi Snell Councillor Jamie McCallum

#### Staff in Attendance

Trevor Hallam CAO/Clerk

#### Others in Attendance

Max McLellan Brussels District Fire Chief

Brian Deitner Brussels District Deputy Fire Chief

Scott Stephenson The Citizen

#### 1.0 CALL TO ORDER

Mayor Heffer called the meeting to order at 7:30 pm.

Mayor Heffer noted that Scott Stephenson would be recording the meeting for the purpose of writing articles.

# 2.0 ADOPTION OF AGENDA

Motion 292-2023

Moved by Jodi Snell Seconded by Jamie McCallum

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the agenda for the meeting of December 19<sup>th</sup>, 2023, as circulated.

Carried.

# 3.0 <u>DISCLOSURE OF PECUNIARY INTEREST / POTENTIAL CONFLICT OF INTEREST</u>

None.

# 4.0 MINUTES

Motion 293-2023

Moved by Sharen Zinn Seconded by Kevin Freiburger

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the December 5<sup>th</sup> 2023, Council Meeting Minutes as written.

Carried.

#### 5.0 ACCOUNTS

Motion 294-2023

Moved by Sharen Zinn Seconded by Jamie McCallum

THAT the Council of the Municipality of Morris-Turnberry hereby approves for payment the December 19<sup>th</sup> accounts in the amount of \$318,565.12.

Carried.

# 6.0 PUBLIC MEETINGS AND DEPUTATIONS

#### 6.1 DEPUTATIONS

#### 6.1.1 Brussels Fire Station

Brussels District Chief Max McLellan and Deputy-Chief Brian Deitner addressed Council regarding the parking area proposed in the design for the expansion of the Brussels Fire Station. They expressed concerns that the number of parking spaces are insufficient to accommodate the full complement of firefighters that may be respond to a fire call.

Mayor Heffer noted that Morris-Turnberry was not consulted during the design phase and has not received updates regarding the progress of the project.

District Chief McLellan explained that neither he nor Deputy Chief Deitner had been consulted at any time and had only become aware of the design during the open house.

Council expressed their surprise that those who use the station were not consulted during the design stage.

Direction was given for staff to contact Huron East and inquire about the expansion of the parking lot.

# 6.2 PUBLIC MEETINGS

# 6.2.1 Proposed Changes to the Fees and Charges By-Law

Motion 295-2023

Moved by Jodi Snell Seconded by Kevin Freiburger

THAT the Council of the Municipality of Morris-Turnberry hereby opens a Public Meeting to consider changes to the Morris-Turnberry Fees and Charges By-Law.

Carried.

#### **PUBLIC MEETING - FEES AND CHARGES**

#### 6.2.2 Call to Order

Mayor Heffer called the public meeting to order at 7:46pm.

# 6.2.3 Declaration of Pecuniary Interest

None.

#### 6.2.4 Requirement

This Public Meeting was held pursuant to the *Building Code Act*, which requires that Council hold at least one public meeting and that proper notice be given of its intent to consider a by-law to amend the fee schedule for services rendered under *the Building Code Act*.

Notice of the Public Meeting was issued in accordance with section 7(6) of the Building Code Act, section 1.9.1.2 of Ontario Regulation 332/12, and the Morris-Turnberry Notice By-Law on November 27<sup>th</sup>, 2023.

#### 6.2.5 Comments

#### 1. Staff

Mr. Hallam noted one proposed addition since the draft was first presented to Council, related to equipment costs for clean up or remediation where no notice is given.

There was a consensus of Council to not adopt the proposed addition.

2. Public

None.

3. Council

None.

# 6.2.6 Close Public Meeting

Motion 296-2023

Moved by Jamie McCallum Seconded by Jodi Snell

THAT the Council of the Municipality of Morris-Turnberry hereby closes the Public Meeting to consider changes to the Morris-Turnberry Fees and Charges By-Law.

Carried.

#### 6.2.7 Consideration of Fees and Charges By-Law

Motion 297-2023

Moved by Kevin Freiburger Seconded by Jamie McCallum

THAT leave be given to introduce By-Law 65-2023, being a bylaw to establish fees, rates, and charges for the Municipality of Morris-Turnberry, as amended, and that it now be read severally a first, second, and third time, and finally passed this 19<sup>th</sup> day of December 2023.

Carried.

# 7.0 STAFF REPORTS

None.

#### 8.0 BUSINESS

# 8.1 COMMUNITY SAFETY AND WELL BEING UPDATE AND 2024 BUDGET

A report has been prepared by Deputy Clerk Kim Johnston in this regard.

Councillor Zin commented that the plan that has been put in place is a good one and that efforts have been made to ensure that no resources are being put into duplicating efforts between agencies and municipalities.

Motion 298-2023

Moved by Sharen Zinn Seconded by Jodi Snell

THAT the Council of the Municipality of Morris-Turnberry hereby approves the proposal from Lakeside Web with respect to the creation and hosting of a Community Safety and Well Being website, as recommended by the Community Safety and Well Being Plan Working Group.

AND FURHTER THAT the proposed Community Safety and Well Being Plan Budget for 2024 as presented.

Carried.

#### 8.2 ANNUAL AND MULTI YEAR ACCESSIBILITY PLAN UPDATES

The County of Huron has provided Council reviewed the Multi Year Accessibility Plan provided by the County of Huron.

Motion 299-2023

Moved by Kevin Freiburger Seconded by Jodi Snell

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the 2024 Multi Year Accessibility Plan prepared by the Huron County Accessibility Advisory Committee.

Carried.

#### 8.2.1 NICHOL MUNICIPAL DRAIN SECTION 76 PROPOSAL

A report was presented in this regard by CAO/Clerk Trevor Hallam.

Motion 300-2023

Moved by Jodi Snell Seconded by Kevin Freiburger

THAT the Council of the Municipality of Morris-Turnberry hereby directs the Clerk to apply to the Ontario Drainage Tribunal for permission to appoint and engineer to vary assessments under Section 76 of the Drainage Act for the Nichol Municipal Drain,

AND FURTHER THAT notice of such application be given to the Municipality of Huron East,

AND FURHTER THAT should such permission be granted, GM BluePlan Engineering be appointed to prepare a report varying assessments for the Nichol Municipal Drain.

Carried.

#### 9.0 COUNCIL REPORTS

Kevin Freiburger

Attended a Bluevale Community Committee Meeting on December 6th.

Jamie McCallum

Attended a Belmore Community Centre Board Meeting on December 18th.

Sharen Zinn

None.

Jodi Snell

Attended a Wingham Healthcare Recruitment Committee on December 11<sup>th</sup>. Attended Coalition for Huron Injury Prevention Committee meeting on December 13<sup>th</sup>.

Jamie Heffer

None.

#### 10.0 CORRESPONDENCE, MINUTES, ITEMS FOR INFORMATION

- 10.1 Media Release County of Huron New Directors
- 10.2 Minutes SVCA Board Meeting October 19, 2023
- 10.3 Meeting Schedule 2024 SVCA Board
- 10.4 Board Meeting Highlights AMDSB December 12, 2023
- 10.5 Resolution City of Greater Sudbury Changes to OHSA
- 10.6 Outstanding Action Items

Councillor McCallum requested that the AMDSB Trustee be invited to address Council. Direction was given to staff to contact the Trustee to extend the invitation.

# 11.0 NEW BUSINESS

None.

# 12.0 BY-LAWS AND AGREEMENTS

#### 12.1 BY-LAW ENFORCEMENT OFFICER CONTRACT

At the December 5<sup>th</sup> meeting of Council, staff were directed to return a by-law authorizing an agreement between the Municipality and Keppel Creek for the provision of Property Standards Officer and By-Law Enforcement Officer services. By-Law 64-2023 was presented for consideration.

Motion 301-2023

Moved by Jamie McCallum Seconded by Jodi Snell

THAT leave be given to introduce By-Law 64-2023, being a bylaw authorize the Mayor and Clerk to execute and affix the Corporate Seal to an agreement between the Municipality of Morris-Turnberry and Keppel Creek for the provision of Property Standards Officer and By-Law Enforcement Officer services, and that it now be read severally a first, second, and third time, and finally passed this 19<sup>th</sup> day of December 2023.

Carried.

# 12.2 PERSONNEL POLICY

At the October 17<sup>th</sup> meeting of Council, staff were directed to return a by-law adopting changes to the Municipality's Personnel Policy. By-Law 66-2023 was presented for consideration.

Motion 302-2023

Moved by Sharen Zinn Seconded by Kevin Freiburger

THAT leave be given to introduce By-Law 66-2023, being a bylaw to adopt a Personnel Policy for the Municipality of Morris-Turnberry, and that it now be read severally a first, second, and third time, and finally passed this 19<sup>th</sup> day of December 2023.

Carried.

# 12.3 BLUEVALE COMMUNITY COMMITTEE TERMS OF REFERENCE

At the December 5<sup>th</sup> meeting of Council, staff were directed to return a by-law adopting a Terms of Reference for the Bluevale Community Committee. The Terms of Reference were adopted by the Committee on December 6<sup>th</sup> By-Law 67-2023 was presented for consideration.

Motion 303-2023

Moved by Kevin Freiburger Seconded by Sharen Zinn

THAT leave be given to introduce By-Law 67-2023, being a bylaw to adopt a Terms of Reference for the Bluevale Community Committee, and that it now be read severally a first, second, and third time, and finally passed this 19<sup>th</sup> day of December 2023.

Carried.

# 13.0 CLOSED SESSION

None.

# 14.0 CONFIRMING BY-LAW

Motion 304-2023

Moved by Sharen Zinn Seconded by Jodi Snell

THAT leave be given to introduce By-Law 68-2023, being a bylaw to confirm the proceedings of the Municipality of Morris-Turnberry meeting of Council held on December 19<sup>th</sup>, 2023, and that it now be read severally a first, second, and third time, and finally passed this 19<sup>th</sup> day of December 2023.

Carried.

# 15.0 ADJOURNMENT

Motion 305-2023

Moved by Sharen Zinn Seconded by Jodi Snell

THAT the Council of the Municipality of Morris-Turnberry does now adjourn at 8:19pm.

Carried.

**NEXT MEETINGS:** 

**Special Meeting of Council – Tuesday, January 9<sup>th</sup>, 2023, 9:00 am** Regular Meeting of Council – Tuesday, January 16<sup>th</sup>, 2024, 7:30 pm Regular Meeting of Council – Tuesday, February 6<sup>th</sup>, 2024, 7:30 pm

Mayor, Jamie Heffer

Clerk, Trevor Hallam



#### **MUNICIPALITY OF MORRIS-TURNBERRY**

#### **COUNCIL MINUTES**

#### Tuesday, January 9th, 2024, 9:00 am

The Council of the Municipality of Morris-Turnberry met in Council Chambers in a special meeting for the purpose of budget deliberations on the 9<sup>th</sup> day of January 2024, at 9:00 am

# **Council in Attendance**

Mayor Jamie Heffer Deputy Mayor Kevin Freiburger Councillor Sharen Zinn Councillor Jodi Snell Councillor Jamie McCallum

#### Staff in Attendance

Trevor Hallam CAO/Clerk Sean Brophy Treasurer

Mike Alcock Director of Public Works

Kirk Livingston Chief Building Official / Drainage Superintendent / Property

Standards Officer / Zoning Administrator

#### Others in Attendance

Scott Stephenson The Citizen

# 1.0 CALL TO ORDER

Mayor Heffer called the meeting to order at 9:00 am.

Mayor Heffer noted that Scott Stephenson would be recording the meeting for the purpose of writing articles.

#### 2.0 ADOPTION OF AGENDA

Motion 1-2024

Moved by Kevin Freiburger Seconded by Jamie McCallum

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the agenda for the meeting of January 9<sup>th</sup>, 2024, as circulated.

Carried.

#### 3.0 <u>DISCLOSURE OF PECUNIARY INTEREST / POTENTIAL CONFLICT OF INTEREST</u>

None.

# 4.0 BUSINESS

# **BUDGET DELIBERATIONS**

The purpose of this meeting is for Council to provide direction to staff on the draft 2024 municipal budget.

Treasurer Sean Brophy presented the draft budget for the consideration of Council. Director of Public Works Mike Alcock and Chief Building Official / Drainage

Superintendent / Property Standards Officer / Zoning Administrator Kirk Livingston presented the budgets for their departments.

#### 4.1 Municipal Drains

No comments or questions from Council.

#### 4.2 Building Department

Mr. Livingston noted that there will be an increase of \$1000 to the amount for training due to the introduction of a new code building code in 2024 that was announced after the first draft was issued.

No comments or questions from Council.

# 4.3 Property Standards

No comments or questions from Council.

#### 4.4 Parks and Cemeteries

Mayor Heffer questioned if the increase to the municipality's Cash in Lieu of Parkland fee accounts for the increase in contributions to reserves, which was confirmed by Mr. Alcock.

Councillor Zinn asked if providing parkland is mandatory. Mr. Alcock noted that with an increase in residential development there is likely to be an increase in the demand for park space, and it would be prudent to build reserves to fund future expenditures. \

## 4.5 Belgrave Water System

#### 4.5.1 Belgrave Water Rate 2024

Councillor Zinn asked for confirmation that the water rate will be the same for users of the system regardless of where they reside. Mr. Alcock confirmed.

Motion 2-2024

Moved by Kevin Freiburger Seconded by Jodi Snell

THAT the Council of the Municipality of Morris-Turnberry hereby establishes the water rate for the Belgrave Water System at \$1234.91 per user for 2024.

Carried.

#### 4.6 Landfill & Waste Disposal

No comments or questions from Council.

# 4.7 Roads

Council discussed upgrading Alice street at north street to provide full load access to a vacant lot that is zoned and designated for industrial development. The consensus of council was to discuss any proposals if or when a developer comes forward and to consider a cost sharing arrangement for the upgrades to the road at that time.

Mr. Alcock noted that the biennial bridge inspection does not appear in the first draft, but will be in the second at an estimated \$7000.00.

Deputy Mayor Freiburger submitted question in advance of the meeting regarding the return on investment for the proposed purchase of the shoulder spreader. Mr. Alcock estimated that the equipment would pay for itself within 8 to 9 years with a potential working life span of approximately 20 years. Snell asked if there would be a reduction in other budget lines if the equipment was purchased. Mr. Alcock confirmed that there would be minor reductions elsewhere, but that the municipality is currently behind in its shoulder work, and so the costs aren't currently seen in the budget but will be in future years.

Mayor Heffer called for a 5-minute recess.

#### 4.8 Administration

Mr. Brophy highlighted the amount of interest currently being earned as a result of the increase to reserve amounts allocated by Council over the preceding years, and proposed allocating interest amounts back into the reserve that earned it proportionately, rather than allocating all earned interest to the general reserve. Council was supportive of allocating interest amounts this way.

#### 4.9 Policing

No comments or questions from Council.

#### 4.10 Fire

Mr. Brophy noted that there are likely to be increases in the second draft budget for operation and capital amounts for the North Huron fire department, and for the Huron East fire department as they are currently estimates using a CPI increase only.

No comments or questions from Council.

# 4.11 Animal Control

No comments or questions from Council.

#### 4.12 Cross Border Utilities

No comments or questions from Council.

#### 4.13 Grants and Donations

Council indicated a desire to charge an administrative fee for staff time for administering the Vance Gund grant for the Wingham Golf and Curling Club.

Mayor Heffer suggested that the donation towards the playground equipment in Belgrave be left out, citing a previous donation request for a school playground that was turned down by Council. Councillor McCallum spoke in support of the request, noting that the school playground was under the jurisdiction of the province and school board and should have been funded by those levels of government, but this is a community project that will benefit residents in Belgrave, and isn't under the jurisdiction of any other level of government. Zinn, Freiburger and Snell were also supportive of leaving the request in the budget.

Councillor Zinn noted that in their request the projects highlighted by the United Way duplicate the work that is proposed to be done by the Community Safety and Wellbeing Oversight Committee and suggested that the request for funding be denied. Mayor Heffer supported denying the request, as Council has chosen not to use tax dollars to donate to charitable organizations in the past. There was a consensus of Council to deny the request of the United Way.

There was a consensus of Council that the grant and donation policy should be reviewed to ensure it aligns with Council's direction.

# 4.14 Recreation

McCallum noted that there are expected capital expenditures for the Belmore arena board that have yet to be communicated.

Councillor Zinn recommended that payments to North Huron be made quarterly rather than in a lump sum.

#### 4.15 Belgrave Development

No comments or questions from Council.

# 4.16 Assessment

No comments or questions from Council.

#### 4.17 Tax Rates

Council expressed appreciation for the state of the budget, and there was a consensus that the final increase should be as close to CPI as possible.

#### 4.18 Streetlights

No comments or questions from Council.

#### 4.19 Reserves

Councillor McCallum confirmed that the Community Benefit reserve was the remaining funds from the sale of the Belgrave property.

# 5.0 CONFIRMING BY-LAW

Motion 3-2024

Moved by Jodi Snell Seconded by Jamie McCallum

THAT leave be given to introduce By-Law # 01-2024, being a bylaw to confirm the proceedings of the Municipality of Morris-Turnberry meeting of Council held on January 9<sup>th</sup>, 2024, and that it now be read severally a first, second, and third time, and finally passed this 9<sup>th</sup> day of January 2024.

Carried.

# 6.0 ADJOURNMENT

Motion 4-2024

Moved by Sharen Zinn Seconded by Jodi Snell

THAT the Council of the Municipality of Morris-Turnberry does now adjourn at 10:58 am.

Carried.

#### **NEXT MEETINGS:**

Regular Meeting of Council – Tuesday, January 16<sup>th</sup>, 2024, 7:30 pm Regular Meeting of Council – Tuesday, February 6<sup>th</sup>, 2024, 7:30 pm

Mayor, Jamie Heffer
Mayor, dame moner

Clerk, Trevor Hallam

# Municipality of Morris-Turnberry Account List for

Account List for January 16 2024 - 2023 Payables

General			
Hydro One	Morris Office	439.85	
Hydro One	Streetlights	1,036.81	
Huron Clean	Office Cleaning	391.84	
Orkin Canada	Pest Control	115.27	
McDonald Home Hardware	Lights	33.88	
MicroAge Basics	Office Supplies & IT Services	1,207.85	
CIBC VISA		24.28	
	Donation in Memory	126.5	
	Water	66.22	
	Planning Fees	61.02	
	Coffee Supplies 4	<u>09.48</u> 687.50	
BM Ross & Associates	Site Plan Review	479.12	
Ian D. Wilson Associates Limited	Lowertown Hydrogeological Assessment	22,160.43	
T. Harris Environmental Management	Designated Substance Surveys	9,437.76	
Randy Scott	Livestock Evaluator	100.79	
John Farrell	Coyote Bounty Program	300.00	
Georgian Bay Fire & Safety	Emergency Light & Fire Extinguisher Inspec		
Minister of Finance	Policing - November	38,533.48	
Bluevale Community Committee	December Hall Rentals	375.00	
Property Owner	Replace Lost Cheque	500.00	
WSIB	WSIB - December	1,096.17	
Minister of Finance	EHT - December	831.69	
Payroll			
December 20 2023	Payroll	19,728.83	
	Expenses	1,665.15	
Council Pay	Payroll - December 2023	3,549.65	
	Rec General	347.65	
	General	Total	105,217.36
Building Department			
Foxton Fuels	Fuel	154.57	
Leslie Motors	Maintenance & Battery	522.09	
CIBC VISA	Safety Jacket	131.19	
WSIB	WSIB - December	258.63	
Minister of Finance	EHT - December	162.68	
Payroll			
December 20 2023	Payroll	4,619.98	
	Expenses		
	Building	Total	5,849.14
Property Standards		4.0==.00	
Keppelcreek	Property Standards - December	1,355.00	
Dustras	Property Standards	lotal	1,355.00
<u>Drainage</u>	Hannar Duran	004.75	
Hydro One	Hopper Pump	201.75	
CIBC VISA	BiVal Municipal Drain	54.24 5.747.00	
MRH Const. Inc. MRH Const. Inc.	Arbuckle Municipal Drain	5,717.80	
	Wells Municipal Drain	3,022.75	
Maitland Valley Conservation  John McKercher Construction Ltd.	Blyth Creek Municipal Drain	100.00	
	Russel & Blyth Creek Municipal Drain	2,356.05 8,034,87	
Headway Engineering GM Blueplan Engineering Limited	Masson Municipal Drain Cruikshank Municipal Drain	8,034.87 5,018,55	
Municipality of Morris-Turnberry	2023 Hopper Pump Maintenance	5,018.55 1,777.10	
Manicipality of Monte-Turnberry	2023 Hopper Pump Maintenance  Drainage		26,283.11
	Dramage	ıvıaı	20,203.11

Belgrave Water Hydro One Hump Veolia Water Nove  Landfill Hydro One Morris PE Inglis Holdings Inc. Morris John McKercher Construction Robert's Farm Equipment Repa  Roads Hydro One Turnb Hydro One Morris Schmidt's Power Equipment Safet CIBC VISA Shop Licen Couri Midwest Co-op Shop Stainton Hardware Shop Steffens Auto Supply Radar Auto Parts Shop Dan Voisin Unde Foxton Fuels Fuel Robert's Farm Equipment Parts Robertson Welding Inc. Repa	Parks & Cemeteric  ave Water hrey Well mber Operations  Wat  Landfill Landfill Landfill Landfill Landfill November & December r for Tractor	es Total ter Total	31.34 1,328.24 257.00 6,605.62	31.34 8,190.86
Hydro One Hydro One Veolia Water  Landfill Hydro One PE Inglis Holdings Inc. John McKercher Construction Robert's Farm Equipment  Robert's Farm Equipment  Roads Hydro One Hydro One Schmidt's Power Equipment CIBC VISA  Midwest Co-op Stainton Hardware Steffens Auto Supply Radar Auto Parts Dan Voisin Foxton Fuels Robert's Farm Equipment Robertson Welding Inc. Leslie Motors  Morria Morria Ropertic Morria Safet Couri Couri Morria Safet Couri Morria Sa	ave Water hrey Well mber Operations  Wat  Landfill Landfill Landfill Landfill Landfill	_	257.00 6,605.62	
Hydro One Hydro One Veolia Water  Landfill Hydro One PE Inglis Holdings Inc. John McKercher Construction Robert's Farm Equipment  Repa  Roads Hydro One Hydro One Schmidt's Power Equipment CIBC VISA Midwest Co-op Stainton Hardware Steffens Auto Supply Radar Auto Parts Dan Voisin Foxton Fuels Robert's Farm Equipment Repa  Hydro One Steffens Auto Supply Radar Auto Parts Dan Voisin Foxton Fuels Robert's Farm Equipment Robertson Welding Inc. Leslie Motors  Morria Morria Repa  Leslie Motors  Hump  Morria Repa	hrey Well mber Operations  Wat  Landfill Landfill Landfill Landfill November & December	ter Total	257.00 6,605.62	8,190.86
Hydro One Veolia Water    Veolia Water	hrey Well mber Operations  Wat  Landfill Landfill Landfill Landfill November & December	ter Total	257.00 6,605.62	8,190.86
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Dan Voisin Unde Foxton Fuels Fuel Robert's Farm Equipment Parts Robertson Welding Inc. Repa Leslie Motors Maint	Supplies		107.96	
Foxton Fuels Fuel Robert's Farm Equipment Parts Robertson Welding Inc. Repa Leslie Motors Maint	Supplies & Parts for Vehicles		870.53	
Robert's Farm Equipment Parts Robertson Welding Inc. Repa Leslie Motors Maint	coating for Vehicles		1,469.00	
Robertson Welding Inc. Repa Leslie Motors Maint			6,934.15	
Leslie Motors Maint	for 13-03 Grader		151.62	
	r for Water Tank		2,664.27	
MCM Townsond Tiro Pono	enance for 22-14 & 20-20 Pickups		242.97	
MGM TOWNSEND THE TREPA	r for 09-02 Grader		1,937.11	
Michelin North America Canada Inc. Tires	for 09-02 Grader		18,474.75	
Armtec Inc. Culve	rt Stock		25,817.86	
Huron County Road Supervisors Assoc 2023	Truck Roadeo Entrance Fee x2		100.00	
RJ Burnside & Associates Ltd Belgr	ave Storm Sewer Masterplan		8,898.75	
Centra Door North Co. Ltd. Turns	erry Shop Repair		444.09	
BM Ross & Associates Limited Mono	rieff Road Culvert (M070)		3,872.44	
Treasurer, County of Huron Cente	rline Painting		9,279.25	
Treasurer, County of Huron Winte	r Sand Stacking		5,110.12	
WSIB WSIE	- December		1,438.85	
Minister of Finance EHT	December		905.08	
Payroll				
December 20 2023 Payro	II		26,374.38	
Expe			238.00	
·		ds Total		120,968.11
	Acc	ount To	tal	270,807.67
Approved By Council:	January 16 2024 - 2022 Po-	/ables		
Approved By Council:	January 16 2024 - 2023 Pay	anics		
Mayor - Jamie Heffer	Treasurer- Sean Brophy			

Municipality of	of Morris-Turnberry
A 1 ! - 1	•

<u>General</u> Bell Canada	Marria Office	464.04	
	Morris Office Cell Phones	461.04 25.07	
Bell Mobility Telizon	Long Distance Phone	25.07	
Enbridge	Morris Office	205.30	
PBS Business Systems	Tax Bills	502.85	
Goderich Print Shop	Envelopes	367.25	
G-Force Marketing	Assessment Roll Binder	250.61	
CIBC VISA	ROMA Conference Hotel Deposit	295.86	
CIBC VISA	Graphic Design Software for Facebook	149.99	
	MAP Training Courses x2	915.30	
	2024 Payroll Software	542.40 1,903.55	
LICTI Canada Ina			
USTI Canada Inc	2024 Keystone Renewal	9,815.13	
Association of Municipalities of Ontario		2,010.28 71.19	
Municipal Employer Pension Centre of Ont	2024 Membership		
Municipal Finance Officers' Association		339.00	
AMCTO OSIM	2024 Membership	508.85	
	2024 Website Hosting	1,356.00	
Assoc of Mun Managers, Clerks & Treasurers	AMCTO Training Course	1,395.55	
Minister of Finance	Tile Drain Loan Vance Foundation	5,951.02	
Wingham Golf & Curling Club	vance Foundation	9,980.00	
Payroll			
Payroll January 3 2024	Payroll	19,734.21	
January 3 2024	Expenses	143.98	
	Genera		55,023.09
Building Department	Concre	ii i otai	00,020.03
Bell Mobility	Cell Phone	59.76	
CIBC VISA	OBOA 2024 Membership	397.76	
Bluewater Chapter OBOA	2024 Membership	75.00	
Blackater Chapter CBC/T	202 i Memberemp	10.00	
Payroll			
January 3 2024	Payroll	5,016.88	
•	Expenses	-	
	Buildin	g Total	5,549.40
Property Standards		_	
	Property Standard	s Total	-
<u>Drainage</u>			
	Drainag	e Total	-
Parks & Cemeteries			
	Davida O Carrataria	- T-(-I	
	Parks & Cemeterie	s i otai	-
Polarovo Water			
Belgrave Water	Dolarovo Wotor	44.20	
Hay Communications	Belgrave Water	11.30	
Allstream	Belgrave Water	<u>141.70</u> r Total	153.00
	vvale	ııvlaı	155.00
<u>Landfill</u>			
Bell Mobility	Cell Phone	8.91	
Bluewater Recycling	Curbside Pickup - January	15,155.96	
Diacwater recogning	Landfi		15,164.87
	Lanun	ıı ı Utai	13,104.07

pads Dall Carada	Mauria Obara	000.50	
	Morris Shop	230.52	
_ · · · · · · · · · · · · · · · · · · ·	Cell Phones	59.05	
	Morris Shop	410.59	
· ·	Turnberry Shop	182.89	
	Turnberry Shop Internet	66.56	
	Parts for 13-03 Grader	210.33	
	Filters for 13-03 & 17-01 Graders	865.87	
MGM Townsend Tire	Repair for 19-06 Tandem	82.63	
Jade Equipment	January Rental Grader	6,215.00	
Ontario Good Roads Association	2024 Membership	862.61	
Huron County Road Supervisors Assoc	2024 Membership	525.00	
Payroll			
January 3 2024	Payroll	25,521.76	
•	Expenses	· -	
	1	Roads Total	35,232.81
		Account Total	111,123.17
Approved By Council:	January 16 2024		

Treasurer- Sean Brophy

Mayor - Jamie Heffer

# MUNICIPALITY OF MORRIS-TURNBERRY REPORT TO COUNCIL

TO: Mayor and Council

PREPARED BY: Trevor Hallam, CAO/Clerk

**DATE:** January 16, 2024

**SUBJECT:** Designated Substance Survey Reports

#### **RECOMMENDATION**

For information only.

#### **BACKGROUND**

At the November 7<sup>th</sup>, 2023 meeting of Council, Treasurer Sean Brophy provided a report on changes to regulations affecting the municipality's obligations regarding asset retirement, following the introduction of a new accounting standard, *PS 3280 for Asset Retirement Obligations (AROs)*. Previously *PS 3260 – Contaminated Sites* and *PS3270 – Solid Waste Closure and Post Liability* were the only two standards in place for municipal retirement obligations. The new standard *PS3280* replaces those two standards and expands the asset retirement categories that need to be identified, valued and reported within the Municipality's annual financial statements. The additional category that is most relevant for the municipality is that pertaining to buildings with asbestos and/or designated substances.

At the November 7<sup>th</sup> meeting, council accepted a quote from T. Harris Environmental Management Inc. to conduct Designated Substance Surveys for all municipal buildings. If any asbestos was found, T. Harris Environmental Inc also offered provide an asbestos abatement plan that could be used to establish the financial implications of retiring the asset containing asbestos.

#### **COMMENTS**

The completed reports for five municipally owned buildings are included with this report and the findings with regard to asbestos only are summarized below as the municipality only has to account for the retirement of assets containing asbestos currently. The scope of the surveys was broader than required, in order to have information on file should additional substances be added to the regulations. Council may refer to the full reports for the listing of other designated substances and their concentrations in various buildings.

#### Municipal Office:

- No asbestos-containing materials (ACM) were observed within the buildings surveyed.
- No action required. No ARO reporting implications.

#### Bluevale Hall:

Asbestos-containing materials (ACM) observed in the surveyed area are detailed below.
 ACMs observed were assigned a Priority rating. Materials identified as Priority 2 may remain in place until system upgrading or renovations.

Location Material		Quantity	Priority	Туре	Friable
Men's Washroom	Vinyl Sheet Flooring (under new linoleum)	~ 75 ft²	2	Chrysotile	Yes
Women's Washroom	Vinyl Sheet Flooring (under new linoleum)	~ 85 ft <sup>2</sup>	2	Chrysotile	Yes
Kitchen	Vinyl Sheet Flooring	~ 200 ft <sup>2</sup>	2	Chrysotile	Yes
Storage Area	Vinyl Sheet Flooring	~ 50 ft <sup>2</sup>	2	Chrysotile	Yes
Exterior	Transite Shingles	~ 10 ft <sup>2</sup>	2		No

No action required until further renovations or demolition disturbs the ACMs. At that time
the cost of removal is estimated at \$6,500.00 for the flooring and \$500.00 for the shingles
(2023 dollars). These amounts will be used for ARO reporting.

#### Belgrave Water Treatment Building

- No asbestos-containing materials (ACM) were observed within the surveyed building.
   Based on the age of construction (2007) no asbestos is suspected to be present.
- No action required. No ARO reporting implications.

# Turnberry Maintenance Building:

- No asbestos-containing materials (ACM) were observed within the surveyed building.
   Based on the age of construction (1994) no asbestos is suspected to be present.
- No action required. No ARO reporting implications.

#### Bluevale Ball Park Snack Booth and Pavilion:

- No asbestos-containing materials (ACM) were observed within the Ball Park Booth or Pavillion.
- No action required. No ARO reporting implications.

#### **Budget Impact**

The net cost to the municipality for the surveys is \$ 8,499.00, which is equal to the amount quoted. An asbestos asset retirement obligation estimate was provided for the Bluevale Hall at no additional cost. Funds from the 2023 asset management reserve were used as approved by Council.

There will be costs associated with the disturbance or removal of ACMs, but as no immediate action is required there are no immediate financial implications.

#### **ATTACHMENTS**

- Morris Turnberry Municipal Office Hazardous Materials Survey Report (L23-03777-01)
- 2. Bluevale Community Hall Hazardous Materials Survey Report (L23-03777-02)
- 3. Bluevale Community Hall Asbestos ARO Estimate
- 4. Belgrave Water Treatment Hazardous Materials Survey Report (L23-03777-03)
- 5. Turnberry Maintenance Building Hazardous Materials Survey Report (L23-03777-04)
- 6. Bluevale Ball Park Booth and Pavilion Hazardous Materials Survey Report (L23-03777-05)

# **OTHERS CONSULTED**

Sean Brophy, Treasurer Greg Balsden, Manager, Southwestern Ontario, T. Harris Environmental Inc.

Respectfully submitted,

revor Hallam,



# HAZARDOUS MATERIALS SURVEY MUNICIPALITY OF MORRIS-TURNBERRY MUNICIPAL OFFICE, GARAGE, STORAGE SHED AND SALT STORAGE BUILDING 41342 Morris Road Brussels, Ontario NOG 1H0

December 11th, 2023

# **Prepared for:**

Trevor Hallam – CAO/Clerk Municipality of Morris-Turnberry 41342 Morris Rd., PO Box 310 Brussels, ON NOG 1H0

T. Harris Environmental Management Inc. 931 Commissioners Road East, Suite 100 London, Ontario N5Z 3H9

Project No: L23-03777-01

**London** • Toronto • Ottawa • Montreal E-mail: <u>info@tharris.ca</u> • Website: <u>www.tharris.ca</u>



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#### **EXECUTIVE SUMMARY**

T. Harris Environmental Management Inc. (THEM) was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs), for the Morris-Turnberry Municipal Office, Garage, Storage Shed and Salt Storage Building located at 41342 Morris Road in Brussels, Ontario. The objective of this study was to determine whether any hazardous building materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, were present in the above noted buildings. The survey was conducted on November 29<sup>th</sup>, 2023.

Based on the investigation conducted by T. Harris Environmental Management, through available records, interviews and a site review, the following were identified:

- No asbestos-containing materials (ACM) were observed within the buildings surveyed. If suspect asbestos-containing materials are uncovered during renovation/demolition activities that were inaccessible at the time of the assessment, they should be assessed by a qualified person at that time.
- Lead was not found at a detectable level in any of the paints sampled. Lead may be present as a component in pipes and in solder used in pipe fittings.
- Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.
- Mercury vapour is suspected to be present within fluorescent light tubes.
- Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building.

Based on the aforementioned findings for the survey conducted, THEM recommends the following:



- Paints identified to have concentrations of lead and observed in poor condition should be removed and/or stabilized following applicable lead abatement procedures. Prior to any renovations or demolition activities that may disturb materials identified to contain lead of any concentration, precautions must be taken as described in Ontario Regulation 213/91, Construction Projects made under the Occupational Health and Safety Act. This may include conducting an assessment of the potential exposure of airborne lead by a qualified person. Exposure to lead-containing materials is regulated under Ontario Regulation 490/09, Designated Substances made under the Occupational Health and Safety Act. Care must be taken to prevent lead-containing particles from becoming airborne during the disturbance of lead-containing surfaces (i.e., during renovation or demolition projects). All lead abatement work must follow procedures outlined in the guideline "Lead on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- Precautions must be taken to prevent mercury vapours becoming airborne during renovations or building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, Designated Substances – made under the Occupational Health and Safety Act.
- All waste material must be handled and disposed of according to R.R.O. 1990, Reg. 347:
   General Waste Management, as amended made under the Ontario Environmental Protection Act. Lead and/or Mercury waste may be subject to Leachate Criteria (Schedule 4) of this regulation.
- Exposure to airborne silica is regulated under Ontario Regulation 490/09, Designated Substances made under the Occupational Health and Safety Act. All work being carried with silica containing materials should be conducted following the guideline "Silica on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in R.R.O. 1990, Reg. 347: General Waste Management, as amended. In addition, requirements outlined in the federal regulation SOR/2008-273 made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.
- All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

- Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.
- Building material(s) that are not detailed within this survey due to inaccessibility during
  the time of the survey and/or are uncovered during renovation/demolition activities,
  notably materials that are suspected to contain asbestos, should be properly assessed by
  qualified person prior to their disturbance.

This survey satisfies requirements of the Occupational Health and Safety Act with regards to the presence/absence of hazardous materials identified within this report. This executive summary is not to be used alone and the report should be reviewed in its entirety.

Should you have any questions or comments regarding this survey, please do not hesitate to contact our office.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

931 Commissioners Road East, Suite 100 London, Ontario N5Z 3H9 Tel. (519) 685-9048

1-888-ASK-THEM

#### 1.0 INTRODUCTION

T. Harris Environmental Management Inc. was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, for the Municipal Office & Garage, Storage Shed and Salt Storage building located a 41342 Morris Road in Brussels, Ontario. The survey was conducted on November 29<sup>th</sup>, 2023.

The objective of this survey was to determine whether hazardous materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs) were present within the buildings surveyed. The survey included a review of the entire building for the presence and extent of hazardous materials, evaluation of the type of hazardous materials and degree of possible exposure, and assessment of requirements for any further investigation or remedial action, if necessary.

Identification of suspect asbestos materials was performed by means of bulk sampling and laboratory analysis. Testing for lead in paint was conducted using bulk sampling. Other hazardous materials, if present, were identified by visual inspection only. These included mercury in gauges and light fixtures, polychlorinated biphenyls (PCBs) in coolant oils of transformers and fluorescent light fixture ballasts, and silica in cement. Recommendations based on our findings are made in Section 5.0.

This report documents our findings as noted during our site inspection. Individual assessments were made to identify Designated Substances and their condition, as well as requirements for special treatment such as control programs or specialized removal and disposal techniques.

#### 2.0 ONTARIO REGULATIONS AND GUIDELINES FOR SURVEY

Ontario Regulation 490/09, *Designated Substances* – made under the Ontario Health and Safety Act, applies to controlling designated substances in the workplace. This regulation may not be all encompassing for each of the Designated Substances and other associated Ontario Regulations may apply.

The management and abatement of asbestos-containing materials must be conducted according to Ontario Regulation 278/05 amended by O. Reg. 450/19, Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations - made under the Occupational

Health and Safety Act. Asbestos-containing waste must be handled and disposed of according to R.R.O., 1990, Regulation 347: *General - Waste Management*.

In addition to the Ontario Regulation 490/09 noted above, the following guidelines were observed for this survey:

- <u>Lead on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- <u>Silica on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

Polychlorinated biphenyls (PCBs) are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however as selected materials were reviewed for PCB content during this survey the following legislation applies: R.R.O., 1990, Regulation 362: Waste Management - PCB's — made under the Environmental Protection Act and SOR/2008-273 — made under the Canadian Environmental Protection Act, 1999.

Applicable legislation and/or guidelines for other materials identified (not listed above) as part of the survey are included where applicable.

All waste materials are regulated by R.R.O., 1990, Regulation 347: *General - Waste Management*, as amended – made under the Ontario Environmental Protection Act.

#### 3.0 SURVEY METHODOLOGY

Not all designated substances or suspect hazardous materials were sampled. Sampling was carried out only for those compounds that were known to be present or those deemed to have a likely source of origin in the buildings under study.

All sample analyses were performed by an independent laboratory and the Laboratory Certificates of Analysis attached in Appendix I. Materials similar in appearance or texture to other materials tested were considered to be of similar composition. When inaccessible areas such as behind walls and above plaster ceilings were encountered during the survey, inferences were drawn based upon findings in adjacent spaces. Other designated substances and listed hazardous materials, if present, were identified by observation only.

The survey, as proposed, included the inspection of all accessible areas specified by the client.

#### 3.1 ASBESTOS-CONTAINING MATERIALS

Asbestos is a general name for several varieties of highly fibrous silicate materials. Commercially significant types include: Chrysotile, Amosite and Crocidolite. The combination of a variety of favourable characteristics made asbestos popular for wide industrial use, including: fibrous structure, low heat conductivity, high electrical resistance, chemical inertness, strength, flexibility and effectiveness as a reinforcing or binding agent when combined with cement or plastic.

Products with bound asbestos pose no danger of releasing airborne fibres unless cut, sawn, ground or sanded. One measure of the potential hazard of a product is its friability. The friability of asbestos containing materials (ACM) is a measure of the ease with which the material can be ground or pulverized by hand pressure. Knowledge of the friability of ACM may theoretically indicate the ease with which fibres can be released into the air.

The accredited survey inspector(s) were responsible for inspecting, assessing and recording the location, condition and type of all suspect friable and non-friable ACM in the project area. Each individual room and space was surveyed. Homogeneous sampling areas of ACM were determined. A homogeneous area is defined as an application of ACM that is uniform in colour, texture, identical in every respect, and is unlikely to consist of more than one type or formulation of material. Materials installed at different times, on different floors, or in special areas such as mechanical rooms are assigned to separate sampling areas.

#### 3.1.1 Asbestos Bulk Sampling

Sampling of suspected asbestos-containing building materials observed within the surveyed area was conducted as per the requirements of Table 1 found within Ontario Regulation 278/05. A summary of the sample requirements can be found in <u>Table I</u> below.

TABLE I
Asbestos Bulk Sampling Requirements

Type of material	Size of area of homogeneous material	Minimum # of bulk material samples to be collected
Surfacing material, including without	<90 sq metres	3
limitation material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on	>90 sq metres but <450 sq. metres	5
structural members	>450 sq metres	7
Thermal insulation, except as described in item 3	Any size	3
Thermal insulation patch	<2 linear metres or 0.5 sq metres	1
Other material	Any size	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), with confirmation of presence and type of asbestos made by dispersion staining optical microscopy. This analytical procedure follows the U.S. Environmental Protection Agency Test Method EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, June 1993. Laboratory Certificates of Analysis for this identification are given in Appendix I.

According to O. Reg. 278/05, asbestos-containing material means material that contains 0.5 percent or more asbestos by dry weight. If analysis establishes that a bulk material sample contains 0.5 percent or more asbestos by dry weight, then it is not necessary to analyze other bulk material samples taken from the same area of homogenous material, the entire area of homogenous material is deemed to be asbestos-containing material.

Destructive testing was not performed. Therefore, in the event asbestos-containing materials are discovered as part of the survey, inferences have been drawn for inaccessible spaces (i.e., above plaster ceilings with no access panels) based upon findings in adjacent spaces. Similarly, motors, blowers, electrical panels, etc., were not de-energized or disassembled to examine concealed conditions. Such items should be considered to have asbestos as a component until proven otherwise.

Boilers were frequently constructed (i.e., lined, bedded, etc.) with asbestos refractory materials. Demolition and/or renovations to existing boiler units which may elicit a disturbance of suspect ACM should necessitate prior investigation to determine for the presence of ACM. In addition, fire doors that may be present in the surveyed areas were not tested intrusively and therefore should be considered to contain ACM until proven otherwise. Further examples of such assumptions include: elevator brakes, roofing felts and mastics, caulking, high voltage wiring, mechanical packing and gaskets, and underground services or piping.

#### 3.1.2 Assessment

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility. Priorities have been established for remedial action based on these combinations, and are given below.

#### Priority 1 (One)

Asbestos-containing material highly recommended to be removed, repaired or encapsulated.

#### Priority 2 (Two)

Asbestos-containing material could remain in place until system upgrading or renovations are to occur.

#### **Priority 3 (Three)**

Asbestos-containing material could remain in place until eventual building demolition.

#### 3.2 **LEAD-CONTAINING MATERIALS**

Paints/surface coatings observed in the surveyed areas were tested for lead content. Other building materials not tested for lead content (i.e., mortar, concrete) should be considered lead-containing until proven otherwise.

Currently in Ontario, there is no regulation that provides a definition of what the percent of lead in paint must be in order to be considered "lead-based paint". The Surface Coating Materials Regulations (SOR/2005-109) made under the Canada Consumer Product Safety Act specifies that the concentration of total lead present in a surface coating material must not be more than



600 mg/kg. The Surface Coatings Materials Regulations came into effect on April 19th, 2005 and was amended in November of 2010, which lowered the acceptable concentration of total lead present in a surface coating material to less than 90 mg/kg (SOR/2010-224). This lead content applies to any paint and/or surface coatings of products advertised, sold or imported into Canada. Coatings applied to furniture, pencils, artists' brushes, toys and articles that are intended for children would fall under the jurisdiction of this regulation. However, these levels are not specifically intended to determine what constitutes a "lead-based paint", it is merely a regulation to protect consumers of coated materials. Therefore, this regulation does not apply to construction projects where lead-based coatings may be disturbed during the course of renovations or construction.

To date, there is no simple correlation between the concentration of lead in paints/surface coatings and the resulting airborne lead levels that may be emitted if the coated material was to be disturbed or removed. However, the Environmental Abatement Council of Canada (EACC) "Lead Guideline for Construction, Renovation, Maintenance or Repair", published October 2014 (herein referred to as 'EACC Guideline'), outlines "virtually safe" lead levels for paints or surface coatings. Paints or coatings containing less than or equal to 0.1% lead by weight<sup>1</sup> are considered low-level lead paints or coatings. If these paints or coatings are disturbed in a manner, which uses normal dust control procedures, and does not exceed the particulate not otherwise specified (PNOS) time-weighted average (TWA) of 0.05 mg/m<sup>3</sup> set in Ontario Regulation 490/09, then worker protection from the inhalation of lead is not required. Projects that meet these guidelines must still adhere to general health and safety precautions, such as prohibiting eating, smoking, drinking or chewing gum in the work area. These projects must also implement dust suppression techniques and provide facilities for workers to wash their hands and face. Additionally, the Occupational Health and Safety branch of the Ministry of Labour (MOL) provides classifications of the types of specific lead operations, which are based on presumed airborne lead concentrations to which the worker will be exposed. The classifications are provided in the MOL publication, "Guideline: Lead on Construction Projects", published in September 2004 and revised in April 2011 (herein referred to as 'MOL Guideline'). The levels of airborne lead expected to be present in a work area is related to the types of work operations being used to disturb or remove the coatings; it is not a function of the percentage of lead within the coating. Based on this MOL Guideline, all paints/surface coatings are to be considered lead-containing unless they are tested and contain undetectable lead concentrations.

<sup>&</sup>lt;sup>1</sup> WHMIS reporting limit for lead in a safety data sheet or material safety data sheet.

Lead is also suspected to be a component in solder on plumbing fixtures throughout the building. Representative samples of solder joints suspected to contain lead were not collected. Other suspect lead-containing materials such as lead sheeting, conduit, pipes and lead-calcium battery plates were not sampled during this investigation, but were noted where applicable.

## 3.2.1 Bulk Sampling for Lead in Paints

To verify lead content in paints, representative bulk samples of paints were retrieved for laboratory analysis for lead content. Paint samples were scraped down to the building base structure, with all possible layers present, then submitted to an independent laboratory. Samples were treated with a dilute nitric acid sample digestion prior to filtration. Analysis utilized for lead detection in filtered samples was Flame Atomic Absorption Spectroscopy (F.A.A.S.).

#### 3.3 SILICA-CONTAINING MATERIALS

Silica occurs naturally as crystalline or amorphous material. Crystalline silica is significantly more toxic than amorphous silica.

Silica may be present in the project area in two forms: i) amorphous-diatomaceous earth in pipe fittings and other insulation materials; and ii) free crystalline ( $\alpha$ -Quartz) in ceiling tiles, concrete, cement, brick, ceramic tiles, terra cotta block and hard plaster finishes. Testing for silica in these materials was not conducted, but its presence was noted.

#### 3.4 MERCURY-CONTAINING MATERIALS

Mercury may be a component in paints and can also be present as a liquid in thermometers, thermostats, and other mechanical equipment switches. Mercury vapour is present in fluorescent lamps.

#### 3.5 **ARESENIC-CONTAINING MATERIALS**

Arsenic is used in metallurgy for hardening copper, lead and alloys; in pigment production, in the manufacture of certain types of glass, in insecticides and fungicides and in rodent poisons, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing.

#### 3.6 **ACRYLONITRILE**

Acrylonitrile (ACN) (also known as vinyl cyanide) is an explosive, flammable liquid used in the manufacture of acrylic fibres, rubber-like materials and pesticide fumigants.

#### 3.7 BENZENE

Benzene, or Benzol, is a colourless liquid. It is used as an intermediate in the production of styrene, phenol, cyclohexane, and other organic chemicals, in the manufacture of detergents, pesticides, solvents, and paint removers. It is also found in gasoline.

#### 3.8 <u>COKE OVEN EMISSIONS</u>

Not applicable to this project area.

#### 3.9 ETHYLENE OXIDE

Ethylene oxide is a colourless gas liquefying below 12 degrees Celsius. It is used generally as a fumigant and sterilizing agent for medical equipment.

#### 3.10 ISOCYANATES

Isocyanates (HDI, MDI and TDI) are used in the production of polyurethane and as an elastomer in casting compounds, mastic, and textile coatings (IPDI).

#### 3.11 VINYL CHLORIDE

Vinyl Chloride, also known as chloroethylene, is a colourless gas but is handled as a liquid under pressure. It is used in the production of polyvinyl chloride resins and in organic synthesis.

#### 3.12 NON-DESIGNATED SUBSTANCES

#### 3.12.1 <u>PCB-containing Materials</u>

PCBs are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however, a review of a number of representative and accessible fluorescent light ballasts suspected to contain PCBs were included in the survey. In addition, accessible building hydraulic equipment (i.e., elevators/lifts) or electrical transformers observed

during the survey were visually reviewed. No sampling of materials for PCB content was conducted as a part of this survey. In addition, no other materials were reviewed/inspected as a part of this survey unless specified by the client. Thus, the following materials should be assumed, if present onsite, to contain PCBs until proven otherwise: cable insulation, thermal insulation materials (i.e., foam, felt), adhesives/tapes, plastics, caulking, lead-based paints and, various types of electrical equipment (i.e., voltage regulators, switches, bushings, electromagnets).

Polychlorinated biphenyl-containing ballasts reviewed were identified by model number, serial number, and date code, as listed in *Environment of Canada Identification of Lamp Ballasts Containing PCBs - Report EPS 2/CC/2 (revised), August 1991*.

#### 3.12.2 Mould

Fungi, also called mould or mildew, are microbiological organisms that can live and reproduce and potentially cause health problems in indoor environments. They are chlorophyll-lacking plant-like organisms that are unicellular (e.g., yeast) or grow in a multinucleate mass (e.g., bread mould), subsist on decomposed organic matter or nutrition from living hosts, and reproduce by production of spores 3 to 200  $\mu$ m in size. Mould growth inside buildings is due to excess moisture caused by leakages, condensation, or capillary movement of water into the building. They will generally not occur if materials are kept dry.

The presence of mould spores in indoor environments may not be significant in terms of the causation of fungal infestation since most micro-organism contamination does not become a problem until it becomes disturbed and is distributed into the ventilation system or air within the building. In other words, there may be little hazard if micro-organisms do not multiply or do not accumulate to harmful levels, if there is no means for micro-organisms to become airborne, or, if aerosolized micro-organisms do not reach susceptible receptors.

Fungi or moulds which are typically found on building materials that have become damaged due to moisture problems can cause or exacerbate allergic type symptoms in occupants who have a history of hypersensitivity diseases (e.g., asthma). Thus, people suffering from respiratory disorders or severe allergies may be at greater risk for developing health problems associated with exposures to fungi found in water damaged areas. Such people may need to be removed from the affected areas until remediation and clearance testing, if required, is completed. However, any decisions regarding medical removal must be based on recommendations made

by an occupational medicine specialist trained in symptomatology related to this type of exposure.

In order to define risk for areas that are suspected or confirmed to be contaminated with mould, the extent of water damage, and/or visible mould growth on building materials must be considered. THEM recommends the following criteria presented in <u>Table II</u> for determining risk levels (hazard categories) and associated remediation protocols. This criterion is based on the "Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation" and "Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines 2015, Edition 3".

TABLE II
Recommended Water Damage/Mould Risk Management Levels

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Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements		
0	No visible signs of mould growth, no evidence of category 2 or 3 water damage and no health complaints.	No remediation required; however, in some situations structural drying may be required.		
1	Small Areas (Source Containment)	<ul> <li>Work can be conducted by in-house staff trained in water damage/mould remedial techniques or by qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>No critical barriers required.</li> <li>Contaminated building materials can be contained with polyethylene sheeting and duct tape and removed.</li> </ul>		

since 1979

Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements
2	Moderate Areas (Local Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>A polyethylene enclosure should be erected to isolate mould contaminated materials.</li> <li>A decontamination chamber may be required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>
3	Extensive Areas (Full Scale Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>The mould contaminated room and/or building section should be isolated with critical barriers.</li> <li>Building materials within the remediation area that cannot be cleaned effectively must be sealed off with polyethylene barriers.</li> <li>A decontamination unit is required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>

Note 1: May or may not include destructive testing.

#### 3.12.3 Ozone Depleting Substances

Ozone depleting substances such as fluorocarbons are commonly used as cooling agents in refrigeration equipment such as ice makers, refrigerators, chilled water drinking fountains, compressors and air conditioners. Commercial chlorofluorocarbon (CFC) production began with R–12 in 1931, R–11 in 1932, R–114 in 1933 and R–113 in 1934. The first hydrochlorofluorocarbon (HCFC) refrigerant, R–22 was produced in 1936. By 1963, these five products accounted for 98% of the total production of the organic fluorine industry.

Almost 50 years passed between the introduction of CFCs and recognition of their harm to the environment when released to the atmosphere. Specific concerns are related to their depletion of stratospheric ozone and to possible climate change by their action as greenhouse gases. The high stability of CFCs enables them to deliver ozone—depleting chlorine to the stratosphere.

The project area was visually inspected for refrigeration equipment and where possible, fluorocarbon content was determined by looking at appliance tags.

#### 4.0 FINDINGS

The following includes observations for any hazardous materials identified within the area surveyed. The survey focused on building materials and as such there may be Designated Substances in equipment that was present within the surveyed area.

#### 4.1 ASBESTOS

Samples of suspect ACMs were collected at various locations from the Municipal Office building. The samples were submitted to EMSL Canada for the determination of asbestos content using the polarized light microscopy (PLM) method of detection. Laboratory Certificates of Analysis detailing results of bulk samples collected during this assessment are attached in Appendix I of this report with results summarized in <u>Table III</u> below. Samples found to be asbestos-containing are shaded. No suspect ACMs were observed within the Storage Shed or Salt Storage Building.

TABLE III
Summary of Asbestos Bulk Sampling Results
Morris-Turnberry Municipal Office & Garage
41342 Morris Road, Brussels, Ontario
November 29<sup>th</sup>, 2023

Sample ID	Location	Description	Asbestos Content		
ACT-A-01	Council Chambers (Location 19)	2' x 2' Textured Ceiling Tiles	None Detected		
ACT-A-02	Council Chambers (Location 19)	2' x 2' Textured Ceiling Tiles	None Detected		
ACT-A-03	Council Chambers (Location 19)	2' x 2' Textured Ceiling Tiles	None Detected		

Sample ID	Location	Description	Asbestos Content	
DJC-A-01	Basement Room (Location 1)	Drywall Joint Compound	None Detected	
DJC-A-02	Basement Storage Area (Location 3)	Drywall Joint Compound	None Detected	
DJC-A-03	Basement Closet (Location 4)	Drywall Joint Compound	None Detected	
DJC-A-04	Main Floor Stairwell (Location 6)	Drywall Joint Compound	None Detected	
DJC-A-05	Main Floor Stairwell (Location 6)	Drywall Joint Compound	None Detected	
Text-A-01	Office Area (Location 9)	Texture Finish Ceiling	None Detected	
Text-A-02	Office (Location 11)	Texture Finish Ceiling	None Detected	
Text-A-03	Entrance Hallway (Location 13)	Texture Finish Ceiling	None Detected	
VSF-I-01	Vault (Location 10)	Beige Vinyl Sheet Flooring	None Detected	
VSF-I-02	Vault (Location 10)	Beige Vinyl Sheet Flooring	None Detected	
VSF-I-03	Vault (Location 10)	Beige Vinyl Sheet Flooring	None Detected	

The following building materials (if present) were investigated for asbestos content. Representative samples were collected of suspect asbestos-containing materials and analyzed for asbestos content using the PLM method of detection, unless otherwise noted. Results of analysis are summarized in <u>Table III</u> with Laboratory Certificates of Analysis presented in Appendix I.

#### 4.1.1 Fireproofing

No fireproofing was observed within the surveyed building.

#### 4.1.2 <u>Texture Finishes</u>

Samples Text-A-01/02/03 were collected of white texture finish ceiling observed throughout the main floor. No asbestos was detected in the samples.

#### 4.1.3 Mechanical Insulation

No suspected asbestos-containing mechanical insulation was observed within the surveyed building. All pipe insulation was identified to be fiberglass.

#### 4.1.4 Plaster

No plaster was observed within the surveyed building.

#### 4.1.5 Ceiling Tiles

Two types of ceiling tiles were observed within the surveyed building. Samples ACT-A-01/02/03 were collected of 2' x 2' textured ceiling tiles in the Council Chambers (Location 19). No asbestos was detected in the samples.

Remaining ceiling tiles were observed to be new based on date stamps and not suspected to contain asbestos.

#### 4.1.6 Vinyl Floor Tiles

No vinyl floor tiles were observed within the surveyed building.

#### 4.1.7 Vinyl Sheet Flooring

Samples VSF-I-01/02/03 were collected of beige vinyl sheet flooring with a "tile pattern" from the Vault (Location 10). No asbestos was detected in the samples.

#### 4.1.8 <u>Drywall Joint Compound</u>

Samples DJC-A-01/02/03/04/05 were collected of white drywall joint compound from various locations of the office area of the building. No asbestos was detected in the samples.

#### 4.1.9 Transite (Board/Ceiling Tile/Pipe)

No asbestos-cement (Transite) products were observed within the surveyed building.

#### 4.1.10 Vermiculite

No vermiculite insulation was observed within the surveyed building.

#### **4.1.11** *Caulking*

No suspect asbestos-containing caulking was observed.

#### 4.1.12 Roofing Materials

Roofing on the buildings surveyed was observed to be steel and not suspect ACMs were noted.

#### 4.1.13 Other

#### **Heat Shields**

Asbestos-containing "heat shields" are often present on small incandescent light fixtures. Work on and/or disturbance of these fixtures should assume such content until proven otherwise.

#### 4.2 <u>LEAD</u>

Four (4) samples of suspect lead-based paint were collected from the Office building. The samples were submitted to an independent laboratory, EMSL Canada Inc., for analysis. Results of the laboratory analysis are listed in <u>Table IV</u> below. The Laboratory Certificate of Analysis is attached in Appendix I.

## TABLE IV Summary of Lead Bulk Sampling Results Morris-Turnberry Municipal Office & Garage 41342 Morris Road, Brussels, Ontario November 29<sup>th</sup>, 2023

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
LD-A-01	Basement Storage Area (Location 3)	Light Beige Wall Paint	<0.0080	

Sample ID	Location	Location Sample Description Lead Concentration by Weight (%)		Photograph
LD-B-01	Basement File Storage (Location 2)	White Wall Paint	<0.0080	
LD-C-01	Garage (Location 22)	Grey Wall Paint	<0.0082	
LD-D-01	Garage Lunchroom (Location 20)	Brown Wall Paint	<0.019	

No lead was detected in the paints sampled. Lead is suspected to be present as a component in pipes and in solder used in pipe fittings in the Office/Service Shop. Based on the age of the Storage Shed and Salt Storage building as well as visually observations, no suspected lead-containing materials are present.

#### 4.3 SILICA

Silica may be present in the building in insulation materials. Free crystalline silica ( $\alpha$ -Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

#### 4.4 MERCURY

Fluorescent light tubes identified within the building are suspected to contain mercury vapour.

#### 4.5 ARSENIC

No source was identified.

#### 4.6 **ACRYLONITRILE**

No source was identified.

#### 4.7 BENZENE

Benzene is assumed to be present in fuels stored onsite.

#### 4.8 **COKE OVEN EMISSIONS**

Not applicable for the building.

#### 4.9 ETHYLENE OXIDE

No source was identified.

#### 4.10 **ISOCYANATES**

No source was identified.

#### 4.11 VINYL CHLORIDE

No source was identified.

#### 4.12 NON-DESIGNATED SUBSTANCES

#### 4.12.1 PCB

At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in the Revised Regulation of Ontario 362/90. In addition, requirements outlined in the federal regulation SOR/2008-273 – made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

No suspect PCB-containing transformers were noted in the areas of the building under study.

#### 4.12.2 Mould

No visible mould was observed within the surveyed building.

#### 4.12.3 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building.

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

The following summarizes hazardous building materials identified within the surveyed area.

#### 5.1 ASBESTOS

No asbestos-containing materials (ACM) were observed within the surveyed buildings. If suspect asbestos-containing materials are uncovered during renovation/demolition activities that were inaccessible at the time of the assessment, they should be assessed by a qualified person at that time.

Vinyl floor products were analyzed using the phase light microscopy (PLM) method of detection as required by Ontario Regulation 278/05. However, given the composition of vinyl floor products, the PLM analysis method is often prone to yielding false negative analysis results. Therefore, it may be prudent that the Transmission Electron Microscopy (TEM) analysis method (in addition to the PLM) be used to determine the asbestos content in the vinyl floor products.

#### 5.2 **LEAD**

Ontario Regulation 490/09, as amended by O. Reg. 189/19, *Designated Substances* – made under OHSA states that airborne levels of lead particles should not exceed 0.05 mg/m<sup>3</sup>. Any demolition or stripping work should be performed under controlled conditions according to the Ontario Ministry of Labour guideline "*Lead on Construction Projects*", dated April 2011.

The disposal of construction waste containing lead is controlled by Ontario Regulation 347, *General Waste Management* – made under the Ontario Environmental Protection Act. Leachate tests for lead in construction waste must not exceed 5 mg/L in order to be disposed of at a local landfill without treatment.

#### 5.3 SILICA

Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.

Precautions must be taken to prevent silica-containing particles from becoming airborne during the disturbance of silica-containing surfaces, such as during renovation or demolition projects. Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act. All work being carried out with silica-containing materials should be conducted following the guideline "Silica on Construction"

*Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

#### 5.4 MERCURY

Mercury vapour is present in tubes of fluorescent light fixtures. If these tubes are removed, they should be disposed of properly or recycled.

Precautions must be taken to prevent mercury vapours from becoming airborne during building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act.

#### 5.5 NON-DESIGNATED SUBSTANCES

#### 5.5.1 PCB

At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in the Revised Regulation of Ontario 362/90. In addition, requirements outlined in the federal regulation SOR/2008-273 — made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

Proper removal, handling and storage of PCB-containing materials must follow Ontario Regulation 362, as amended by 232/11, *Waste Management - PCBs* and Ontario Regulation 347, *General Waste Management*, as well as Federal Regulations SOR/2008-27, *PCB Regulations* and SOR/97-109, *PCB Waste Export Regulations* — made under the Canadian Environmental Protection Act.

Ontario Regulation 347 designates PCB waste (containing PCBs at a concentration of more than fifty parts per million (ppm) by weight) as a hazardous waste and states that no person shall dispose of PCB waste by land disposal. In Ontario, the Ministry of Environment (MOE) puts the onus on the owner to perform a leachate test as per Leachate Criteria Testing (Schedule 4) of Ontario Regulation 347, on all waste that may be hazardous and in turn handle the waste according to the test results. Leachate tests for PCBs must not exceed 0.3 mg/L (TCLP) in order to be disposed of at a local landfill without treatment.

Releasing PCBs into the environment is prohibited under the Canadian Environmental Protection Act. This prohibition applies to all PCBs, without exception, at all times. The prohibition on release applies to all quantities at a concentration of 2 mg/kg or more for liquids and 50 mg/kg or more for solids. The mixing or diluting of PCBs or products containing PCBs with any other product is prohibited with any other product except to destroy the PCBs or recover them to destroy them in an authorized facility.

#### 5.5.2 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building. All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

#### 5.6 GENERAL

Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347, as amended – made under the Environmental Protection Act. In the event lead and/or Mercury waste may be generated as part of renovation or demolition activities, the waste may be subject to Leachate Criteria (Schedule 4) of this regulation.

Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities, notably materials that are suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

#### 6.0 <u>LIMITATIONS</u>

In this statement of limitations, the "Client" refers to the persons or entities to whom this report is addressed. "THEM" refers to T. Harris Environmental Management Inc. The "Contract" refers to any general, or project-specific written agreement, including project-specific scope of work documents, executed between THEM and the Client pertaining to the subject matter of this report.

This report is subject to the limitations set out below and any other limitations set out in the body of this report or in the Contract between THEM and the Client.

The investigation and assessment described in this report were conducted in accordance with the Contract agreed upon by the Client in a manner consistent with a reasonable level of care and skill normally exercised by members of the occupational hygiene consulting profession currently practising under similar conditions in the Province of Ontario and observing the code of ethics of the Canadian Registration Board of Occupational Hygiene (CRBOH) and the American Board of Industrial Hygiene (ABIH).

In preparing this report, THEM has relied on information provided by others, including without limitation, information concerning the history and operation of the site, and test results and analyses of other consultants, independent laboratories, or testing services. Except as expressly stated in this report, THEM has not made any independent verification of such information. Findings cannot be extended to portions of the site, which were unavailable for direct observation.

The assessment in this report has been made in the context of regulations which were in force and effect at the time of the assessment and which are specified in this report. The assessment did not take into account any regulations, which were not in effect at the date of the assessments, or any guideline or standard not specified in this report. Regulatory standards do not exist for all materials of a potentially hazardous nature.

The collection of any samples at the site (including the location of samples and the analytical parameters applied to the samples) was undertaken in accordance with the Contract agreed upon by the Client, based upon the information provided to THEM by the Client concerning existing site conditions. Conditions between sample locations (if any) may differ from those indicated in this report.

This report is intended solely for the use or uses specified in this report and/or the Contract. Use of this report for purposes other than those set out in this report and/or the Contract will be at the sole risk of the Client.

Copying of this report except as may be reasonably required for internal use by the Client and any distribution of this report to persons other than the Client in whole or in part, is not permitted without the express written permission of THEM.

This report is for the sole use of the Client. THEM makes no representation or warranty, either expressed or implied, to any third party with regard to this report and the work referred to in this report and expressly disclaims any, and accepts no duty of care to any third party or any responsibility or liability whatsoever to any third party for any loss, expenses, damages (direct, consequential or contingent), fines, penalties, or other harm that may be suffered or incurred by any third party as a result of any use of, any reliance placed upon, or any decision made or actions taken based upon this report or the work referred to herein.

In no event shall THEM be liable for any indirect, incidental, special or consequential damages, or damages from loss of profits, revenue, or use, incurred by either the client or any third party, whether in an action in tort or contract, even if THEM has been advised of the possibility of such damages. THEM's liability for damages shall in no event exceed the limit of available insurance coverage.

If new information concerning the subject matter of this report arises, THEM should be contacted to re-evaluate the conclusions of this report and to provide amendments as required.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

Joe D'Angelo, B.A. (Envs), AMRT, EP Project Manager Greg Balsden, B.Sc., AMRT Manager – Southwestern Ontario



### APPENDIX I LABORATORY CERTIFICATES OF ANALYSIS



Proj:

Client Sample ID:

#### EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3 Phone/Fax: (289) 997-4602 / (289) 997-4607 http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552318684 55THAR50A Customer ID: L23-03777-01 Customer PO:

Project ID:

Attn: Greg Balsden

> T. Harris Environmental, Inc. 931 Commissioners Rd. E.

Suite 100

London, ON N5Z 3H9 Phone: Fax: Collected: (519) 685-9048 (519) 685-1042 11/29/2023

Received:

11/30/2023

Analyzed: 12/05/2023

Morris Turnberry Municipal Office (L23-03777-01)

#### Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Lab Sample ID: 552318684-0001 Client Sample ID: ACT-A-01

Sample Description: Acoustic ceiling tile (Council Chambres - Location 19)

		Analyzed		Non	-Asbestos				
TEST		Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment		
PLM		12/05/2023	Gray	80.0%	20.0%	None Detected			
Client Sample ID:	ACT-A-02						Lab Sample ID:	552318684-0002	

Sample Description: Acoustic ceiling tile (Council Chambres - Location 19)

		Analyzed		Non	-Asbestos			
TEST		Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	•	12/05/2023	Gray	80.0%	20.0%	None Detected		
Client Sample ID:	ACT-A-03						Lab Sample ID:	552318684-0003

Lab Sample ID: Client Sample ID: ACT-A-03

Sample Description: Acoustic ceiling tile (Council Chambres - Location 19)

		Analyzed		Non	-Asbestos				
TEST		Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment		
PLM		12/05/2023	Gray	80.0%	20.0%	None Detected			
Client Sample ID:	DJC-A-01						Lab Sample ID:	552318684-0004	

Sample Description: Drywall Joint Compound (Server Room - Location 1)

	Analyzed		Non	Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	12/05/2023	White	0.0%	100.0%	None Detected		

552318684-0005 Client Sample ID: DJC-A-02 Lab Sample ID:

Sample Description: Drywall Joint Compound (Basement - Location 3)

	Analyzed		Non-	Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	12/05/2023	White	0.0%	100.0%	None Detected		

552318684-0006 DJC-A-03 Lab Sample ID: Client Sample ID:

Sample Description: Drywall Joint Compound (Basement Closet - Location 4)

	Analyzed			Non	-Asbestos			
TEST		Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM		12/05/2023	White	0.0%	100.0%	None Detected		
Client Sample ID:	DJC-A-04						Lab Sample ID:	552318684-0007

Sample Description: Drywall Joint Compound (Stairwell - Location 6)

Analyzed			Non-Asbestos				
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	12/05/2023	White	0.0%	100.0%	None Detected		



Client Sample ID:

#### EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3 Phone/Fax: (289) 997-4602 / (289) 997-4607 http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552318684 55THAR50A Customer ID: L23-03777-01 Customer PO:

Project ID:

Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Lab Sample ID: 552318684-0008 Client Sample ID: DJC-A-05

Sample Description: Drywall Joint Compound (Stairwell - Location 6)

Analyzed Non-Asbestos **TEST** Date Color Fibrous Non-Fibrous Asbestos Comment PLM 12/05/2023 White 0.0% 100.0% None Detected Client Sample ID: Text-A-01 Lab Sample ID: 552318684-0009

Sample Description: Texture finish ceiling (Office - Location 9)

Analyzed Non-Asbestos TEST Date **Fibrous** Non-Fibrous Comment Color Asbestos PLM 12/05/2023 White 0.0% 100.0% None Detected

Client Sample ID: Text-A-02 Lab Sample ID: 552318684-0010

Sample Description: Texture finish ceiling (Office - Location 11)

Text-A-03

Analyzed Non-Asbestos **TEST** Date Color **Fibrous** Non-Fibrous Asbestos Comment PLM 12/05/2023 White 0.0% 100.0% None Detected Lab Sample ID: 552318684-0011

Sample Description: Texture finish ceiling (Entrance Hallway - Location 13)

Analyzed Non-Asbestos **TEST** Date Color Fibrous Non-Fibrous Asbestos Comment PLM 12/05/2023 White 0.0% 100.0% None Detected Lab Sample ID: 552318684-0012 Client Sample ID:

Sample Description: Vinyl Sheet Flooring (Vault - Location 10)

Analyzed Non-Asbestos **TEST** Date Fibrous Non-Fibrous **Asbestos** Comment Color PLM None Detected 12/05/2023 Brown/Yellow 20.0% 80.0%

552318684-0013 VSF-I-02 Lab Sample ID: Client Sample ID:

Sample Description: Vinyl Sheet Flooring (Vault - Location 10)

Non-Asbestos Analyzed TEST Fibrous Non-Fibrous Comment Date Asbestos Color PLM 12/05/2023 Brown/Yellow 20.0% 80.0% None Detected 552318684-0014 VSF-I-03 Lab Sample ID:

Client Sample ID:

Sample Description: Vinyl Sheet Flooring (Vault - Location 10)

Analyzed Non-Asbestos TEST Comment Date Color **Fibrous** Non-Fibrous **Asbestos** PLM 12/05/2023 20.0% 80.0% Brown/Yellow None Detected



#### EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3 Phone/Fax: (289) 997-4602 / (289) 997-4607 http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552318684 Customer ID: 55THAR50A Customer PO: L23-03777-01

Project ID:

Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Analyst(s):

Nickesh Mistry PLM (4)
Vanessa Gallego PLM (10)

Reviewed and approved by:

Matthew Davis or other approved signatory or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This is a summary report; official reports are available on LabConnect or upon request and relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON NVLAP Lab Code 200877-0

Initial report from: 12/05/202320:16:29



#### **EMSL Canada Inc.**

2756 Slough Street, Mississauga, ON L4T 1G3

Phone/Fax: (289) 997-4602 / (289) 997-4607

http://www.EMSL.com torontolab@emsl.com

CustomerID:
CustomerPO:

EMSL Canada Or

55THAR50A L23-03777-01

552318678

ProjectID:

Attn: Greg Balsden

T. Harris Environmental, Inc. 931 Commissioners Rd. E. Suite 100

London, ON N5Z 3H9

Project: Morris Turnberry Municipal Office (L23-03777-01)

Phone: (519) 685-9048
Fax: (519) 685-1042
Received: 11/30/2023 10:10 AM

Collected: 11/29/2023

#### Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

Client SampleDescription	Collected Analyzed	Weight	RDL	Lead Concentration
LD-A-01 552318678-0001	11/29/2023 11/30/2023 Site: Basement - Location 3 Desc: Light Beige Wall Paint	0.2488 g	0.0080 % wt	<0.0080 % wt
LD-B-01 552318678-0002	11/29/2023 11/30/2023 Site: Basement File Storage - Location 2 Desc: White Wall Paint	0.2556 g	0.0080 % wt	<0.0080 % wt
LD-C-01 552318678-0003	11/29/2023 11/30/2023 Site: Garage - Location 22 Desc: Grey Wall Paint	0.2429 g	0.0082 % wt	<0.0082 % wt
LD-D-01 552318678-0004	11/29/2023 11/30/2023 Site: Garage Lunch Room - Location 20 Desc: Brown Wall Paint Insufficient sample to reach reporting limit	0.1052 g	0.019 % wt	<0.019 % wt

Rowena Fanto, Lead Supervisor or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

\*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request. Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA LAP, LLC-ELLAP Accredited #196142

Initial report from 12/06/2023 08:29:00



### HAZARDOUS MATERIALS SURVEY BLUEVALE COMMUNITY HALL 32 Clyde Street Bluevale, Ontario

December 11th, 2023

#### **Prepared for:**

Trevor Hallam – CAO/Clerk Municipality of Morris-Turnberry 41342 Morris Rd., PO Box 310 Brussels, ON NOG 1H0

T. Harris Environmental Management Inc. 931 Commissioners Road East, Suite 100 London, Ontario N5Z 3H9

Project No: L23-03777-02

London ● Toronto ● Ottawa ● Montreal
E-mail: info@tharris.ca ● Website: www.tharris.ca



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#### **EXECUTIVE SUMMARY**

T. Harris Environmental Management Inc. (THEM) was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs), for the Bluevale Community Hall located at 32 Clyde Street in Bluevale, Ontario. The objective of this study was to determine whether any hazardous building materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, were present in the above noted buildings. The survey was conducted on November 29<sup>th</sup>, 2023.

Based on the investigation conducted by T. Harris Environmental Management, through available records, interviews and a site review, the following were identified:

Asbestos-containing materials (ACM) observed in the surveyed area are detailed in <u>Table I</u>.
 Asbestos-containing materials observed were assigned a Priority rating. Materials assigned Priority 1 are highly recommended to be removed, repaired or encapsulated. Materials identified as Priority 2 may remain in place until system upgrading or renovations. Materials assigned Priority 3 may remain in place until the building is demolished.

TABLE I
Summary of Asbestos-Containing Materials
Bluevale Community Hall
32 Clyde Street, Bluevale, Ontario
November 29<sup>th</sup>, 2023

Location	Material	Quantity	Priority	Type(s) of Asbestos	Friable (Y/N)	Photo
Men's Washroom (Location 5)	Vinyl Sheet Flooring (under new linoleum)	~ 75 ft²	2	Chrysotile	Yes	
Women's Washroom (Location 6)	Vinyl Sheet Flooring (under new linoleum)	~ 85 ft²	2	Chrysotile	Yes	P1
Kitchen (Location 7)	Vinyl Sheet Flooring	~ 200 ft <sup>2</sup>	2	Chrysotile	Yes	P2
Storage Area (Location 8)	Vinyl Sheet Flooring	~ 50 ft <sup>2</sup>	2	Chrysotile	Yes	
Exterior	Transite Shingles*	~ 10 ft <sup>2</sup> **	2		No	Р3

<sup>\*</sup>Material visually identified to contain asbestos.

<sup>\*\*</sup>More Transite shingles may be present on exterior steel and vinyl siding leader is assumed to be present below grade.

 A summary of the paints and their associated lead concentrations can be found in <u>Table II</u>. No lead was detected in the paints sampled from the building. Lead is suspected to be present as a component in pipes and in solder used in pipe fittings.

# TABLE II Summary of Lead Bulk Sampling Results Bluevale Community Hall 32 Clyde Street, Bluevale, Ontario November 29<sup>th</sup>, 2023

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
LD-A-01	Library Room (Location 2)	Yellow Wall Paint	<0.0081	
LD-B-01	Basement Hall (Location 4)	Light Grey Wall Paint	<0.0080	
LD-C-01	Upper-Level Hall (Location 10)	Light Beige Wall paint	<0.0082	

- Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline (α-Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.
- Mercury vapour is suspected to be present within fluorescent light tubes.
- Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building.
- Mouse droppings were observed on ceiling tiles and above vapour barrier in the ceiling space of the Library Room (Location 2).

Based on the findings of this report THEM recommends the following:

Friable ACM assigned a Priority 1 must be removed and/or repaired immediately following
applicable asbestos abatement procedures. Friable ACM assigned a Priority 2 can remain
in place until major system upgrading, maintenance or demolition which could result in
disturbance of this material. In the event the friable ACM is removed, Type 3 operations
apply as outlined in Ontario Regulation 278/05, Designated Substance - Asbestos on

Construction Projects and in Buildings and Repair Operations – made under the Ontario Occupational Health and Safety Act. Type 2 operations can be applied for the repair of friable materials or, removal of less than 1 square metre of friable ACM. In addition, Type 2 Glove Bag operations can be applied for the removal of asbestos-containing mechanical pipe insulation fittings as outlined in Ontario Regulation 278/05.

- Non-friable asbestos-containing materials assigned Priority 1 must be removed and/or repaired immediately following applicable asbestos abatement procedures. Non-friable asbestos-containing materials assigned Priority 2 can remain in place until major system upgrading, maintenance or demolition which could result in disturbance of this material. In the event the non-friable asbestos-containing materials are removed, Type 1 operations apply (provided that the material is wetted down and removed using non-powered handheld tools) as outlined in Ontario Regulation 278/05, Designated Substance Asbestos on Construction Projects and in Buildings and Repair Operations made under the Ontario Occupational Health and Safety Act.
- Respiratory protection equipment worn by contractors conducting asbestos abatement activities should be selected based on Table 2 Respirators found in Ontario Regulation 278/05.
- In the event all ACM within the building is not removed, an asbestos management program must be implemented according to Ontario Regulation 278/05.
- Paints identified to have concentrations of lead and observed in poor condition should be removed and/or stabilized following applicable lead abatement procedures. Prior to any renovations or demolition activities that may disturb materials identified to contain lead of any concentration, precautions must be taken as described in Ontario Regulation 213/91, Construction Projects made under the Occupational Health and Safety Act. This may include conducting an assessment of the potential exposure of airborne lead by a qualified person. Exposure to lead-containing materials is regulated under Ontario Regulation 490/09, Designated Substances made under the Occupational Health and Safety Act. Care must be taken to prevent lead-containing particles from becoming airborne during the disturbance of lead-containing surfaces (i.e., during renovation or demolition projects). All lead abatement work must follow procedures outlined in the guideline "Lead on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

- Precautions must be taken to prevent mercury vapours becoming airborne during renovations or building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, Designated Substances – made under the Occupational Health and Safety Act.
- All waste material must be handled and disposed of according to R.R.O. 1990, Reg. 347:
   General Waste Management, as amended made under the Ontario Environmental Protection Act. Lead and/or Mercury waste may be subject to Leachate Criteria (Schedule 4) of this regulation.
- Exposure to airborne silica is regulated under Ontario Regulation 490/09, Designated Substances made under the Occupational Health and Safety Act. All work being carried with silica containing materials should be conducted following the guideline "Silica on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in R.R.O. 1990, Reg. 347: General Waste Management, as amended. In addition, requirements outlined in the federal regulation SOR/2008-273 made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.
- All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.
- Areas with rodent droppings present should be cleaned following appropriate Health Canada recommendations to prevent potential exposure to hantavirus.
- Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.
- Building material(s) that are not detailed within this survey due to inaccessibility during
  the time of the survey and/or are uncovered during renovation/demolition activities,
  notably materials that are suspected to contain asbestos, should be properly assessed by
  qualified person prior to their disturbance.

This survey satisfies requirements of the Occupational Health and Safety Act with regards to the presence/absence of hazardous materials identified within this report. This executive summary is not to be used alone and the report should be reviewed in its entirety.

Should you have any questions or comments regarding this survey, please do not hesitate to contact our office.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

#### 1.0 <u>INTRODUCTION</u>

T. Harris Environmental Management Inc. was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, for the Bluevale Community Hall located at 32 Clyde Street in Bluevale, Ontario. The survey was conducted on November 29<sup>th</sup>, 2023.

The objective of this survey was to determine whether hazardous materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs) were present within the building surveyed. The survey included a review of the entire building for the presence and extent of hazardous materials, evaluation of the type of hazardous materials and degree of possible exposure, and assessment of requirements for any further investigation or remedial action, if necessary.

Identification of suspect asbestos materials was performed by means of bulk sampling and laboratory analysis. Testing for lead in paint was conducted using bulk sampling. Other hazardous materials, if present, were identified by visual inspection only. These included mercury in gauges and light fixtures, polychlorinated biphenyls (PCBs) in coolant oils of transformers and fluorescent light fixture ballasts, and silica in cement. Recommendations based on our findings are made in Section 5.0.

This report documents our findings as noted during our site inspection. Individual assessments were made to identify Designated Substances and their condition, as well as requirements for special treatment such as control programs or specialized removal and disposal techniques.

#### 2.0 ONTARIO REGULATIONS AND GUIDELINES FOR SURVEY

Ontario Regulation 490/09, *Designated Substances* – made under the Ontario Health and Safety Act, applies to controlling designated substances in the workplace. This regulation may not be all encompassing for each of the Designated Substances and other associated Ontario Regulations may apply.

The management and abatement of asbestos-containing materials must be conducted according to Ontario Regulation 278/05 amended by O. Reg. 450/19, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations —* made under the Occupational

Health and Safety Act. Asbestos-containing waste must be handled and disposed of according to R.R.O., 1990, Regulation 347: *General - Waste Management*.

In addition to the Ontario Regulation 490/09 noted above, the following guidelines were observed for this survey:

- <u>Lead on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- <u>Silica on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

Polychlorinated biphenyls (PCBs) are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however as selected materials were reviewed for PCB content during this survey the following legislation applies: R.R.O., 1990, Regulation 362: Waste Management - PCB's — made under the Environmental Protection Act and SOR/2008-273 — made under the Canadian Environmental Protection Act, 1999.

Applicable legislation and/or guidelines for other materials identified (not listed above) as part of the survey are included where applicable.

All waste materials are regulated by R.R.O., 1990, Regulation 347: *General - Waste Management*, as amended – made under the Ontario Environmental Protection Act.

#### 3.0 SURVEY METHODOLOGY

Not all designated substances or suspect hazardous materials were sampled. Sampling was carried out only for those compounds that were known to be present or those deemed to have a likely source of origin in the buildings under study.

All sample analyses were performed by an independent laboratory and the Laboratory Certificates of Analysis attached in Appendix III. Materials similar in appearance or texture to other materials tested were considered to be of similar composition. When inaccessible areas such as behind walls and above plaster ceilings were encountered during the survey, inferences were drawn based upon findings in adjacent spaces. Other designated substances and listed hazardous materials, if present, were identified by observation only.

The survey, as proposed, included the inspection of all accessible areas specified by the client.

#### 3.1 ASBESTOS-CONTAINING MATERIALS

Asbestos is a general name for several varieties of highly fibrous silicate materials. Commercially significant types include: Chrysotile, Amosite and Crocidolite. The combination of a variety of favourable characteristics made asbestos popular for wide industrial use, including: fibrous structure, low heat conductivity, high electrical resistance, chemical inertness, strength, flexibility and effectiveness as a reinforcing or binding agent when combined with cement or plastic.

Products with bound asbestos pose no danger of releasing airborne fibres unless cut, sawn, ground or sanded. One measure of the potential hazard of a product is its friability. The friability of asbestos containing materials (ACM) is a measure of the ease with which the material can be ground or pulverized by hand pressure. Knowledge of the friability of ACM may theoretically indicate the ease with which fibres can be released into the air.

The accredited survey inspector(s) were responsible for inspecting, assessing and recording the location, condition and type of all suspect friable and non-friable ACM in the project area. Each individual room and space was surveyed. Homogeneous sampling areas of ACM were determined. A homogeneous area is defined as an application of ACM that is uniform in colour, texture, identical in every respect, and is unlikely to consist of more than one type or formulation of material. Materials installed at different times, on different floors, or in special areas such as mechanical rooms are assigned to separate sampling areas.

#### 3.1.1 Asbestos Bulk Sampling

Sampling of suspected asbestos-containing building materials observed within the surveyed area was conducted as per the requirements of Table 1 found within Ontario Regulation 278/05. A summary of the sample requirements can be found in <u>Table III</u> below.

TABLE III
Asbestos Bulk Sampling Requirements

Type of material	Size of area of homogeneous material	Minimum # of bulk material samples to be collected
Surfacing material, including without	<90 sq metres	3
limitation material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on	>90 sq metres but <450 sq. metres	5
structural members	>450 sq metres	7
Thermal insulation, except as described in item 3	Any size	3
Thermal insulation patch	<2 linear metres or 0.5 sq metres	1
Other material	Any size	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), with confirmation of presence and type of asbestos made by dispersion staining optical microscopy. This analytical procedure follows the U.S. Environmental Protection Agency Test Method EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, June 1993. Laboratory Certificates of Analysis for this identification are given in Appendix III.

According to O. Reg. 278/05, asbestos-containing material means material that contains 0.5 percent or more asbestos by dry weight. If analysis establishes that a bulk material sample contains 0.5 percent or more asbestos by dry weight, then it is not necessary to analyze other bulk material samples taken from the same area of homogenous material, the entire area of homogenous material is deemed to be asbestos-containing material.

Destructive testing was not performed. Therefore, in the event asbestos-containing materials are discovered as part of the survey, inferences have been drawn for inaccessible spaces (i.e., above plaster ceilings with no access panels) based upon findings in adjacent spaces. Similarly, motors, blowers, electrical panels, etc., were not de-energized or disassembled to examine concealed conditions. Such items should be considered to have asbestos as a component until proven otherwise.

Boilers were frequently constructed (i.e., lined, bedded, etc.) with asbestos refractory materials. Demolition and/or renovations to existing boiler units which may elicit a disturbance of suspect ACM should necessitate prior investigation to determine for the presence of ACM. In addition, fire doors that may be present in the surveyed areas were not tested intrusively and therefore should be considered to contain ACM until proven otherwise. Further examples of such assumptions include: elevator brakes, roofing felts and mastics, caulking, high voltage wiring, mechanical packing and gaskets, and underground services or piping.

#### 3.1.2 Assessment

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility. Priorities have been established for remedial action based on these combinations, and are given below.

#### Priority 1 (One)

Asbestos-containing material highly recommended to be removed, repaired or encapsulated.

#### Priority 2 (Two)

Asbestos-containing material could remain in place until system upgrading or renovations are to occur.

#### **Priority 3 (Three)**

Asbestos-containing material could remain in place until eventual building demolition.

#### 3.2 **LEAD-CONTAINING MATERIALS**

Paints/surface coatings observed in the surveyed areas were tested for lead content. Other building materials not tested for lead content (i.e., mortar, concrete) should be considered lead-containing until proven otherwise.

Currently in Ontario, there is no regulation that provides a definition of what the percent of lead in paint must be in order to be considered "lead-based paint". The Surface Coating Materials Regulations (SOR/2005-109) made under the Canada Consumer Product Safety Act specifies that the concentration of total lead present in a surface coating material must not be more than



600 mg/kg. The Surface Coatings Materials Regulations came into effect on April 19th, 2005 and was amended in November of 2010, which lowered the acceptable concentration of total lead present in a surface coating material to less than 90 mg/kg (SOR/2010-224). This lead content applies to any paint and/or surface coatings of products advertised, sold or imported into Canada. Coatings applied to furniture, pencils, artists' brushes, toys and articles that are intended for children would fall under the jurisdiction of this regulation. However, these levels are not specifically intended to determine what constitutes a "lead-based paint", it is merely a regulation to protect consumers of coated materials. Therefore, this regulation does not apply to construction projects where lead-based coatings may be disturbed during the course of renovations or construction.

To date, there is no simple correlation between the concentration of lead in paints/surface coatings and the resulting airborne lead levels that may be emitted if the coated material was to be disturbed or removed. However, the Environmental Abatement Council of Canada (EACC) "Lead Guideline for Construction, Renovation, Maintenance or Repair", published October 2014 (herein referred to as 'EACC Guideline'), outlines "virtually safe" lead levels for paints or surface coatings. Paints or coatings containing less than or equal to 0.1% lead by weight<sup>1</sup> are considered low-level lead paints or coatings. If these paints or coatings are disturbed in a manner, which uses normal dust control procedures, and does not exceed the particulate not otherwise specified (PNOS) time-weighted average (TWA) of 0.05 mg/m<sup>3</sup> set in Ontario Regulation 490/09, then worker protection from the inhalation of lead is not required. Projects that meet these guidelines must still adhere to general health and safety precautions, such as prohibiting eating, smoking, drinking or chewing gum in the work area. These projects must also implement dust suppression techniques and provide facilities for workers to wash their hands and face. Additionally, the Occupational Health and Safety branch of the Ministry of Labour (MOL) provides classifications of the types of specific lead operations, which are based on presumed airborne lead concentrations to which the worker will be exposed. The classifications are provided in the MOL publication, "Guideline: Lead on Construction Projects", published in September 2004 and revised in April 2011 (herein referred to as 'MOL Guideline'). The levels of airborne lead expected to be present in a work area is related to the types of work operations being used to disturb or remove the coatings; it is not a function of the percentage of lead within the coating. Based on this MOL Guideline, all paints/surface coatings are to be considered lead-containing unless they are tested and contain undetectable lead concentrations.

<sup>&</sup>lt;sup>1</sup> WHMIS reporting limit for lead in a safety data sheet or material safety data sheet.

Lead is also suspected to be a component in solder on plumbing fixtures throughout the building. Representative samples of solder joints suspected to contain lead were not collected. Other suspect lead-containing materials such as lead sheeting, conduit, pipes and lead-calcium battery plates were not sampled during this investigation, but were noted where applicable.

#### 3.2.1 Bulk Sampling for Lead in Paints

To verify lead content in paints, representative bulk samples of paints were retrieved for laboratory analysis for lead content. Paint samples were scraped down to the building base structure, with all possible layers present, then submitted to an independent laboratory. Samples were treated with a dilute nitric acid sample digestion prior to filtration. Analysis utilized for lead detection in filtered samples was Flame Atomic Absorption Spectroscopy (F.A.A.S.).

#### 3.3 SILICA-CONTAINING MATERIALS

Silica occurs naturally as crystalline or amorphous material. Crystalline silica is significantly more toxic than amorphous silica.

Silica may be present in the project area in two forms: i) amorphous-diatomaceous earth in pipe fittings and other insulation materials; and ii) free crystalline ( $\alpha$ -Quartz) in ceiling tiles, concrete, cement, brick, ceramic tiles, terra cotta block and hard plaster finishes. Testing for silica in these materials was not conducted, but its presence was noted.

#### 3.4 MERCURY-CONTAINING MATERIALS

Mercury may be a component in paints and can also be present as a liquid in thermometers, thermostats, and other mechanical equipment switches. Mercury vapour is present in fluorescent lamps.

#### 3.5 **ARESENIC-CONTAINING MATERIALS**

Arsenic is used in metallurgy for hardening copper, lead and alloys; in pigment production, in the manufacture of certain types of glass, in insecticides and fungicides and in rodent poisons, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing.

#### 3.6 **ACRYLONITRILE**

Acrylonitrile (ACN) (also known as vinyl cyanide) is an explosive, flammable liquid used in the manufacture of acrylic fibres, rubber-like materials and pesticide fumigants.

#### 3.7 BENZENE

Benzene, or Benzol, is a colourless liquid. It is used as an intermediate in the production of styrene, phenol, cyclohexane, and other organic chemicals, in the manufacture of detergents, pesticides, solvents, and paint removers. It is also found in gasoline.

#### 3.8 COKE OVEN EMISSIONS

Not applicable to this project area.

#### 3.9 ETHYLENE OXIDE

Ethylene oxide is a colourless gas liquefying below 12 degrees Celsius. It is used generally as a fumigant and sterilizing agent for medical equipment.

#### 3.10 ISOCYANATES

Isocyanates (HDI, MDI and TDI) are used in the production of polyurethane and as an elastomer in casting compounds, mastic, and textile coatings (IPDI).

#### 3.11 VINYL CHLORIDE

Vinyl Chloride, also known as chloroethylene, is a colourless gas but is handled as a liquid under pressure. It is used in the production of polyvinyl chloride resins and in organic synthesis.

#### 3.12 NON-DESIGNATED SUBSTANCES

#### 3.12.1 <u>PCB-containing Materials</u>

PCBs are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however, a review of a number of representative and accessible fluorescent light ballasts suspected to contain PCBs were included in the survey. In addition, accessible building hydraulic equipment (i.e., elevators/lifts) or electrical transformers observed

during the survey were visually reviewed. No sampling of materials for PCB content was conducted as a part of this survey. In addition, no other materials were reviewed/inspected as a part of this survey unless specified by the client. Thus, the following materials should be assumed, if present onsite, to contain PCBs until proven otherwise: cable insulation, thermal insulation materials (i.e., foam, felt), adhesives/tapes, plastics, caulking, lead-based paints and, various types of electrical equipment (i.e., voltage regulators, switches, bushings, electromagnets).

Polychlorinated biphenyl-containing ballasts reviewed were identified by model number, serial number, and date code, as listed in *Environment of Canada Identification of Lamp Ballasts Containing PCBs - Report EPS 2/CC/2 (revised), August 1991*.

#### 3.12.2 Mould

Fungi, also called mould or mildew, are microbiological organisms that can live and reproduce and potentially cause health problems in indoor environments. They are chlorophyll-lacking plant-like organisms that are unicellular (e.g., yeast) or grow in a multinucleate mass (e.g., bread mould), subsist on decomposed organic matter or nutrition from living hosts, and reproduce by production of spores 3 to 200  $\mu$ m in size. Mould growth inside buildings is due to excess moisture caused by leakages, condensation, or capillary movement of water into the building. They will generally not occur if materials are kept dry.

The presence of mould spores in indoor environments may not be significant in terms of the causation of fungal infestation since most micro-organism contamination does not become a problem until it becomes disturbed and is distributed into the ventilation system or air within the building. In other words, there may be little hazard if micro-organisms do not multiply or do not accumulate to harmful levels, if there is no means for micro-organisms to become airborne, or, if aerosolized micro-organisms do not reach susceptible receptors.

Fungi or moulds which are typically found on building materials that have become damaged due to moisture problems can cause or exacerbate allergic type symptoms in occupants who have a history of hypersensitivity diseases (e.g., asthma). Thus, people suffering from respiratory disorders or severe allergies may be at greater risk for developing health problems associated with exposures to fungi found in water damaged areas. Such people may need to be removed from the affected areas until remediation and clearance testing, if required, is completed. However, any decisions regarding medical removal must be based on recommendations made

by an occupational medicine specialist trained in symptomatology related to this type of exposure.

In order to define risk for areas that are suspected or confirmed to be contaminated with mould, the extent of water damage, and/or visible mould growth on building materials must be considered. THEM recommends the following criteria presented in <u>Table IV</u> for determining risk levels (hazard categories) and associated remediation protocols. This criterion is based on the "Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation" and "Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines 2015, Edition 3".

TABLE IV
Recommended Water Damage/Mould Risk Management Levels

Recommended trater bandge, modia mon management levels			
Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements	
0	No visible signs of mould growth, no evidence of category 2 or 3 water damage and no health complaints.	No remediation required; however, in some situations structural drying may be required.	
1	Small Areas (Source Containment)	<ul> <li>Work can be conducted by in-house staff trained in water damage/mould remedial techniques or by qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>No critical barriers required.</li> <li>Contaminated building materials can be contained with polyethylene sheeting and duct tape and removed.</li> </ul>	



Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements
2	Moderate Areas (Local Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>A polyethylene enclosure should be erected to isolate mould contaminated materials.</li> <li>A decontamination chamber may be required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>
3	Extensive Areas (Full Scale Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>The mould contaminated room and/or building section should be isolated with critical barriers.</li> <li>Building materials within the remediation area that cannot be cleaned effectively must be sealed off with polyethylene barriers.</li> <li>A decontamination unit is required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>

Note 1: May or may not include destructive testing.

#### 3.12.3 Ozone Depleting Substances

Ozone depleting substances such as fluorocarbons are commonly used as cooling agents in refrigeration equipment such as ice makers, refrigerators, chilled water drinking fountains, compressors and air conditioners. Commercial chlorofluorocarbon (CFC) production began with R–12 in 1931, R–11 in 1932, R–114 in 1933 and R–113 in 1934. The first hydrochlorofluorocarbon (HCFC) refrigerant, R–22 was produced in 1936. By 1963, these five products accounted for 98% of the total production of the organic fluorine industry.

Almost 50 years passed between the introduction of CFCs and recognition of their harm to the environment when released to the atmosphere. Specific concerns are related to their depletion of stratospheric ozone and to possible climate change by their action as greenhouse gases. The high stability of CFCs enables them to deliver ozone—depleting chlorine to the stratosphere.

The project area was visually inspected for refrigeration equipment and where possible, fluorocarbon content was determined by looking at appliance tags.

#### 4.0 FINDINGS

The following includes observations for any hazardous materials identified within the area surveyed. The survey focused on building materials and as such there may be Designated Substances in equipment that was present within the surveyed area.

#### 4.1 ASBESTOS

Samples of suspect ACMs were collected at various locations from the Municipal Office building. The samples were submitted to EMSL Canada for the determination of asbestos content using the polarized light microscopy (PLM) method of detection. Laboratory Certificates of Analysis detailing results of bulk samples collected during this assessment are attached in Appendix III of this report with results summarized in <u>Table V</u> below. Samples found to be asbestos containing are shaded.

TABLE V
Summary of Asbestos Bulk Sampling Results
Bluevale Community Hall
32 Clyde Street, Bluevale, Ontario
November 29<sup>th</sup>, 2023

Sample ID	Location	Description	Asbestos Content
ACT-A-01	Library Room (Location 2)	2' x 4' Acoustic Ceiling Tile with Deep fissures and red backing	None Detected
ACT-A-02	Basement Hall (Location 4)	2' x 4' Acoustic Ceiling Tile with Deep fissures and red backing	None Detected
ACT-A-03	Men's Washroom (Location 5)	2' x 4' Acoustic Ceiling Tile with Deep fissures and red backing	None Detected

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Sample ID	Location	Description	Asbestos Content
DJC-A-01	Library Room (Location 2)	Drywall Joint Compound	None Detected
DJC-A-02	Basement Hall (Location 4)	Drywall Joint Compound	None Detected
DJC-A-03	Basement Hall (Location 4)	Drywall Joint Compound	None Detected
DJC-A-04	Kitchen (Location 7)	Drywall Joint Compound	None Detected
DJC-A-05	Bar (Location 11)	Drywall Joint Compound	None Detected
VSF-I-01	Men's Washroom	Beige Vinyl Sheet Flooring	20% Chrysotile
	(Location 5)	(under new linoleum)	
VSF-I-02	Kitchen (Location 7)	Beige Vinyl Sheet Flooring	ANR
VSF-I-03	Kitchen (Location 7)	Beige Vinyl Sheet Flooring	ANR
VSF-II-01	Bar	Beige/Grey Vinyl Sheet Flooring	None Detected
V3F-11-U1	(Location 11)	Yellow Mastic	None Detected
VCE II 02	Bar	Beige/Grey Vinyl Sheet Flooring	None Detected
VSF-II-02	(Location 11)	Yellow Mastic	None Detected
VSF-II-03	Bar	Beige/Grey Vinyl Sheet Flooring	None Detected
	(Location 11)	Yellow Mastic	None Detected
Plast-A-01	Upper-Level Hall	White Skim Coat Plaster	None Detected
Tiast-A-01	(Location 10)	Grey Rough Coat Plaster	None Detected
Plast-A-02	Upper-Level Hall	White Skim Coat Plaster	None Detected
Flast-A-UZ	(Location 10)	Grey Rough Coat Plaster	None Detected
Plast-A-03	Upper-Level Hall	White Skim Coat Plaster	None Detected
riast-A-US	(Location 10)	Grey Rough Coat Plaster	None Detected

The following building materials (if present) were investigated for asbestos content. Representative samples were collected of suspect asbestos-containing materials and analyzed for asbestos content using the PLM method of detection, unless otherwise noted. Results of analysis are summarized in <u>Table V</u> with Laboratory Certificates of Analysis presented in Appendix III. For information regarding the specific location and condition of asbestos-containing materials, refer to Table VII and the Floor Plans presented in Appendix II.

#### 4.1.1 Fireproofing

No fireproofing was observed within the surveyed building.

#### 4.1.2 <u>Texture Finishes</u>

No textured finishes were observed within the surveyed building.

#### 4.1.3 Mechanical Insulation

No suspected asbestos-containing mechanical insulation was observed within the surveyed building. All pipe insulation was identified to be fiberglass.

#### 4.1.4 <u>Plaster</u>

Samples Plast-A-01/02/03 were collected of smooth finished plaster with a white skim coat and grey rough coat layer from the Upper-Level Hall. No asbestos was detected in the samples.

#### 4.1.5 Ceiling Tiles

Samples ACT-A-01/02/03 were collected of 2' x 4' ceiling tiles with deep gouges and red backing observed throughout the building. No asbestos was detected in the samples.

#### 4.1.6 <u>Vinyl Floor Tiles</u>

No vinyl floor tiles were observed within the surveyed building.

#### 4.1.7 <u>Vinyl Sheet Flooring</u>

Samples VSF-I-01/02/03 were collected of beige vinyl sheet flooring observed in the Basement Kitchen and the basement washrooms under new linoleum. The samples were found to contain 20% Chrysotile asbestos.

Samples VSF-II-01/02/03 were collected of beige/grey vinyl sheet flooring from the Bar. No asbestos was detected in the samples.

Asbestos-containing vinyl sheeting flooring is a friable material as the asbestos is present in the paper layer below the vinyl. The flooring was observed to be in good condition and assigned a Priority 2.

#### 4.1.8 <u>Drywall Joint Compound</u>

Samples DJC-A-01/02/03/04/05 were collected of white drywall joint compound from various locations of the office area of the building. No asbestos was detected in the samples.

#### 4.1.9 <u>Transite (Board/Ceiling Tile/Pipe)</u>

Asbestos-containing Transite (asbestos-cement) shingles were observed on a small area on the front of the building between the vinyl siding and the steel siding. Approximately 10 square feet of shingles were visible. Shingles could not be observed under the steel or vinyl siding where accessible, however more could be present.

Asbestos-containing Transite shingles are a friable material and were observed to be in fair condition and assigned a Priority 2.

#### 4.1.10 Vermiculite

No vermiculite insulation was observed within the surveyed building.

#### **4.1.11** *Caulking*

No suspect asbestos-containing caulking was observed.

#### 4.1.12 Roofing Materials

Roofing on the buildings surveyed was observed to be steel and not suspect ACMs were noted.

#### 4.1.13 Other

#### **Heat Shields**

Asbestos-containing "heat shields" are often present on small incandescent light fixtures. Work on and/or disturbance of these fixtures should assume such content until proven otherwise.

#### **4.2 LEAD**

Three (3) samples of suspect lead-based paint were collected from the Office building. The samples were submitted to an independent laboratory, EMSL Canada Inc., for analysis. Results of the laboratory analysis are listed in <u>Table VI</u> below. The Laboratory Certificate of Analysis is attached in Appendix III.

# TABLE VI Summary of Lead Bulk Sampling Results Bluevale Community Hall 32 Clyde Street, Bluevale, Ontario November 29<sup>th</sup>, 2023

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
LD-A-01	Library Room (Location 2)	Yellow Wall Paint	<0.0081	
LD-B-01	Basement Hall (Location 4)	Light Grey Wall Paint	<0.0080	
LD-C-01	Upper-Level Hall (Location 10)	Light Beige Wall paint	<0.0082	

No lead was detected in the paints sampled. Lead is suspected to be present as a component in pipes and in solder used in pipe fittings.

#### 4.3 SILICA

Silica may be present in the building in insulation materials. Free crystalline silica ( $\alpha$ -Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

#### 4.4 MERCURY

Fluorescent light tubes identified within the building are suspected to contain mercury vapour.

#### 4.5 **ARSENIC**

No source was identified.

#### 4.6 **ACRYLONITRILE**

No source was identified.

#### 4.7 BENZENE

No source was identified.

#### 4.8 COKE OVEN EMISSIONS

Not applicable for the building.

#### 4.9 ETHYLENE OXIDE

No source was identified.

#### 4.10 **ISOCYANATES**

No source was identified.

#### 4.11 VINYL CHLORIDE

No source was identified.

#### 4.12 NON-DESIGNATED SUBSTANCES

#### 4.12.1 PCB

At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in the Revised Regulation of Ontario 362/90. In addition, requirements outlined in the federal

regulation SOR/2008-273 – made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

No suspect PCB-containing transformers were noted in the areas of the building under study.

#### 4.12.2 **Mould**

No visible mould was observed within the surveyed building.

#### 4.12.3 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building.

#### 4.12.4 Rodent Droppings

Rodent droppings were observed on top of acoustic ceiling tiles and above vapour barrier in the ceiling space of the Library Room (Location 2) (Appendix I, Photograph 4).

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

The following summarizes hazardous building materials identified within the surveyed area.

#### 5.1 ASBESTOS

Asbestos-containing materials observed in the surveyed area are detailed in <u>Table VII</u>. Asbestos materials observed were assigned a Priority rating. Materials assigned Priority 1 are highly recommended to be removed, repaired or encapsulated. Materials identified as Priority 2 may remain in place until system upgrading or renovations. Materials assigned Priority 3 may remain in place until the building is demolished.

#### TABLE VII

## Summary of Asbestos-Containing Materials Bluevale Community Hall 32 Clyde Street, Bluevale, Ontario November 29<sup>th</sup>, 2023

Location	Material	Quantity	Priority	Type(s) of Asbestos	Friable (Y/N)	Photo
Men's Washroom (Location 5)	Vinyl Sheet Flooring (under new linoleum)	~ 75 ft²	2	Chrysotile	Yes	
Women's Washroom (Location 6)	Vinyl Sheet Flooring (under new linoleum)	~ 85 ft²	2	Chrysotile	Yes	P1
Kitchen (Location 7)	Vinyl Sheet Flooring	~ 200 ft <sup>2</sup>	2	Chrysotile	Yes	P2
Storage Area (Location 8)	Vinyl Sheet Flooring	~ 50 ft <sup>2</sup>	2	Chrysotile	Yes	
Exterior	Transite Shingles*	~ 10 ft <sup>2</sup> **	2		No	Р3

<sup>\*</sup>Material visually identified to contain asbestos.

Friable ACM assigned a Priority 1 must be removed and/or repaired immediately following applicable asbestos abatement procedures. Friable ACM assigned a Priority 2 can remain in place until major system upgrading, maintenance or demolition which could result in disturbance of this material. In the event the friable ACM is removed, Type 3 operations apply as outlined in Ontario Regulation 278/05, Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations — made under the Ontario Occupational Health and Safety Act. Type 2 operations can be applied for the repair of friable materials or, removal of less than 1 square metre of friable ACM. In addition, Type 2 Glove Bag operations can be applied for the removal of asbestos-containing mechanical pipe insulation fittings as outlined in Ontario Regulation 278/05.

Non-friable ACM assigned a Priority 1 must be removed and/or repaired immediately following applicable asbestos abatement procedures. Non-friable ACM assigned a Priority 2 can remain in place until major system upgrading, maintenance or demolition which could result in disturbance of this material. In the event the non-friable ACM is removed, Type 1 operations apply (provided that the material is wetted down and removed using non-powered handheld tools) as outlined in Ontario Regulation 278/05, Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations — made under the Ontario Occupational Health and Safety Act.

<sup>\*\*</sup>More Transite shingles may be present on exterior steel and vinyl siding leader is assumed to be present below grade.

Respiratory protection equipment worn by contractors conducting asbestos abatement activities should be selected based on Table 2 Respirators found in Ontario Regulation 278/05.

In the event all ACM within the building is not removed, an asbestos management program must be implemented according to Ontario Regulation 278/05.

#### 5.2 <u>LEAD</u>

Ontario Regulation 490/09, as amended by O. Reg. 189/19, *Designated Substances* – made under OHSA states that airborne levels of lead particles should not exceed 0.05 mg/m³. Any demolition or stripping work should be performed under controlled conditions according to the Ontario Ministry of Labour guideline "*Lead on Construction Projects*", dated April 2011.

The disposal of construction waste containing lead is controlled by Ontario Regulation 347, *General Waste Management* – made under the Ontario Environmental Protection Act. Leachate tests for lead in construction waste must not exceed 5 mg/L in order to be disposed of at a local landfill without treatment.

#### 5.3 SILICA

Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.

Precautions must be taken to prevent silica-containing particles from becoming airborne during the disturbance of silica-containing surfaces, such as during renovation or demolition projects. Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act. All work being carried out with silica-containing materials should be conducted following the guideline "Silica on Construction *Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

#### 5.4 MERCURY

Mercury vapour is present in tubes of fluorescent light fixtures. If these tubes are removed, they should be disposed of properly or recycled.

Precautions must be taken to prevent mercury vapours from becoming airborne during building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act.

#### 5.5 NON-DESIGNATED SUBSTANCES

#### 5.5.1 PCB

At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in the Revised Regulation of Ontario 362/90. In addition, requirements outlined in the federal regulation SOR/2008-273 — made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

Proper removal, handling and storage of PCB-containing materials must follow Ontario Regulation 362, as amended by 232/11, *Waste Management - PCBs* and Ontario Regulation 347, *General Waste Management*, as well as Federal Regulations SOR/2008-27, *PCB Regulations* and SOR/97-109, *PCB Waste Export Regulations* — made under the Canadian Environmental Protection Act.

Ontario Regulation 347 designates PCB waste (containing PCBs at a concentration of more than fifty parts per million (ppm) by weight) as a hazardous waste and states that no person shall dispose of PCB waste by land disposal. In Ontario, the Ministry of Environment (MOE) puts the onus on the owner to perform a leachate test as per Leachate Criteria Testing (Schedule 4) of Ontario Regulation 347, on all waste that may be hazardous and in turn handle the waste according to the test results. Leachate tests for PCBs must not exceed 0.3 mg/L (TCLP) in order to be disposed of at a local landfill without treatment.

Releasing PCBs into the environment is prohibited under the Canadian Environmental Protection Act. This prohibition applies to all PCBs, without exception, at all times. The prohibition on release applies to all quantities at a concentration of 2 mg/kg or more for liquids and 50 mg/kg or more for solids. The mixing or diluting of PCBs or products containing PCBs with any other product is prohibited with any other product except to destroy the PCBs or recover them to destroy them in an authorized facility.

#### 5.5.2 <u>Ozone Depleting Substances</u>

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building. All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

#### 5.5.3 Other

Areas with rodent droppings present should be cleaned following appropriate Health Canada recommendations to prevent potential exposure to hantavirus.

#### 5.6 **GENERAL**

Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347, as amended – made under the Environmental Protection Act. In the event lead and/or Mercury waste may be generated as part of renovation or demolition activities, the waste may be subject to Leachate Criteria (Schedule 4) of this regulation.

Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities, notably materials that are suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

#### 6.0 <u>LIMITATIONS</u>

In this statement of limitations, the "Client" refers to the persons or entities to whom this report is addressed. "THEM" refers to T. Harris Environmental Management Inc. The "Contract" refers to any general, or project-specific written agreement, including project-specific scope of work documents, executed between THEM and the Client pertaining to the subject matter of this report.

This report is subject to the limitations set out below and any other limitations set out in the body of this report or in the Contract between THEM and the Client.

The investigation and assessment described in this report were conducted in accordance with the Contract agreed upon by the Client in a manner consistent with a reasonable level of care and skill normally exercised by members of the occupational hygiene consulting profession currently practising under similar conditions in the Province of Ontario and observing the code of ethics of the Canadian Registration Board of Occupational Hygiene (CRBOH) and the American Board of Industrial Hygiene (ABIH).

In preparing this report, THEM has relied on information provided by others, including without limitation, information concerning the history and operation of the site, and test results and analyses of other consultants, independent laboratories, or testing services. Except as expressly stated in this report, THEM has not made any independent verification of such information. Findings cannot be extended to portions of the site, which were unavailable for direct observation.

The assessment in this report has been made in the context of regulations which were in force and effect at the time of the assessment and which are specified in this report. The assessment did not take into account any regulations, which were not in effect at the date of the assessments, or any guideline or standard not specified in this report. Regulatory standards do not exist for all materials of a potentially hazardous nature.

The collection of any samples at the site (including the location of samples and the analytical parameters applied to the samples) was undertaken in accordance with the Contract agreed upon by the Client, based upon the information provided to THEM by the Client concerning existing site conditions. Conditions between sample locations (if any) may differ from those indicated in this report.

This report is intended solely for the use or uses specified in this report and/or the Contract. Use of this report for purposes other than those set out in this report and/or the Contract will be at the sole risk of the Client.

Copying of this report except as may be reasonably required for internal use by the Client and any distribution of this report to persons other than the Client in whole or in part, is not permitted without the express written permission of THEM.

This report is for the sole use of the Client. THEM makes no representation or warranty, either expressed or implied, to any third party with regard to this report and the work referred to in this report and expressly disclaims any, and accepts no duty of care to any third party or any responsibility or liability whatsoever to any third party for any loss, expenses, damages (direct, consequential or contingent), fines, penalties, or other harm that may be suffered or incurred by any third party as a result of any use of, any reliance placed upon, or any decision made or actions taken based upon this report or the work referred to herein.

In no event shall THEM be liable for any indirect, incidental, special or consequential damages, or damages from loss of profits, revenue, or use, incurred by either the client or any third party, whether in an action in tort or contract, even if THEM has been advised of the possibility of such damages. THEM's liability for damages shall in no event exceed the limit of available insurance coverage.

If new information concerning the subject matter of this report arises, THEM should be contacted to re-evaluate the conclusions of this report and to provide amendments as required.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

Joe D'Angelo, B.A. (Envs), AMRT, EP Project Manager Greg Balsden, B.Sc., AMRT Manager – Southwestern Ontario



#### APPENDIX I SITE PHOTOGRAPHS



Photograph 1: View of non-asbestos linoleum in the Women's Washroom (Location 6) which is covering asbestoscontaining vinyl sheet flooring, assigned a **Priority 2**.



**Photograph 2:** View of asbestos-containing vinyl sheet flooring in the Kitchen (Location 7), assigned a **Priority 2**.

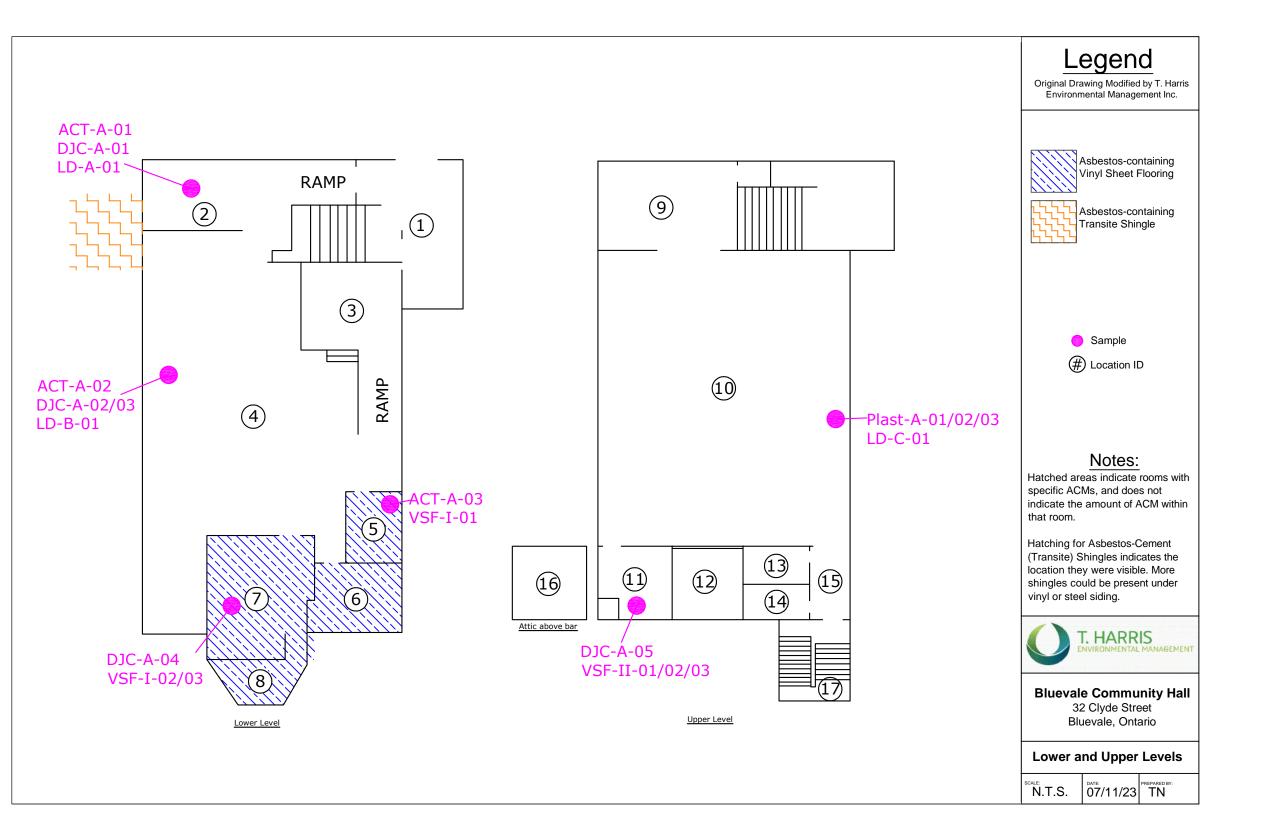


**Photograph 3:** View of asbestos-containing Transite Siding Shingles on the Building exterior, assigned a **Priority 2**. No shingles were observed under the vinyl siding, where accessible, however, more shingles could be present under steel or vinyl siding.



**Photograph 4:** View of mouse droppings on ceiling tiles in the Library Room (Location 2).

### APPENDIX II FLOOR PLANS





## APPENDIX III LABORATORY CERTIFICATES OF ANALYSIS



Proj:

PL

Client Sample ID:

Client Sample ID:

Client Sample ID:

#### EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3 Phone/Fax: (289) 997-4602 / (289) 997-4607 http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552318693 55THAR50A Customer ID: L23-03777-02 Customer PO:

Project ID:

Lab Sample ID:

Lab Sample ID:

552318693-0002

Attn: Greg Balsden

> T. Harris Environmental. Inc. 931 Commissioners Rd. E.

Suite 100

London, ON N5Z 3H9

ACT-A-02

ACT-A-03

Phone: Fax: Collected: (519) 685-9048 (519) 685-1042 11/29/2023

Received: Analyzed:

11/30/2023 12/06/2023

#### Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Lab Sample ID: 552318693-0001 Client Sample ID: ACT-A-01

Sample Description: Acoustic ceiling tile (Basement Library Room - Location 2)

Bluevale Community Hall (L23-03777-02)

	Analyzed		Non-	Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	12/05/2023	Gray	80.0%	20.0%	None Detected		

Sample Description: Acoustic ceiling tile (Basement Meeting Room - Location 4)

Analyzed Non-Asbestos TEST Date Color Fibrous Non-Fibrous Asbestos Comment PLM 12/05/2023 None Detected 80.0% 20.0% Gray 552318693-0003

Sample Description: Acoustic ceiling tile (Basement Men's W/R - Location 5)

Analyzed Non-Asbestos **TEST** Date Color Fibrous Non-Fibrous Asbestos Comment PLM 12/06/2023 Gray/Pink 80.0% 20.0% None Detected Lab Sample ID: 552318693-0004 DJC-A-01

Sample Description: Drywall Joint Compound (Basement Library - Location 2)

Analyzed Non-Asbestos **TEST** Non-Fibrous Comment Date Color Fibrous Asbestos 12/05/2023 PLM White 0.0% 100.0% None Detected DJC-A-02 Lab Sample ID: 552318693-0005 Client Sample ID:

Sample Description: Drywall Joint Compound (Basement Meeting Rm - Location 4)

Analyzed Non-Asbestos **TEST** Date Color **Fibrous** Non-Fibrous Asbestos Comment PLM 12/05/2023 White 0.0% 100.0% None Detected Lab Sample ID: 552318693-0006 Client Sample ID: DJC-A-03

Sample Description: Drywall Joint Compound (Basement Meeting Rm - Location 4)

Analyzed Non-Asbestos Fibrous Non-Fibrous TEST Date Color Asbestos Comment PLM 12/05/2023 White 0.0% 100.0% None Detected 552318693-0007 Lab Sample ID: Client Sample ID:

Sample Description: Drywall Joint Compound (Kitchen - Location 7)

Analyzed Non-Asbestos **TEST** Date Color **Fibrous** Non-Fibrous Asbestos Comment PLM 12/05/2023 White 0.0% 100.0% None Detected



Client Sample ID:

#### EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3 Phone/Fax: (289) 997-4602 / (289) 997-4607 http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552318693 55THAR50A Customer ID: L23-03777-02 Customer PO:

Project ID:

Lab Sample ID:

#### Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Lab Sample ID: 552318693-0008 Client Sample ID: DJC-A-05

Sample Description: Drywall Joint Compound (Bar - Location 11)

Analyzed Non-Asbestos **TEST** Date Color Fibrous Non-Fibrous Asbestos Comment PLM 12/06/2023 White 0.0% 100.0% None Detected 552318693-0009

Sample Description: Vinyl Sheet Flooring (Men's W/R - Location 5)

VSF-I-01

Analyzed Non-Asbestos TEST Date Non-Fibrous Comment Color **Fibrous** Asbestos PLM 12/05/2023 Gray/Beige 0.0% 80.0% 20% Chrysotile

Client Sample ID: VSF-I-02 Lab Sample ID: 552318693-0010

Sample Description: Vinyl Sheet Flooring (Kitchen - Location 7)

Analyzed Non-Asbestos **TEST** Date Color Fibrous Non-Fibrous Asbestos Comment PLM 12/05/2023 Positive Stop (Not Analyzed) Lab Sample ID: 552318693-0011 VSF-I-03 Client Sample ID:

Sample Description: Vinyl Sheet Flooring (Kitchen - Location 7)

Analyzed Non-Asbestos **TEST** Date Color Fibrous Non-Fibrous Asbestos Comment PLM 12/05/2023 Positive Stop (Not Analyzed) VSF-II-01-Sheet Flooring Lab Sample ID: 552318693-0012 Client Sample ID:

Sample Description: Vinyl Sheet Flooring (Bar -Location 11)

Analyzed Non-Asbestos **TEST** Date **Fibrous** Non-Fibrous **Asbestos** Comment Color PLM 12/05/2023 Brown/Gray/Beige 15.0% 85.0% None Detected

Lab Sample ID: 552318693-0012A VSF-II-01-Mastic Client Sample ID:

Sample Description: Vinyl Sheet Flooring (Bar -Location 11)

Non-Asbestos Analyzed TEST Fibrous Non-Fibrous Comment Date Asbestos Color PLM 12/06/2023 0.0% 100.0% None Detected Yellow/Beige 552318693-0013

VSF-II-02 Lab Sample ID: Client Sample ID:

Sample Description: Vinyl Sheet Flooring (Bar -Location 11)

Analyzed Non-Asbestos Comment **TEST** Date Color **Fibrous** Non-Fibrous **Asbestos** PLM 12/05/2023 Brown/Gray/Beige 15.0% 85.0% None Detected Lab Sample ID: 552318693-0014 VSF-II-03-Sheet Flooring Client Sample ID:

Sample Description: Vinyl Sheet Flooring (Bar -Location 11)

Analyzed Non-Asbestos **TEST** Date Color Fibrous Non-Fibrous Asbestos Comment PLM 12/06/2023 Brown/Gray/Beige 15.0% 85.0% None Detected



#### **EMSL** Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3 Phone/Fax: (289) 997-4602 / (289) 997-4607 http://www.EMSL.com / torontolab@emsl.com EMSL Canada Order 552318693 Customer ID: 55THAR50A Customer PO: L23-03777-02

Project ID:

#### Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Client Sample ID:	VSF-II-03-Mastic					Lab Sample ID:	552318693-0014A
Sample Description:	Vinyl Sheet Flooring (Bar -Lo	ocation 11)					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	12/06/2023	Yellow	0.0%	100.0%	None Detected		
Client Sample ID:	Plast-A-01-Skim Coat					Lab Sample ID:	552318693-0015
Sample Description:	White and grey plaster (Hall-	- Location 10)					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	12/05/2023	White	0.0%	100.0%	None Detected		
Client Sample ID:	Plast-A-01-Rough Coat					Lab Sample ID:	552318693-0015A
Sample Description:	White and grey plaster (Hall-	- Location 10)					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
	12/05/2023	Gray	0.0%	100.0%	None Detected		
PLM	12/00/2020	<del> </del>					
	Plast-A-02-Skim Coat					Lab Sample ID:	552318693-0016
Client Sample ID:						Lab Sample ID:	552318693-0016
Client Sample ID:	Plast-A-02-Skim Coat		Non	-Asbestos		Lab Sample ID:	552318693-0016
Client Sample ID:	Plast-A-02-Skim Coat White and grey plaster (Hall-		Non Fibrous	-Asbestos Non-Fibrous	Asbestos	Lab Sample ID:  Comment	552318693-0016
Client Sample ID: Sample Description: TEST	Plast-A-02-Skim Coat White and grey plaster (Hall-	- Location 10)			<b>Asbestos</b> None Detected	·	552318693-0016
Client Sample ID: Sample Description: TEST	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date	- Location 10)	Fibrous	Non-Fibrous		·	552318693-0016 552318693-0016A
Client Sample ID: Sample Description:  TEST PLM Client Sample ID:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023	- Location 10)  Color  White	Fibrous	Non-Fibrous		Comment	
Client Sample ID: Sample Description:  TEST PLM Client Sample ID:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat	- Location 10)  Color  White	Fibrous 0.0%	Non-Fibrous		Comment  Lab Sample ID:	
Client Sample ID: Sample Description:  TEST  PLM  Client Sample ID: Sample Description:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat White and grey plaster (Hall- Analyzed Date	Color White Location 10)  Color	Fibrous 0.0% Non Fibrous	Non-Fibrous 100.0%  -Asbestos Non-Fibrous	None Detected  Asbestos	Comment	
Client Sample ID: Sample Description:  TEST  PLM  Client Sample ID: Sample Description:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat White and grey plaster (Hall-	Color White - Location 10)	Fibrous 0.0% Non	Non-Fibrous 100.0%	None Detected	Comment  Lab Sample ID:	
Client Sample ID: Sample Description:  TEST  PLM  Client Sample ID: Sample Description:  TEST	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat White and grey plaster (Hall- Analyzed Date	Color White Location 10)  Color	Fibrous 0.0% Non Fibrous	Non-Fibrous 100.0%  -Asbestos Non-Fibrous	None Detected  Asbestos	Comment  Lab Sample ID:	
Client Sample ID: Sample Description:  TEST PLM Client Sample ID: Sample Description:  TEST PLM Client Sample ID:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat White and grey plaster (Hall- Analyzed Date 12/05/2023	Color White Location 10)  Color Gray	Fibrous 0.0% Non Fibrous	Non-Fibrous 100.0%  -Asbestos Non-Fibrous	None Detected  Asbestos	Comment  Lab Sample ID:  Comment	552318693-0016A
Client Sample ID: Sample Description:  TEST PLM Client Sample ID: Sample Description:  TEST PLM Client Sample ID: Sample Description:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-03-Skim Coat White and grey plaster (Hall- Analyzed	Color White Location 10)  Color Gray	Non Fibrous 0.0%	Asbestos 100.0%  Asbestos Non-Fibrous 100.0%	None Detected  Asbestos	Comment  Lab Sample ID:  Comment  Lab Sample ID:	552318693-0016A
Client Sample ID: Sample Description:  TEST PLM Client Sample ID: Sample Description:  TEST PLM Client Sample ID: Sample Description:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-03-Skim Coat White and grey plaster (Hall- Analyzed Date Analyzed Date	Color White Location 10)  Color Gray	Non Fibrous  Non Fibrous  Non Fibrous	-Asbestos 100.0% -Asbestos Non-Fibrous -Asbestos Non-Fibrous	None Detected  Asbestos	Comment  Lab Sample ID:  Comment	552318693-0016A
PLM  Client Sample ID: Sample Description:  TEST  PLM  Client Sample ID: Sample Description:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-03-Skim Coat White and grey plaster (Hall- Analyzed	Color White Location 10)  Color Gray  Location 10)	Non Fibrous 0.0%	Asbestos 100.0%  Asbestos Non-Fibrous 100.0%	Asbestos None Detected	Comment  Lab Sample ID:  Comment  Lab Sample ID:	552318693-0016A
Client Sample ID: Sample Description:  TEST PLM Client Sample ID: Sample Description:  TEST PLM Client Sample ID: Sample Description:	Plast-A-02-Skim Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-02-Rough Coat White and grey plaster (Hall- Analyzed Date 12/05/2023  Plast-A-03-Skim Coat White and grey plaster (Hall- Analyzed Date Analyzed Date	Color White Location 10)  Color Gray Location 10)  Color	Non Fibrous  Non Fibrous  Non Fibrous	-Asbestos 100.0% -Asbestos Non-Fibrous -Asbestos Non-Fibrous	Asbestos Asbestos Asbestos	Comment  Lab Sample ID:  Comment  Lab Sample ID:	552318693-0016A

Non-Asbestos

Fibrous Non-Fibrous

100.0%

0.0%

Asbestos

None Detected

Comment

TEST

PLM

Analyzed

Date

12/06/2023

Color

Gray



#### **EMSL Canada Inc.**

2756 Slough Street Mississauga, ON L4T 1G3 Phone/Fax: (289) 997-4602 / (289) 997-4607 http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552318693 Customer ID: 55THAR50A Customer PO: L23-03777-02

Project ID:

Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Analyst(s):

Kira Ramphal PLM (7) Nickesh Mistry PLM (13)

Reviewed and approved by:

Matthew Davis or other approved signatory or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This is a summary report; official reports are available on LabConnect or upon request and relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON NVLAP Lab Code 200877-0

Initial report from: 12/06/202309:23:24



#### EMSL Canada Inc.

2756 Slough Street, Mississauga, ON L4T 1G3

(289) 997-4602 / (289) 997-4607

http://www.EMSL.com torontolab@emsl.com

CustomerPO: ProjectID:

CustomerID:

EMSL Canada Or

55THAR50A L23-03777-02

552318681

**Greg Balsden** 

T. Harris Environmental, Inc. 931 Commissioners Rd. E. Suite 100

London, ON N5Z 3H9

Project: Bluevale Community Hall (L23-03777-02)

Phone: (519) 685-9048 Fax: (519) 685-1042 Received: 11/30/2023 10:06 AM

Collected: 11/29/2023

#### Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

Client SampleDescription	Collected Analyzed	Weight	RDL	Lead Concentration
LD-A-01 552318681-0001	11/29/2023 11/30/2023 Site: Basement Library Room - Location 2 Desc: Yellow Wall Paint	0.2479 g	0.0081 % wt	<0.0081 % wt
LD-B-01 552318681-0002	11/29/2023 11/30/2023 Site: Basement Meeting Room/Hall - Location 4 Desc: Grey Wall Paint	0.2578 g	0.0080 % wt	<0.0080 % wt
LD-C-01 552318681-0003	11/29/2023 11/30/2023 Site: Upper Level Hall - Location 10 Desc: Light Beige Wall Paint	0.2434 g	0.0082 % wt	<0.0082 % wt

Rowena Fanto, Lead Supervisor or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA LAP, LLC-ELLAP Accredited #196142

December 21<sup>st</sup>, 2023

Municipality of Morris-Turnberry 41342 Morris Rd., PO Box 310 Brussels, ON NOG 1H0

Attn.: Mr. Trevor Hallam – CAO/Clerk

Re: Asbestos Abatement Cost Estimates – ARO Accounting

**Municipality of Morris-Turnberry** 

Please find below, T. Harris Environmental Management Inc. cost estimates for abatement of asbestos/lead containing materials within the Bluevale Community Hall. No asbestos or lead was found in the Miantenance Building, Municipal Office, Water Treatment Building or Ball Park Booth and no estimates have been provided for these building. The estimates below are based on the Designated Substance Survey Reports completed in December 2023 for the Bluevale Community Hall.

Structure	Type/Amount of Asbestos	Abatement Costs
	Asbestos – Vinyl Sheet Flooring	\$6,500.00
Bluevale Community Hall	(4 rooms, ~ 410 ft <sup>2</sup> )	
- 32 Clyde Street, Bluevale, ON	Transite Exterior Shingles	\$500.00
	(~ 10 ft²)	
	No lead	\$0.00
Total Estimated Abatement Cost I	\$7,000.00 (Plus HST)	

Thanks, and please let me know if you have any questions.

Yours truly,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

Greg Balsden, B.Sc., AMRT. Manager Southwestern Ontario



# HAZARDOUS MATERIALS SURVEY BELGRAVE WATER TREATMENT BUILDING 28 McCrea Street Belgrave, Ontario NOG 1G0

December 11th, 2023

#### **Prepared for:**

Trevor Hallam – CAO/Clerk Municipality of Morris-Turnberry 41342 Morris Rd., PO Box 310 Brussels, ON NOG 1H0

T. Harris Environmental Management Inc. 931 Commissioners Road East, Suite 100 London, Ontario N5Z 3H9

Project No: L23-03777-03

**London** • Toronto • Ottawa • Montreal E-mail: <u>info@tharris.ca</u> • Website: <u>www.tharris.ca</u>



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#### **APPENDICES**

APPENDIX I LABORATORY CERTIFICATES OF ANALYSIS



#### **EXECUTIVE SUMMARY**

T. Harris Environmental Management Inc. (THEM) was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs), for the Belgrave Water Treatment Building located at 28 McCrea Street in Belgrave, Ontario. The objective of this study was to determine whether any hazardous building materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, were present in the above noted buildings. The survey was conducted on November 29<sup>th</sup>, 2023.

Based on the investigation conducted by T. Harris Environmental Management, through available records, interviews and a site review, the following were identified:

- No asbestos-containing materials (ACM) were observed within the surveyed building.
  Based on the age of construction (2007) no asbestos is suspected to be present. If suspect
  asbestos-containing materials are uncovered during renovation/demolition activities that
  were inaccessible at the time of the assessment, they should be assessed by a qualified
  person at that time.
- Lead was not found at a detectable level in any of the paints sampled. Lead may be present as a component in pipes and in solder used in pipe fittings.
- Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.
- Benzene is assumed to be present within diesel fuel in the fuel storage tank inside the building.
- Mercury vapour is suspected to be present within fluorescent light tubes.

Based on the aforementioned findings for the survey conducted, THEM recommends the following:

• Paints identified to have concentrations of lead and observed in poor condition should be removed and/or stabilized following applicable lead abatement procedures. Prior to any



renovations or demolition activities that may disturb materials identified to contain lead of any concentration, precautions must be taken as described in Ontario Regulation 213/91, Construction Projects – made under the Occupational Health and Safety Act. This may include conducting an assessment of the potential exposure of airborne lead by a qualified person. Exposure to lead-containing materials is regulated under Ontario Regulation 490/09, Designated Substances – made under the Occupational Health and Safety Act. Care must be taken to prevent lead-containing particles from becoming airborne during the disturbance of lead-containing surfaces (i.e., during renovation or demolition projects). All lead abatement work must follow procedures outlined in the guideline "Lead on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

- Precautions must be taken to prevent mercury vapours becoming airborne during renovations or building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, Designated Substances – made under the Occupational Health and Safety Act.
- All waste material must be handled and disposed of according to R.R.O. 1990, Reg. 347:
   General Waste Management, as amended made under the Ontario Environmental Protection Act. Lead and/or Mercury waste may be subject to Leachate Criteria (Schedule 4) of this regulation.
- Exposure to airborne silica is regulated under Ontario Regulation 490/09, Designated Substances made under the Occupational Health and Safety Act. All work being carried with silica containing materials should be conducted following the guideline "Silica on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.
- Building material(s) that are not detailed within this survey due to inaccessibility during
  the time of the survey and/or are uncovered during renovation/demolition activities,
  notably materials that are suspected to contain asbestos, should be properly assessed by
  qualified person prior to their disturbance.

This survey satisfies requirements of the Occupational Health and Safety Act with regards to the presence/absence of hazardous materials identified within this report. This executive summary is not to be used alone and the report should be reviewed in its entirety.

Should you have any questions or comments regarding this survey, please do not hesitate to contact our office.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

#### 1.0 INTRODUCTION

T. Harris Environmental Management Inc. was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, for the Belgrave Water Treatment Building located at 28 McCrea Street in Belgrave, Ontario. The survey was conducted on November 29<sup>th</sup>, 2023.

The objective of this survey was to determine whether hazardous materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs) were present within the building surveyed. The survey included a review of the entire building for the presence and extent of hazardous materials, evaluation of the type of hazardous materials and degree of possible exposure, and assessment of requirements for any further investigation or remedial action, if necessary.

Identification of suspect asbestos materials was performed by means of bulk sampling and laboratory analysis. Testing for lead in paint was conducted using bulk sampling. Other hazardous materials, if present, were identified by visual inspection only. These included mercury in gauges and light fixtures, polychlorinated biphenyls (PCBs) in coolant oils of transformers and fluorescent light fixture ballasts, and silica in cement. Recommendations based on our findings are made in Section 5.0.

This report documents our findings as noted during our site inspection. Individual assessments were made to identify Designated Substances and their condition, as well as requirements for special treatment such as control programs or specialized removal and disposal techniques.

#### 2.0 ONTARIO REGULATIONS AND GUIDELINES FOR SURVEY

Ontario Regulation 490/09, *Designated Substances* – made under the Ontario Health and Safety Act, applies to controlling designated substances in the workplace. This regulation may not be all encompassing for each of the Designated Substances and other associated Ontario Regulations may apply.

The management and abatement of asbestos-containing materials must be conducted according to Ontario Regulation 278/05 amended by O. Reg. 450/19, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations —* made under the Occupational

Health and Safety Act. Asbestos-containing waste must be handled and disposed of according to R.R.O., 1990, Regulation 347: *General - Waste Management*.

In addition to the Ontario Regulation 490/09 noted above, the following guidelines were observed for this survey:

- <u>Lead on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- <u>Silica on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

Polychlorinated biphenyls (PCBs) are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however as selected materials were reviewed for PCB content during this survey the following legislation applies: R.R.O., 1990, Regulation 362: Waste Management - PCB's — made under the Environmental Protection Act and SOR/2008-273 — made under the Canadian Environmental Protection Act, 1999.

Applicable legislation and/or guidelines for other materials identified (not listed above) as part of the survey are included where applicable.

All waste materials are regulated by R.R.O., 1990, Regulation 347: *General - Waste Management*, as amended – made under the Ontario Environmental Protection Act.

#### 3.0 SURVEY METHODOLOGY

Not all designated substances or suspect hazardous materials were sampled. Sampling was carried out only for those compounds that were known to be present or those deemed to have a likely source of origin in the buildings under study.

All sample analyses were performed by an independent laboratory and the Laboratory Certificates of Analysis attached in Appendix I. Materials similar in appearance or texture to other materials tested were considered to be of similar composition. When inaccessible areas such as behind walls and above plaster ceilings were encountered during the survey, inferences were drawn based upon findings in adjacent spaces. Other designated substances and listed hazardous materials, if present, were identified by observation only.

The survey, as proposed, included the inspection of all accessible areas specified by the client.

#### 3.1 ASBESTOS-CONTAINING MATERIALS

Asbestos is a general name for several varieties of highly fibrous silicate materials. Commercially significant types include: Chrysotile, Amosite and Crocidolite. The combination of a variety of favourable characteristics made asbestos popular for wide industrial use, including: fibrous structure, low heat conductivity, high electrical resistance, chemical inertness, strength, flexibility and effectiveness as a reinforcing or binding agent when combined with cement or plastic.

Products with bound asbestos pose no danger of releasing airborne fibres unless cut, sawn, ground or sanded. One measure of the potential hazard of a product is its friability. The friability of asbestos containing materials (ACM) is a measure of the ease with which the material can be ground or pulverized by hand pressure. Knowledge of the friability of ACM may theoretically indicate the ease with which fibres can be released into the air.

The accredited survey inspector(s) were responsible for inspecting, assessing and recording the location, condition and type of all suspect friable and non-friable ACM in the project area. Each individual room and space was surveyed. Homogeneous sampling areas of ACM were determined. A homogeneous area is defined as an application of ACM that is uniform in colour, texture, identical in every respect, and is unlikely to consist of more than one type or formulation of material. Materials installed at different times, on different floors, or in special areas such as mechanical rooms are assigned to separate sampling areas.

#### 3.1.1 Asbestos Bulk Sampling

Sampling of suspected asbestos-containing building materials observed within the surveyed area was conducted as per the requirements of Table 1 found within Ontario Regulation 278/05. A summary of the sample requirements can be found in <u>Table I</u> below.

TABLE I
Asbestos Bulk Sampling Requirements

Type of material	Size of area of homogeneous material	Minimum # of bulk material samples to be collected
Surfacing material, including without	<90 sq metres	3
limitation material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on	>90 sq metres but <450 sq. metres	5
structural members	>450 sq metres	7
Thermal insulation, except as described in item 3	Any size	3
Thermal insulation patch	<2 linear metres or 0.5 sq metres	1
Other material	Any size	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), with confirmation of presence and type of asbestos made by dispersion staining optical microscopy. This analytical procedure follows the U.S. Environmental Protection Agency Test Method EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, June 1993. Laboratory Certificates of Analysis for this identification are given in Appendix I.

According to O. Reg. 278/05, asbestos-containing material means material that contains 0.5 percent or more asbestos by dry weight. If analysis establishes that a bulk material sample contains 0.5 percent or more asbestos by dry weight, then it is not necessary to analyze other bulk material samples taken from the same area of homogenous material, the entire area of homogenous material is deemed to be asbestos-containing material.

Destructive testing was not performed. Therefore, in the event asbestos-containing materials are discovered as part of the survey, inferences have been drawn for inaccessible spaces (i.e., above plaster ceilings with no access panels) based upon findings in adjacent spaces. Similarly, motors, blowers, electrical panels, etc., were not de-energized or disassembled to examine concealed conditions. Such items should be considered to have asbestos as a component until proven otherwise.

Boilers were frequently constructed (i.e., lined, bedded, etc.) with asbestos refractory materials. Demolition and/or renovations to existing boiler units which may elicit a disturbance of suspect ACM should necessitate prior investigation to determine for the presence of ACM. In addition, fire doors that may be present in the surveyed areas were not tested intrusively and therefore should be considered to contain ACM until proven otherwise. Further examples of such assumptions include: elevator brakes, roofing felts and mastics, caulking, high voltage wiring, mechanical packing and gaskets, and underground services or piping.

#### 3.1.2 Assessment

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility. Priorities have been established for remedial action based on these combinations, and are given below.

#### Priority 1 (One)

Asbestos-containing material highly recommended to be removed, repaired or encapsulated.

#### Priority 2 (Two)

Asbestos-containing material could remain in place until system upgrading or renovations are to occur.

#### **Priority 3 (Three)**

Asbestos-containing material could remain in place until eventual building demolition.

#### 3.2 **LEAD-CONTAINING MATERIALS**

Paints/surface coatings observed in the surveyed areas were tested for lead content. Other building materials not tested for lead content (i.e., mortar, concrete) should be considered lead-containing until proven otherwise.

Currently in Ontario, there is no regulation that provides a definition of what the percent of lead in paint must be in order to be considered "lead-based paint". The Surface Coating Materials Regulations (SOR/2005-109) made under the Canada Consumer Product Safety Act specifies that the concentration of total lead present in a surface coating material must not be more than



600 mg/kg. The Surface Coatings Materials Regulations came into effect on April 19th, 2005 and was amended in November of 2010, which lowered the acceptable concentration of total lead present in a surface coating material to less than 90 mg/kg (SOR/2010-224). This lead content applies to any paint and/or surface coatings of products advertised, sold or imported into Canada. Coatings applied to furniture, pencils, artists' brushes, toys and articles that are intended for children would fall under the jurisdiction of this regulation. However, these levels are not specifically intended to determine what constitutes a "lead-based paint", it is merely a regulation to protect consumers of coated materials. Therefore, this regulation does not apply to construction projects where lead-based coatings may be disturbed during the course of renovations or construction.

To date, there is no simple correlation between the concentration of lead in paints/surface coatings and the resulting airborne lead levels that may be emitted if the coated material was to be disturbed or removed. However, the Environmental Abatement Council of Canada (EACC) "Lead Guideline for Construction, Renovation, Maintenance or Repair", published October 2014 (herein referred to as 'EACC Guideline'), outlines "virtually safe" lead levels for paints or surface coatings. Paints or coatings containing less than or equal to 0.1% lead by weight<sup>1</sup> are considered low-level lead paints or coatings. If these paints or coatings are disturbed in a manner, which uses normal dust control procedures, and does not exceed the particulate not otherwise specified (PNOS) time-weighted average (TWA) of 0.05 mg/m<sup>3</sup> set in Ontario Regulation 490/09, then worker protection from the inhalation of lead is not required. Projects that meet these guidelines must still adhere to general health and safety precautions, such as prohibiting eating, smoking, drinking or chewing gum in the work area. These projects must also implement dust suppression techniques and provide facilities for workers to wash their hands and face. Additionally, the Occupational Health and Safety branch of the Ministry of Labour (MOL) provides classifications of the types of specific lead operations, which are based on presumed airborne lead concentrations to which the worker will be exposed. The classifications are provided in the MOL publication, "Guideline: Lead on Construction Projects", published in September 2004 and revised in April 2011 (herein referred to as 'MOL Guideline'). The levels of airborne lead expected to be present in a work area is related to the types of work operations being used to disturb or remove the coatings; it is not a function of the percentage of lead within the coating. Based on this MOL Guideline, all paints/surface coatings are to be considered lead-containing unless they are tested and contain undetectable lead concentrations.

<sup>&</sup>lt;sup>1</sup> WHMIS reporting limit for lead in a safety data sheet or material safety data sheet.

Lead is also suspected to be a component in solder on plumbing fixtures throughout the building. Representative samples of solder joints suspected to contain lead were not collected. Other suspect lead-containing materials such as lead sheeting, conduit, pipes and lead-calcium battery plates were not sampled during this investigation, but were noted where applicable.

#### 3.2.1 Bulk Sampling for Lead in Paints

To verify lead content in paints, representative bulk samples of paints were retrieved for laboratory analysis for lead content. Paint samples were scraped down to the building base structure, with all possible layers present, then submitted to an independent laboratory. Samples were treated with a dilute nitric acid sample digestion prior to filtration. Analysis utilized for lead detection in filtered samples was Flame Atomic Absorption Spectroscopy (F.A.A.S.).

#### 3.3 SILICA-CONTAINING MATERIALS

Silica occurs naturally as crystalline or amorphous material. Crystalline silica is significantly more toxic than amorphous silica.

Silica may be present in the project area in two forms: i) amorphous-diatomaceous earth in pipe fittings and other insulation materials; and ii) free crystalline ( $\alpha$ -Quartz) in ceiling tiles, concrete, cement, brick, ceramic tiles, terra cotta block and hard plaster finishes. Testing for silica in these materials was not conducted, but its presence was noted.

#### 3.4 MERCURY-CONTAINING MATERIALS

Mercury may be a component in paints and can also be present as a liquid in thermometers, thermostats, and other mechanical equipment switches. Mercury vapour is present in fluorescent lamps.

#### 3.5 **ARESENIC-CONTAINING MATERIALS**

Arsenic is used in metallurgy for hardening copper, lead and alloys; in pigment production, in the manufacture of certain types of glass, in insecticides and fungicides and in rodent poisons, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing.

#### 3.6 **ACRYLONITRILE**

Acrylonitrile (ACN) (also known as vinyl cyanide) is an explosive, flammable liquid used in the manufacture of acrylic fibres, rubber-like materials and pesticide fumigants.

#### 3.7 BENZENE

Benzene, or Benzol, is a colourless liquid. It is used as an intermediate in the production of styrene, phenol, cyclohexane, and other organic chemicals, in the manufacture of detergents, pesticides, solvents, and paint removers. It is also found in gasoline.

#### 3.8 COKE OVEN EMISSIONS

Not applicable to this project area.

#### 3.9 ETHYLENE OXIDE

Ethylene oxide is a colourless gas liquefying below 12 degrees Celsius. It is used generally as a fumigant and sterilizing agent for medical equipment.

#### 3.10 ISOCYANATES

Isocyanates (HDI, MDI and TDI) are used in the production of polyurethane and as an elastomer in casting compounds, mastic, and textile coatings (IPDI).

#### 3.11 VINYL CHLORIDE

Vinyl Chloride, also known as chloroethylene, is a colourless gas but is handled as a liquid under pressure. It is used in the production of polyvinyl chloride resins and in organic synthesis.

#### 3.12 NON-DESIGNATED SUBSTANCES

#### 3.12.1 <u>PCB-containing Materials</u>

PCBs are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however, a review of a number of representative and accessible fluorescent light ballasts suspected to contain PCBs were included in the survey. In addition, accessible building hydraulic equipment (i.e., elevators/lifts) or electrical transformers observed

during the survey were visually reviewed. No sampling of materials for PCB content was conducted as a part of this survey. In addition, no other materials were reviewed/inspected as a part of this survey unless specified by the client. Thus, the following materials should be assumed, if present onsite, to contain PCBs until proven otherwise: cable insulation, thermal insulation materials (i.e., foam, felt), adhesives/tapes, plastics, caulking, lead-based paints and, various types of electrical equipment (i.e., voltage regulators, switches, bushings, electromagnets).

Polychlorinated biphenyl-containing ballasts reviewed were identified by model number, serial number, and date code, as listed in *Environment of Canada Identification of Lamp Ballasts Containing PCBs - Report EPS 2/CC/2 (revised), August 1991*.

#### 3.12.2 Mould

Fungi, also called mould or mildew, are microbiological organisms that can live and reproduce and potentially cause health problems in indoor environments. They are chlorophyll-lacking plant-like organisms that are unicellular (e.g., yeast) or grow in a multinucleate mass (e.g., bread mould), subsist on decomposed organic matter or nutrition from living hosts, and reproduce by production of spores 3 to 200  $\mu$ m in size. Mould growth inside buildings is due to excess moisture caused by leakages, condensation, or capillary movement of water into the building. They will generally not occur if materials are kept dry.

The presence of mould spores in indoor environments may not be significant in terms of the causation of fungal infestation since most micro-organism contamination does not become a problem until it becomes disturbed and is distributed into the ventilation system or air within the building. In other words, there may be little hazard if micro-organisms do not multiply or do not accumulate to harmful levels, if there is no means for micro-organisms to become airborne, or, if aerosolized micro-organisms do not reach susceptible receptors.

Fungi or moulds which are typically found on building materials that have become damaged due to moisture problems can cause or exacerbate allergic type symptoms in occupants who have a history of hypersensitivity diseases (e.g., asthma). Thus, people suffering from respiratory disorders or severe allergies may be at greater risk for developing health problems associated with exposures to fungi found in water damaged areas. Such people may need to be removed from the affected areas until remediation and clearance testing, if required, is completed. However, any decisions regarding medical removal must be based on recommendations made

by an occupational medicine specialist trained in symptomatology related to this type of exposure.

In order to define risk for areas that are suspected or confirmed to be contaminated with mould, the extent of water damage, and/or visible mould growth on building materials must be considered. THEM recommends the following criteria presented in <u>Table II</u> for determining risk levels (hazard categories) and associated remediation protocols. This criterion is based on the "Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation" and "Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines 2015, Edition 3".

TABLE II
Recommended Water Damage/Mould Risk Management Levels

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Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements		
0	No visible signs of mould growth, no evidence of category 2 or 3 water damage and no health complaints.	No remediation required; however, in some situations structural drying may be required.		
1	Small Areas (Source Containment)	<ul> <li>Work can be conducted by in-house staff trained in water damage/mould remedial techniques or by qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>No critical barriers required.</li> <li>Contaminated building materials can be contained with polyethylene sheeting and duct tape and removed.</li> </ul>		



Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements		
2	Moderate Areas (Local Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>A polyethylene enclosure should be erected to isolate mould contaminated materials.</li> <li>A decontamination chamber may be required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>		
3	Extensive Areas (Full Scale Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>The mould contaminated room and/or building section should be isolated with critical barriers.</li> <li>Building materials within the remediation area that cannot be cleaned effectively must be sealed off with polyethylene barriers.</li> <li>A decontamination unit is required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>		

Note 1: May or may not include destructive testing.

#### 3.12.3 Ozone Depleting Substances

Ozone depleting substances such as fluorocarbons are commonly used as cooling agents in refrigeration equipment such as ice makers, refrigerators, chilled water drinking fountains, compressors and air conditioners. Commercial chlorofluorocarbon (CFC) production began with R–12 in 1931, R–11 in 1932, R–114 in 1933 and R–113 in 1934. The first hydrochlorofluorocarbon (HCFC) refrigerant, R–22 was produced in 1936. By 1963, these five products accounted for 98% of the total production of the organic fluorine industry.

Almost 50 years passed between the introduction of CFCs and recognition of their harm to the environment when released to the atmosphere. Specific concerns are related to their depletion of stratospheric ozone and to possible climate change by their action as greenhouse gases. The high stability of CFCs enables them to deliver ozone—depleting chlorine to the stratosphere.

The project area was visually inspected for refrigeration equipment and where possible, fluorocarbon content was determined by looking at appliance tags.

#### 4.0 FINDINGS

The following includes observations for any hazardous materials identified within the area surveyed. The survey focused on building materials and as such there may be Designated Substances in equipment that was present within the surveyed area.

#### 4.1 ASBESTOS

No samples were collected as no suspected ACMs were observed within the buildings. The Maintenance Building was constructed in 2007 and therefore no asbestos materials are suspected present.

#### **4.2 LEAD**

Two (2) samples of suspect lead-based paint were collected from the building. The samples were submitted to an independent laboratory, EMSL Canada Inc., for analysis. Results of the laboratory analysis are listed in <u>Table III</u> below. The Laboratory Certificate of Analysis is attached in Appendix I.

TABLE III
Summary of Lead Bulk Sampling Results
Belgrave Water Treatment Building
28 McCrea Street, Belgrave Ontario
November 29<sup>th</sup>, 2023

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
LD-A-01	Chemical Storage Room	Pink Wall Paint	<0.0081	
LD-B-01	Chemical Storage Room	Grey Floor Paint	<0.0080	

No lead was detected in the paint sampled. Lead is not suspected to be present as a component in pipes and in solder used in pipe fittings based on the age of the building (2007).

#### 4.3 SILICA

Silica may be present in the building in insulation materials. Free crystalline silica ( $\alpha$ -Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

#### 4.4 MERCURY

Fluorescent light tubes identified within the building are suspected to contain mercury vapour.

#### 4.5 ARSENIC

No source was identified.

#### 4.6 **ACRYLONITRILE**

No source was identified.

#### 4.7 BENZENE

Benzene is assumed to be present in diesel fuel stored onsite.

#### 4.8 **COKE OVEN EMISSIONS**

Not applicable for the building.

#### 4.9 ETHYLENE OXIDE

No source was identified.

#### 4.10 **ISOCYANATES**

No source was identified.

#### 4.11 VINYL CHLORIDE

No source was identified.

#### 4.12 NON-DESIGNATED SUBSTANCES

#### 4.12.1 PCB

Based on the age of the building (2007) no PCB containing ballasts or transformers are suspected to be present.

#### 4.12.2 Mould

No visible mould was observed within the surveyed building.

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

The following summarizes hazardous building materials identified within the surveyed area.

#### 5.1 ASBESTOS

No asbestos-containing materials (ACM) were observed within the surveyed building. If suspect asbestos-containing materials are uncovered during renovation/demolition activities that were inaccessible at the time of the assessment, they should be assessed by a qualified person at that time.

#### 5.2 LEAD

Ontario Regulation 490/09, as amended by O. Reg. 189/19, *Designated Substances* – made under OHSA states that airborne levels of lead particles should not exceed 0.05 mg/m<sup>3</sup>. Any demolition or stripping work should be performed under controlled conditions according to the Ontario Ministry of Labour guideline "*Lead on Construction Projects*", dated April 2011.

The disposal of construction waste containing lead is controlled by Ontario Regulation 347, *General Waste Management* – made under the Ontario Environmental Protection Act. Leachate tests for lead in construction waste must not exceed 5 mg/L in order to be disposed of at a local landfill without treatment.

#### 5.3 SILICA

Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.

Precautions must be taken to prevent silica-containing particles from becoming airborne during the disturbance of silica-containing surfaces, such as during renovation or demolition projects. Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act. All work being carried out with silica-containing materials should be conducted following the guideline "Silica on Construction *Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

#### 5.4 MERCURY

Mercury vapour is present in tubes of fluorescent light fixtures. If these tubes are removed, they should be disposed of properly or recycled.

Precautions must be taken to prevent mercury vapours from becoming airborne during building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act.

#### 5.5 NON-DESIGNATED SUBSTANCES

#### 5.5.1 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building. All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

#### 5.6 **GENERAL**

Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347, as amended – made under the Environmental Protection Act. In the event lead and/or Mercury waste may be generated as part of renovation or demolition activities, the waste may be subject to Leachate Criteria (Schedule 4) of this regulation.

Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities, notably materials that are suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

#### 6.0 LIMITATIONS

In this statement of limitations, the "Client" refers to the persons or entities to whom this report is addressed. "THEM" refers to T. Harris Environmental Management Inc. The "Contract" refers to any general, or project-specific written agreement, including project-specific scope of work documents, executed between THEM and the Client pertaining to the subject matter of this report.

This report is subject to the limitations set out below and any other limitations set out in the body of this report or in the Contract between THEM and the Client.

The investigation and assessment described in this report were conducted in accordance with the Contract agreed upon by the Client in a manner consistent with a reasonable level of care and skill normally exercised by members of the occupational hygiene consulting profession currently practising under similar conditions in the Province of Ontario and observing the code of ethics of the Canadian Registration Board of Occupational Hygiene (CRBOH) and the American Board of Industrial Hygiene (ABIH).

In preparing this report, THEM has relied on information provided by others, including without limitation, information concerning the history and operation of the site, and test results and analyses of other consultants, independent laboratories, or testing services. Except as expressly stated in this report, THEM has not made any independent verification of such information. Findings cannot be extended to portions of the site, which were unavailable for direct observation.

The assessment in this report has been made in the context of regulations which were in force and effect at the time of the assessment and which are specified in this report. The assessment did not take into account any regulations, which were not in effect at the date of the assessments, or any guideline or standard not specified in this report. Regulatory standards do not exist for all materials of a potentially hazardous nature.

The collection of any samples at the site (including the location of samples and the analytical parameters applied to the samples) was undertaken in accordance with the Contract agreed upon by the Client, based upon the information provided to THEM by the Client concerning existing site conditions. Conditions between sample locations (if any) may differ from those indicated in this report.

This report is intended solely for the use or uses specified in this report and/or the Contract. Use of this report for purposes other than those set out in this report and/or the Contract will be at the sole risk of the Client.

Copying of this report except as may be reasonably required for internal use by the Client and any distribution of this report to persons other than the Client in whole or in part, is not permitted without the express written permission of THEM.

This report is for the sole use of the Client. THEM makes no representation or warranty, either expressed or implied, to any third party with regard to this report and the work referred to in this report and expressly disclaims any, and accepts no duty of care to any third party or any responsibility or liability whatsoever to any third party for any loss, expenses, damages (direct, consequential or contingent), fines, penalties, or other harm that may be suffered or incurred by any third party as a result of any use of, any reliance placed upon, or any decision made or actions taken based upon this report or the work referred to herein.

In no event shall THEM be liable for any indirect, incidental, special or consequential damages, or damages from loss of profits, revenue, or use, incurred by either the client or any third party, whether in an action in tort or contract, even if THEM has been advised of the possibility of such damages. THEM's liability for damages shall in no event exceed the limit of available insurance coverage.

If new information concerning the subject matter of this report arises, THEM should be contacted to re-evaluate the conclusions of this report and to provide amendments as required.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

Joe D'Angelo, B.A. (Envs), AMRT, EP Project Manager Greg Balsden, B.Sc., AMRT Manager – Southwestern Ontario



# APPENDIX I LABORATORY CERTIFICATES OF ANALYSIS



#### EMSL Canada Inc.

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L23-03777-03

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Project: Belgrave Water Treatment (L23-03777-03)

Phone: (519) 685-9048 Fax: (519) 685-1042 Received: 11/30/2023 10:06 AM

Collected: 11/29/2023

### Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

Client SampleDescription	Collected Analyzed	Weight	RDL	Lead Concentration
LD-A-01 552318686-0001	11/29/2023 12/1/2023 Site: Chemical Room Desc: Pink Wall Paint	0.2471 g	0.0081 % wt	<0.0081 % wt
LD-B-01 552318686-0002	11/29/2023 12/1/2023 Site: Chemical Room Desc: Grey Floor Paint	0.2494 g	0.0080 % wt	<0.0080 % wt

Rowena Fanto, Lead Supervisor or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA LAP, LLC-ELLAP Accredited #196142



# HAZARDOUS MATERIALS SURVEY MORRIS-TURNBERRY MAINTENANCE BUILDING 65 B-Line Wingham, Ontario NOG 1G0

December 11th, 2023

#### **Prepared for:**

Trevor Hallam – CAO/Clerk Municipality of Morris-Turnberry 41342 Morris Rd., PO Box 310 Brussels, ON NOG 1H0

T. Harris Environmental Management Inc. 931 Commissioners Road East, Suite 100 London, Ontario N5Z 3H9

Project No: L23-03777-04

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## **APPENDICES**

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#### **EXECUTIVE SUMMARY**

T. Harris Environmental Management Inc. (THEM) was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs), for the Morris-Turnberry Public Works Maintenance Building located at 65 B-Line in Wingham, Ontario. The objective of this study was to determine whether any hazardous building materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, were present in the above noted buildings. The survey was conducted on November 29<sup>th</sup>, 2023.

Based on the investigation conducted by T. Harris Environmental Management, through available records, interviews and a site review, the following were identified:

- No asbestos-containing materials (ACM) were observed within the surveyed building.
  Based on the age of construction (1994) no asbestos is suspected to be present. If suspect
  asbestos-containing materials are uncovered during renovation/demolition activities that
  were inaccessible at the time of the assessment, they should be assessed by a qualified
  person at that time.
- Lead was not found at a detectable level in any of the paints sampled. Lead may be present as a component in pipes and in solder used in pipe fittings.
- Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.
- Mercury vapour is suspected to be present within fluorescent light tubes.
- Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building.

Based on the aforementioned findings for the survey conducted, THEM recommends the following:



- Paints identified to have concentrations of lead and observed in poor condition should be removed and/or stabilized following applicable lead abatement procedures. Prior to any renovations or demolition activities that may disturb materials identified to contain lead of any concentration, precautions must be taken as described in Ontario Regulation 213/91, Construction Projects made under the Occupational Health and Safety Act. This may include conducting an assessment of the potential exposure of airborne lead by a qualified person. Exposure to lead-containing materials is regulated under Ontario Regulation 490/09, Designated Substances made under the Occupational Health and Safety Act. Care must be taken to prevent lead-containing particles from becoming airborne during the disturbance of lead-containing surfaces (i.e., during renovation or demolition projects). All lead abatement work must follow procedures outlined in the guideline "Lead on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- Precautions must be taken to prevent mercury vapours becoming airborne during renovations or building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, Designated Substances – made under the Occupational Health and Safety Act.
- All waste material must be handled and disposed of according to R.R.O. 1990, Reg. 347:
   General Waste Management, as amended made under the Ontario Environmental Protection Act. Lead and/or Mercury waste may be subject to Leachate Criteria (Schedule 4) of this regulation.
- Exposure to airborne silica is regulated under Ontario Regulation 490/09, Designated Substances made under the Occupational Health and Safety Act. All work being carried with silica containing materials should be conducted following the guideline "Silica on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in R.R.O. 1990, Reg. 347: General Waste Management, as amended. In addition, requirements outlined in the federal regulation SOR/2008-273 made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.
- All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

- Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.
- Building material(s) that are not detailed within this survey due to inaccessibility during
  the time of the survey and/or are uncovered during renovation/demolition activities,
  notably materials that are suspected to contain asbestos, should be properly assessed by
  qualified person prior to their disturbance.

This survey satisfies requirements of the Occupational Health and Safety Act with regards to the presence/absence of hazardous materials identified within this report. This executive summary is not to be used alone and the report should be reviewed in its entirety.

Should you have any questions or comments regarding this survey, please do not hesitate to contact our office.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

#### 1.0 <u>INTRODUCTION</u>

T. Harris Environmental Management Inc. was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, for the Morris-Turnberry Public Works Maintenance Building located at 65 B-Line in Wingham, Ontario. The survey was conducted on November 29<sup>th</sup>, 2023.

The objective of this survey was to determine whether hazardous materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs) were present within the building surveyed. The survey included a review of the entire building for the presence and extent of hazardous materials, evaluation of the type of hazardous materials and degree of possible exposure, and assessment of requirements for any further investigation or remedial action, if necessary.

Identification of suspect asbestos materials was performed by means of bulk sampling and laboratory analysis. Testing for lead in paint was conducted using bulk sampling. Other hazardous materials, if present, were identified by visual inspection only. These included mercury in gauges and light fixtures, polychlorinated biphenyls (PCBs) in coolant oils of transformers and fluorescent light fixture ballasts, and silica in cement. Recommendations based on our findings are made in Section 5.0.

This report documents our findings as noted during our site inspection. Individual assessments were made to identify Designated Substances and their condition, as well as requirements for special treatment such as control programs or specialized removal and disposal techniques.

#### 2.0 ONTARIO REGULATIONS AND GUIDELINES FOR SURVEY

Ontario Regulation 490/09, *Designated Substances* – made under the Ontario Health and Safety Act, applies to controlling designated substances in the workplace. This regulation may not be all encompassing for each of the Designated Substances and other associated Ontario Regulations may apply.

The management and abatement of asbestos-containing materials must be conducted according to Ontario Regulation 278/05 amended by O. Reg. 450/19, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations —* made under the Occupational

Health and Safety Act. Asbestos-containing waste must be handled and disposed of according to R.R.O., 1990, Regulation 347: *General - Waste Management*.

In addition to the Ontario Regulation 490/09 noted above, the following guidelines were observed for this survey:

- <u>Lead on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- <u>Silica on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

Polychlorinated biphenyls (PCBs) are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however as selected materials were reviewed for PCB content during this survey the following legislation applies: R.R.O., 1990, Regulation 362: Waste Management - PCB's — made under the Environmental Protection Act and SOR/2008-273 — made under the Canadian Environmental Protection Act, 1999.

Applicable legislation and/or guidelines for other materials identified (not listed above) as part of the survey are included where applicable.

All waste materials are regulated by R.R.O., 1990, Regulation 347: *General - Waste Management*, as amended – made under the Ontario Environmental Protection Act.

#### 3.0 SURVEY METHODOLOGY

Not all designated substances or suspect hazardous materials were sampled. Sampling was carried out only for those compounds that were known to be present or those deemed to have a likely source of origin in the buildings under study.

All sample analyses were performed by an independent laboratory and the Laboratory Certificates of Analysis attached in Appendix II. Materials similar in appearance or texture to other materials tested were considered to be of similar composition. When inaccessible areas such as behind walls and above plaster ceilings were encountered during the survey, inferences were drawn based upon findings in adjacent spaces. Other designated substances and listed hazardous materials, if present, were identified by observation only.

The survey, as proposed, included the inspection of all accessible areas specified by the client.

#### 3.1 ASBESTOS-CONTAINING MATERIALS

Asbestos is a general name for several varieties of highly fibrous silicate materials. Commercially significant types include: Chrysotile, Amosite and Crocidolite. The combination of a variety of favourable characteristics made asbestos popular for wide industrial use, including: fibrous structure, low heat conductivity, high electrical resistance, chemical inertness, strength, flexibility and effectiveness as a reinforcing or binding agent when combined with cement or plastic.

Products with bound asbestos pose no danger of releasing airborne fibres unless cut, sawn, ground or sanded. One measure of the potential hazard of a product is its friability. The friability of asbestos containing materials (ACM) is a measure of the ease with which the material can be ground or pulverized by hand pressure. Knowledge of the friability of ACM may theoretically indicate the ease with which fibres can be released into the air.

The accredited survey inspector(s) were responsible for inspecting, assessing and recording the location, condition and type of all suspect friable and non-friable ACM in the project area. Each individual room and space was surveyed. Homogeneous sampling areas of ACM were determined. A homogeneous area is defined as an application of ACM that is uniform in colour, texture, identical in every respect, and is unlikely to consist of more than one type or formulation of material. Materials installed at different times, on different floors, or in special areas such as mechanical rooms are assigned to separate sampling areas.

#### 3.1.1 Asbestos Bulk Sampling

Sampling of suspected asbestos-containing building materials observed within the surveyed area was conducted as per the requirements of Table 1 found within Ontario Regulation 278/05. A summary of the sample requirements can be found in <u>Table I</u> below.

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TABLE I
Asbestos Bulk Sampling Requirements

Type of material	Size of area of homogeneous material	Minimum # of bulk material samples to be collected
Surfacing material, including without	<90 sq metres	3
limitation material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on	>90 sq metres but <450 sq. metres	5
structural members	>450 sq metres	7
Thermal insulation, except as described in item 3	Any size	3
Thermal insulation patch	<2 linear metres or 0.5 sq metres	1
Other material	Any size	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), with confirmation of presence and type of asbestos made by dispersion staining optical microscopy. This analytical procedure follows the U.S. Environmental Protection Agency Test Method EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, June 1993. Laboratory Certificates of Analysis for this identification are given in Appendix II.

According to O. Reg. 278/05, asbestos-containing material means material that contains 0.5 percent or more asbestos by dry weight. If analysis establishes that a bulk material sample contains 0.5 percent or more asbestos by dry weight, then it is not necessary to analyze other bulk material samples taken from the same area of homogenous material, the entire area of homogenous material is deemed to be asbestos-containing material.

Destructive testing was not performed. Therefore, in the event asbestos-containing materials are discovered as part of the survey, inferences have been drawn for inaccessible spaces (i.e., above plaster ceilings with no access panels) based upon findings in adjacent spaces. Similarly, motors, blowers, electrical panels, etc., were not de-energized or disassembled to examine concealed conditions. Such items should be considered to have asbestos as a component until proven otherwise.

Boilers were frequently constructed (i.e., lined, bedded, etc.) with asbestos refractory materials. Demolition and/or renovations to existing boiler units which may elicit a disturbance of suspect ACM should necessitate prior investigation to determine for the presence of ACM. In addition, fire doors that may be present in the surveyed areas were not tested intrusively and therefore should be considered to contain ACM until proven otherwise. Further examples of such assumptions include: elevator brakes, roofing felts and mastics, caulking, high voltage wiring, mechanical packing and gaskets, and underground services or piping.

#### 3.1.2 Assessment

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility. Priorities have been established for remedial action based on these combinations, and are given below.

#### Priority 1 (One)

Asbestos-containing material highly recommended to be removed, repaired or encapsulated.

#### Priority 2 (Two)

Asbestos-containing material could remain in place until system upgrading or renovations are to occur.

#### **Priority 3 (Three)**

Asbestos-containing material could remain in place until eventual building demolition.

#### 3.2 **LEAD-CONTAINING MATERIALS**

Paints/surface coatings observed in the surveyed areas were tested for lead content. Other building materials not tested for lead content (i.e., mortar, concrete) should be considered lead-containing until proven otherwise.

Currently in Ontario, there is no regulation that provides a definition of what the percent of lead in paint must be in order to be considered "lead-based paint". The Surface Coating Materials Regulations (SOR/2005-109) made under the Canada Consumer Product Safety Act specifies that the concentration of total lead present in a surface coating material must not be more than



600 mg/kg. The Surface Coatings Materials Regulations came into effect on April 19th, 2005 and was amended in November of 2010, which lowered the acceptable concentration of total lead present in a surface coating material to less than 90 mg/kg (SOR/2010-224). This lead content applies to any paint and/or surface coatings of products advertised, sold or imported into Canada. Coatings applied to furniture, pencils, artists' brushes, toys and articles that are intended for children would fall under the jurisdiction of this regulation. However, these levels are not specifically intended to determine what constitutes a "lead-based paint", it is merely a regulation to protect consumers of coated materials. Therefore, this regulation does not apply to construction projects where lead-based coatings may be disturbed during the course of renovations or construction.

To date, there is no simple correlation between the concentration of lead in paints/surface coatings and the resulting airborne lead levels that may be emitted if the coated material was to be disturbed or removed. However, the Environmental Abatement Council of Canada (EACC) "Lead Guideline for Construction, Renovation, Maintenance or Repair", published October 2014 (herein referred to as 'EACC Guideline'), outlines "virtually safe" lead levels for paints or surface coatings. Paints or coatings containing less than or equal to 0.1% lead by weight<sup>1</sup> are considered low-level lead paints or coatings. If these paints or coatings are disturbed in a manner, which uses normal dust control procedures, and does not exceed the particulate not otherwise specified (PNOS) time-weighted average (TWA) of 0.05 mg/m<sup>3</sup> set in Ontario Regulation 490/09, then worker protection from the inhalation of lead is not required. Projects that meet these guidelines must still adhere to general health and safety precautions, such as prohibiting eating, smoking, drinking or chewing gum in the work area. These projects must also implement dust suppression techniques and provide facilities for workers to wash their hands and face. Additionally, the Occupational Health and Safety branch of the Ministry of Labour (MOL) provides classifications of the types of specific lead operations, which are based on presumed airborne lead concentrations to which the worker will be exposed. The classifications are provided in the MOL publication, "Guideline: Lead on Construction Projects", published in September 2004 and revised in April 2011 (herein referred to as 'MOL Guideline'). The levels of airborne lead expected to be present in a work area is related to the types of work operations being used to disturb or remove the coatings; it is not a function of the percentage of lead within the coating. Based on this MOL Guideline, all paints/surface coatings are to be considered lead-containing unless they are tested and contain undetectable lead concentrations.

<sup>&</sup>lt;sup>1</sup> WHMIS reporting limit for lead in a safety data sheet or material safety data sheet.

Lead is also suspected to be a component in solder on plumbing fixtures throughout the building. Representative samples of solder joints suspected to contain lead were not collected. Other suspect lead-containing materials such as lead sheeting, conduit, pipes and lead-calcium battery plates were not sampled during this investigation, but were noted where applicable.

#### 3.2.1 Bulk Sampling for Lead in Paints

To verify lead content in paints, representative bulk samples of paints were retrieved for laboratory analysis for lead content. Paint samples were scraped down to the building base structure, with all possible layers present, then submitted to an independent laboratory. Samples were treated with a dilute nitric acid sample digestion prior to filtration. Analysis utilized for lead detection in filtered samples was Flame Atomic Absorption Spectroscopy (F.A.A.S.).

#### 3.3 SILICA-CONTAINING MATERIALS

Silica occurs naturally as crystalline or amorphous material. Crystalline silica is significantly more toxic than amorphous silica.

Silica may be present in the project area in two forms: i) amorphous-diatomaceous earth in pipe fittings and other insulation materials; and ii) free crystalline ( $\alpha$ -Quartz) in ceiling tiles, concrete, cement, brick, ceramic tiles, terra cotta block and hard plaster finishes. Testing for silica in these materials was not conducted, but its presence was noted.

#### 3.4 MERCURY-CONTAINING MATERIALS

Mercury may be a component in paints and can also be present as a liquid in thermometers, thermostats, and other mechanical equipment switches. Mercury vapour is present in fluorescent lamps.

#### 3.5 **ARESENIC-CONTAINING MATERIALS**

Arsenic is used in metallurgy for hardening copper, lead and alloys; in pigment production, in the manufacture of certain types of glass, in insecticides and fungicides and in rodent poisons, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing.

#### 3.6 **ACRYLONITRILE**

Acrylonitrile (ACN) (also known as vinyl cyanide) is an explosive, flammable liquid used in the manufacture of acrylic fibres, rubber-like materials and pesticide fumigants.

#### 3.7 BENZENE

Benzene, or Benzol, is a colourless liquid. It is used as an intermediate in the production of styrene, phenol, cyclohexane, and other organic chemicals, in the manufacture of detergents, pesticides, solvents, and paint removers. It is also found in gasoline.

#### 3.8 COKE OVEN EMISSIONS

Not applicable to this project area.

#### 3.9 ETHYLENE OXIDE

Ethylene oxide is a colourless gas liquefying below 12 degrees Celsius. It is used generally as a fumigant and sterilizing agent for medical equipment.

#### 3.10 ISOCYANATES

Isocyanates (HDI, MDI and TDI) are used in the production of polyurethane and as an elastomer in casting compounds, mastic, and textile coatings (IPDI).

#### 3.11 VINYL CHLORIDE

Vinyl Chloride, also known as chloroethylene, is a colourless gas but is handled as a liquid under pressure. It is used in the production of polyvinyl chloride resins and in organic synthesis.

#### 3.12 NON-DESIGNATED SUBSTANCES

#### 3.12.1 <u>PCB-containing Materials</u>

PCBs are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however, a review of a number of representative and accessible fluorescent light ballasts suspected to contain PCBs were included in the survey. In addition, accessible building hydraulic equipment (i.e., elevators/lifts) or electrical transformers observed

during the survey were visually reviewed. No sampling of materials for PCB content was conducted as a part of this survey. In addition, no other materials were reviewed/inspected as a part of this survey unless specified by the client. Thus, the following materials should be assumed, if present onsite, to contain PCBs until proven otherwise: cable insulation, thermal insulation materials (i.e., foam, felt), adhesives/tapes, plastics, caulking, lead-based paints and, various types of electrical equipment (i.e., voltage regulators, switches, bushings, electromagnets).

Polychlorinated biphenyl-containing ballasts reviewed were identified by model number, serial number, and date code, as listed in *Environment of Canada Identification of Lamp Ballasts Containing PCBs - Report EPS 2/CC/2 (revised), August 1991*.

#### 3.12.2 Mould

Fungi, also called mould or mildew, are microbiological organisms that can live and reproduce and potentially cause health problems in indoor environments. They are chlorophyll-lacking plant-like organisms that are unicellular (e.g., yeast) or grow in a multinucleate mass (e.g., bread mould), subsist on decomposed organic matter or nutrition from living hosts, and reproduce by production of spores 3 to 200  $\mu$ m in size. Mould growth inside buildings is due to excess moisture caused by leakages, condensation, or capillary movement of water into the building. They will generally not occur if materials are kept dry.

The presence of mould spores in indoor environments may not be significant in terms of the causation of fungal infestation since most micro-organism contamination does not become a problem until it becomes disturbed and is distributed into the ventilation system or air within the building. In other words, there may be little hazard if micro-organisms do not multiply or do not accumulate to harmful levels, if there is no means for micro-organisms to become airborne, or, if aerosolized micro-organisms do not reach susceptible receptors.

Fungi or moulds which are typically found on building materials that have become damaged due to moisture problems can cause or exacerbate allergic type symptoms in occupants who have a history of hypersensitivity diseases (e.g., asthma). Thus, people suffering from respiratory disorders or severe allergies may be at greater risk for developing health problems associated with exposures to fungi found in water damaged areas. Such people may need to be removed from the affected areas until remediation and clearance testing, if required, is completed. However, any decisions regarding medical removal must be based on recommendations made

by an occupational medicine specialist trained in symptomatology related to this type of exposure.

In order to define risk for areas that are suspected or confirmed to be contaminated with mould, the extent of water damage, and/or visible mould growth on building materials must be considered. THEM recommends the following criteria presented in <u>Table II</u> for determining risk levels (hazard categories) and associated remediation protocols. This criterion is based on the "Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation" and "Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines 2015, Edition 3".

TABLE II
Recommended Water Damage/Mould Risk Management Levels

	necommended trater barrage, modita mon management zevelo			
Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements		
0	No visible signs of mould growth, no evidence of category 2 or 3 water damage and no health complaints.	No remediation required; however, in some situations structural drying may be required.		
1	Small Areas (Source Containment)	<ul> <li>Work can be conducted by in-house staff trained in water damage/mould remedial techniques or by qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>No critical barriers required.</li> <li>Contaminated building materials can be contained with polyethylene sheeting and duct tape and removed.</li> </ul>		

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Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements	
2	Moderate Areas (Local Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>A polyethylene enclosure should be erected to isolate mould contaminated materials.</li> <li>A decontamination chamber may be required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>	
3	Extensive Areas (Full Scale Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>The mould contaminated room and/or building section should be isolated with critical barriers.</li> <li>Building materials within the remediation area that cannot be cleaned effectively must be sealed off with polyethylene barriers.</li> <li>A decontamination unit is required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied</li> </ul>	

Note 1: May or may not include destructive testing.

#### 3.12.3 Ozone Depleting Substances

Ozone depleting substances such as fluorocarbons are commonly used as cooling agents in refrigeration equipment such as ice makers, refrigerators, chilled water drinking fountains, compressors and air conditioners. Commercial chlorofluorocarbon (CFC) production began with R-12 in 1931, R-11 in 1932, R-114 in 1933 and R-113 in 1934. The first hydrochlorofluorocarbon (HCFC) refrigerant, R-22 was produced in 1936. By 1963, these five products accounted for 98% of the total production of the organic fluorine industry.

to the remediation area following cleaning.

Almost 50 years passed between the introduction of CFCs and recognition of their harm to the environment when released to the atmosphere. Specific concerns are related to their depletion of stratospheric ozone and to possible climate change by their action as greenhouse gases. The high stability of CFCs enables them to deliver ozone—depleting chlorine to the stratosphere.

The project area was visually inspected for refrigeration equipment and where possible, fluorocarbon content was determined by looking at appliance tags.

#### 4.0 FINDINGS

The following includes observations for any hazardous materials identified within the area surveyed. The survey focused on building materials and as such there may be Designated Substances in equipment that was present within the surveyed area.

#### 4.1 ASBESTOS

No samples were collected as no suspected ACMs were observed within the buildings. The Maintenance Building was constructed in 1994 and therefore no asbestos materials are suspected present.

#### **4.2 LEAD**

Two (2) samples of suspect lead-based paint were collected from the building. The samples were submitted to an independent laboratory, EMSL Canada Inc., for analysis. Results of the laboratory analysis are listed in <u>Table III</u> below. The Laboratory Certificate of Analysis is attached in Appendix II.

TABLE III
Summary of Lead Bulk Sampling Results
Morris-Turnberry Maintenance Building
65 B-Line, Wingham Ontario
November 29<sup>th</sup>, 2023

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
LD-A-01	Washroom & Sink Area	Light Beige Wall Paint	<0.0081	
LD-B-01	Service Room	Grey Wall Paint	<0.0082	

No lead was detected in the paint sampled. Lead is not suspected to be present as a component in pipes and in solder used in pipe fittings based on the age of construction of the building (1994).

#### 4.3 SILICA

Silica may be present in the building in insulation materials. Free crystalline silica ( $\alpha$ -Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

#### 4.4 MERCURY

Fluorescent light tubes identified within the building are suspected to contain mercury vapour.

#### 4.5 ARSENIC

No source was identified.

#### 4.6 **ACRYLONITRILE**

No source was identified.

#### 4.7 BENZENE

Benzene is assumed to be present in fuels stored onsite.

#### 4.8 **COKE OVEN EMISSIONS**

Not applicable for the building.

#### 4.9 ETHYLENE OXIDE

No source was identified.

#### 4.10 **ISOCYANATES**

No source was identified.

#### 4.11 VINYL CHLORIDE

No source was identified.

#### 4.12 <u>NON-DESIGNATED SUBSTANCES</u>

#### 4.12.1 PCB

Based on the age of the building (1994) no PCB containing ballasts or transformers are suspected to be present.

#### 4.12.2 Mould

Approximately 10 square feet of suspect mould spotting was observed on the drywall walls and door in the Service Room and approximately 30 square feet of suspect mould spotting and water staining was observed on the drywall walls in the Parts Room. These locations have been assigned a Hazard Category 1 as per <u>Table II</u> of this report.

#### 4.12.3 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building.

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

The following summarizes hazardous building materials identified within the surveyed area.

#### 5.1 ASBESTOS

No asbestos-containing materials (ACM) were observed within the surveyed building. If suspect asbestos-containing materials are uncovered during renovation/demolition activities that were inaccessible at the time of the assessment, they should be assessed by a qualified person at that time.

#### 5.2 <u>LEAD</u>

Ontario Regulation 490/09, as amended by O. Reg. 189/19, *Designated Substances* – made under OHSA states that airborne levels of lead particles should not exceed 0.05 mg/m<sup>3</sup>. Any demolition or stripping work should be performed under controlled conditions according to the Ontario Ministry of Labour guideline "*Lead on Construction Projects*", dated April 2011.

The disposal of construction waste containing lead is controlled by Ontario Regulation 347, *General Waste Management* – made under the Ontario Environmental Protection Act. Leachate tests for lead in construction waste must not exceed 5 mg/L in order to be disposed of at a local landfill without treatment.

#### 5.3 SILICA

Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.

Precautions must be taken to prevent silica-containing particles from becoming airborne during the disturbance of silica-containing surfaces, such as during renovation or demolition projects. Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act. All work being carried out with silica-containing materials should be conducted following the guideline "Silica on Construction *Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

#### 5.4 MERCURY

Mercury vapour is present in tubes of fluorescent light fixtures. If these tubes are removed, they should be disposed of properly or recycled.

Precautions must be taken to prevent mercury vapours from becoming airborne during building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act.

#### 5.5 NON-DESIGNATED SUBSTANCES

#### 5.5.1 Mould

Porous building materials (e.g., drywall) with visible mould or water-damage, should be removed following proper remedial techniques. Semi-porous materials (e.g., wood doors and trim) and non-porous materials affected by mould, should be cleaned or removed following proper remedial techniques.

Currently, mould-contaminated materials are not classified as hazardous waste. However, precautions should apply to the handling, disposal, recycling, and transportation of mouldy materials. Two principles underlie these precautions - the need for worker protection and the avoidance of cross-contamination to neighbouring spaces.

If disturbance of mould-contaminated building materials is required prior to building demolition, such work should be conducted in accordance with the "Institute of Inspection, Cleaning and Restoration Certification (IICRC) Standard for Professional Mould Remediation S520-2015, 3<sup>rd</sup> Edition".

In general, the single most effective way to prevent mould contamination within a building is prompt removal of any suspected contaminated material and repairing the structural components of the building that lead to the water infiltration or excessive condensation. Emphasis should be placed on preventing contamination through proper maintenance of the building and prompt repair of any water-damaged areas. In all situations, the underlying cause of the water leak and condensation buildup must be rectified or the problem will reoccur.

#### 5.5.2 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building. All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

#### 5.6 GENERAL

Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347, as amended – made under the Environmental Protection Act. In the event lead and/or Mercury waste may be generated as part of renovation or demolition activities, the waste may be subject to Leachate Criteria (Schedule 4) of this regulation.

Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities, notably materials that are suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

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#### 6.0 **LIMITATIONS**

In this statement of limitations, the "Client" refers to the persons or entities to whom this report is addressed. "THEM" refers to T. Harris Environmental Management Inc. The "Contract" refers to any general, or project-specific written agreement, including project-specific scope of work documents, executed between THEM and the Client pertaining to the subject matter of this report.

This report is subject to the limitations set out below and any other limitations set out in the body of this report or in the Contract between THEM and the Client.

The investigation and assessment described in this report were conducted in accordance with the Contract agreed upon by the Client in a manner consistent with a reasonable level of care and skill normally exercised by members of the occupational hygiene consulting profession currently practising under similar conditions in the Province of Ontario and observing the code of ethics of the Canadian Registration Board of Occupational Hygiene (CRBOH) and the American Board of Industrial Hygiene (ABIH).

In preparing this report, THEM has relied on information provided by others, including without limitation, information concerning the history and operation of the site, and test results and analyses of other consultants, independent laboratories, or testing services. Except as expressly stated in this report, THEM has not made any independent verification of such information. Findings cannot be extended to portions of the site, which were unavailable for direct observation.

The assessment in this report has been made in the context of regulations which were in force and effect at the time of the assessment and which are specified in this report. The assessment did not take into account any regulations, which were not in effect at the date of the assessments, or any guideline or standard not specified in this report. Regulatory standards do not exist for all materials of a potentially hazardous nature.

The collection of any samples at the site (including the location of samples and the analytical parameters applied to the samples) was undertaken in accordance with the Contract agreed upon by the Client, based upon the information provided to THEM by the Client concerning existing site conditions. Conditions between sample locations (if any) may differ from those indicated in this report.

This report is intended solely for the use or uses specified in this report and/or the Contract. Use of this report for purposes other than those set out in this report and/or the Contract will be at the sole risk of the Client.

Copying of this report except as may be reasonably required for internal use by the Client and any distribution of this report to persons other than the Client in whole or in part, is not permitted without the express written permission of THEM.

This report is for the sole use of the Client. THEM makes no representation or warranty, either expressed or implied, to any third party with regard to this report and the work referred to in this report and expressly disclaims any, and accepts no duty of care to any third party or any responsibility or liability whatsoever to any third party for any loss, expenses, damages (direct, consequential or contingent), fines, penalties, or other harm that may be suffered or incurred by any third party as a result of any use of, any reliance placed upon, or any decision made or actions taken based upon this report or the work referred to herein.

In no event shall THEM be liable for any indirect, incidental, special or consequential damages, or damages from loss of profits, revenue, or use, incurred by either the client or any third party, whether in an action in tort or contract, even if THEM has been advised of the possibility of such damages. THEM's liability for damages shall in no event exceed the limit of available insurance coverage.

If new information concerning the subject matter of this report arises, THEM should be contacted to re-evaluate the conclusions of this report and to provide amendments as required.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

Joe D'Angelo, B.A. (Envs), AMRT, EP Project Manager Greg Balsden, B.Sc., AMRT Manager – Southwestern Ontario



# APPENDIX I SITE PHOTOGRAPHS





Photograph 1: View of suspect mould spotting on drywall walls in the Service Room.



Photograph 2: View of suspect mould spotting on the wood door in the Service Room.



Photograph 3: View of suspect mould spotting on the drywall walls in the Parts Room.



Photograph 4: View of suspect mould spotting on the drywall walls in the Parts Room.



## APPENDIX II LABORATORY CERTIFICATES OF ANALYSIS



#### EMSL Canada Inc.

2756 Slough Street, Mississauga, ON L4T 1G3

(289) 997-4602 / (289) 997-4607

http://www.EMSL.com torontolab@emsl.com CustomerPO:

55THAR50A L23-03777-04

552318683

ProjectID:

CustomerID:

EMSL Canada Or

**Greg Balsden** 

T. Harris Environmental, Inc. 931 Commissioners Rd. E. Suite 100

London, ON N5Z 3H9

Phone: (519) 685-9048 Fax: (519) 685-1042 Received: 11/30/2023 10:04 AM

Collected: 11/29/2023

Project: Maintenance Building (L23-03777-04)

#### Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

Client SampleDescription	Collected Analyzed	Weight	RDL	Lead Concentration
LD-A-01 552318683-0001	11/29/2023 11/30/2023 Site: W/R Sink Area - Location 2 Desc: Beige Wall Paint	0.2467 g	0.0081 % wt	<0.0081 % wt
LD-B-01 552318683-0002	11/29/2023 11/30/2023 Site: Service Room - Location 4 Desc: Grey Wall Paint	0.2445 g	0.0082 % wt	<0.0082 % wt

Rowena Fanto, Lead Supervisor or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA LAP, LLC-ELLAP Accredited #196142



# HAZARDOUS MATERIALS SURVEY BLUEVALE BALL PARK BOOTH & PAVILLION 21 Park Road Bluevale, Ontario NOG 1G0

December 11th, 2023

#### **Prepared for:**

Trevor Hallam – CAO/Clerk Municipality of Morris-Turnberry 41342 Morris Rd., PO Box 310 Brussels, ON NOG 1H0

T. Harris Environmental Management Inc. 931 Commissioners Road East, Suite 100 London, Ontario N5Z 3H9

Project No: L23-03777-05

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#### **EXECUTIVE SUMMARY**

T. Harris Environmental Management Inc. (THEM) was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs), for the Bluevale Ball Park Booth and Pavillion located at 21 Park Road in Bluevale, Ontario. The objective of this study was to determine whether any hazardous building materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, were present in the above noted buildings. The survey was conducted on November 29<sup>th</sup>, 2023.

Based on the investigation conducted by T. Harris Environmental Management, through available records, interviews and a site review, the following were identified:

- No asbestos-containing materials (ACM) were observed within the Ball Park Booth or Pavillion. If suspect asbestos-containing materials are uncovered during renovation/demolition activities that were inaccessible at the time of the assessment, they should be assessed by a qualified person at that time.
- The grey interior paint throughout the Ball Park booth was found to be a low-level lead paint. Lead may be present as a component in pipes and in solder used in pipe fittings.
- Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.
- Mercury vapour is suspected to be present within fluorescent light tubes.

Based on the aforementioned findings for the survey conducted, THEM recommends the following:

 Paints identified to have concentrations of lead and observed in poor condition should be removed and/or stabilized following applicable lead abatement procedures. Prior to any renovations or demolition activities that may disturb materials identified to contain lead of any concentration, precautions must be taken as described in Ontario Regulation 213/91, Construction Projects – made under the Occupational Health and Safety Act. This



may include conducting an assessment of the potential exposure of airborne lead by a qualified person. Exposure to lead-containing materials is regulated under Ontario Regulation 490/09, *Designated Substances* — made under the Occupational Health and Safety Act. Care must be taken to prevent lead-containing particles from becoming airborne during the disturbance of lead-containing surfaces (i.e., during renovation or demolition projects). All lead abatement work must follow procedures outlined in the guideline "*Lead on Construction Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

- Precautions must be taken to prevent mercury vapours becoming airborne during renovations or building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, Designated Substances – made under the Occupational Health and Safety Act.
- All waste material must be handled and disposed of according to R.R.O. 1990, Reg. 347:
   General Waste Management, as amended made under the Ontario Environmental
   Protection Act. Lead and/or Mercury waste may be subject to Leachate Criteria
   (Schedule 4) of this regulation.
- Exposure to airborne silica is regulated under Ontario Regulation 490/09, Designated Substances made under the Occupational Health and Safety Act. All work being carried with silica containing materials should be conducted following the guideline "Silica on Construction Projects", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in R.R.O. 1990, Reg. 347: General Waste Management, as amended. In addition, requirements outlined in the federal regulation SOR/2008-273 made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.
- All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.
- Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.

• Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities, notably materials that are suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

This survey satisfies requirements of the Occupational Health and Safety Act with regards to the presence/absence of hazardous materials identified within this report. This executive summary is not to be used alone and the report should be reviewed in its entirety.

Should you have any questions or comments regarding this survey, please do not hesitate to contact our office.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

#### 1.0 <u>INTRODUCTION</u>

T. Harris Environmental Management Inc. was retained by the Municipality of Morris-Turnberry to conduct a Hazardous Materials Survey, including Designated Substances, for the Bluevale Ball Park Booth and Pavillion, located at 21 Park Road in Bluevale, Ontario. The survey was conducted on November 29<sup>th</sup>, 2023.

The objective of this survey was to determine whether hazardous materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs) were present within the buildings surveyed. The survey included a review of the entire building for the presence and extent of hazardous materials, evaluation of the type of hazardous materials and degree of possible exposure, and assessment of requirements for any further investigation or remedial action, if necessary.

Identification of suspect asbestos materials was performed by means of bulk sampling and laboratory analysis. Testing for lead in paint was conducted using bulk sampling. Other hazardous materials, if present, were identified by visual inspection only. These included mercury in gauges and light fixtures, polychlorinated biphenyls (PCBs) in coolant oils of transformers and fluorescent light fixture ballasts, and silica in cement. Recommendations based on our findings are made in Section 5.0.

This report documents our findings as noted during our site inspection. Individual assessments were made to identify Designated Substances and their condition, as well as requirements for special treatment such as control programs or specialized removal and disposal techniques.

#### 2.0 ONTARIO REGULATIONS AND GUIDELINES FOR SURVEY

Ontario Regulation 490/09, *Designated Substances* – made under the Ontario Health and Safety Act, applies to controlling designated substances in the workplace. This regulation may not be all encompassing for each of the Designated Substances and other associated Ontario Regulations may apply.

The management and abatement of asbestos-containing materials must be conducted according to Ontario Regulation 278/05 amended by O. Reg. 450/19, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations —* made under the Occupational

Health and Safety Act. Asbestos-containing waste must be handled and disposed of according to R.R.O., 1990, Regulation 347: *General - Waste Management*.

In addition to the Ontario Regulation 490/09 noted above, the following guidelines were observed for this survey:

- <u>Lead on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- <u>Silica on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

Polychlorinated biphenyls (PCBs) are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however as selected materials were reviewed for PCB content during this survey the following legislation applies: R.R.O., 1990, Regulation 362: Waste Management - PCB's — made under the Environmental Protection Act and SOR/2008-273 — made under the Canadian Environmental Protection Act, 1999.

Applicable legislation and/or guidelines for other materials identified (not listed above) as part of the survey are included where applicable.

All waste materials are regulated by R.R.O., 1990, Regulation 347: *General - Waste Management*, as amended – made under the Ontario Environmental Protection Act.

#### 3.0 SURVEY METHODOLOGY

Not all designated substances or suspect hazardous materials were sampled. Sampling was carried out only for those compounds that were known to be present or those deemed to have a likely source of origin in the buildings under study.

All sample analyses were performed by an independent laboratory and the Laboratory Certificates of Analysis attached in Appendix I. Materials similar in appearance or texture to other materials tested were considered to be of similar composition. When inaccessible areas such as behind walls and above plaster ceilings were encountered during the survey, inferences were drawn based upon findings in adjacent spaces. Other designated substances and listed hazardous materials, if present, were identified by observation only.

The survey, as proposed, included the inspection of all accessible areas specified by the client.

#### 3.1 ASBESTOS-CONTAINING MATERIALS

Asbestos is a general name for several varieties of highly fibrous silicate materials. Commercially significant types include: Chrysotile, Amosite and Crocidolite. The combination of a variety of favourable characteristics made asbestos popular for wide industrial use, including: fibrous structure, low heat conductivity, high electrical resistance, chemical inertness, strength, flexibility and effectiveness as a reinforcing or binding agent when combined with cement or plastic.

Products with bound asbestos pose no danger of releasing airborne fibres unless cut, sawn, ground or sanded. One measure of the potential hazard of a product is its friability. The friability of asbestos containing materials (ACM) is a measure of the ease with which the material can be ground or pulverized by hand pressure. Knowledge of the friability of ACM may theoretically indicate the ease with which fibres can be released into the air.

The accredited survey inspector(s) were responsible for inspecting, assessing and recording the location, condition and type of all suspect friable and non-friable ACM in the project area. Each individual room and space was surveyed. Homogeneous sampling areas of ACM were determined. A homogeneous area is defined as an application of ACM that is uniform in colour, texture, identical in every respect, and is unlikely to consist of more than one type or formulation of material. Materials installed at different times, on different floors, or in special areas such as mechanical rooms are assigned to separate sampling areas.

#### 3.1.1 Asbestos Bulk Sampling

Sampling of suspected asbestos-containing building materials observed within the surveyed area was conducted as per the requirements of Table 1 found within Ontario Regulation 278/05. A summary of the sample requirements can be found in <u>Table I</u> below.

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TABLE I
Asbestos Bulk Sampling Requirements

Type of material	Size of area of homogeneous material	Minimum # of bulk material samples to be collected
Surfacing material, including without	<90 sq metres	3
limitation material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on	>90 sq metres but <450 sq. metres	5
structural members	>450 sq metres	7
Thermal insulation, except as described in item 3	Any size	3
Thermal insulation patch	<2 linear metres or 0.5 sq metres	1
Other material	Any size	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), with confirmation of presence and type of asbestos made by dispersion staining optical microscopy. This analytical procedure follows the U.S. Environmental Protection Agency Test Method EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, June 1993. Laboratory Certificates of Analysis for this identification are given in Appendix I.

According to O. Reg. 278/05, asbestos-containing material means material that contains 0.5 percent or more asbestos by dry weight. If analysis establishes that a bulk material sample contains 0.5 percent or more asbestos by dry weight, then it is not necessary to analyze other bulk material samples taken from the same area of homogenous material, the entire area of homogenous material is deemed to be asbestos-containing material.

Destructive testing was not performed. Therefore, in the event asbestos-containing materials are discovered as part of the survey, inferences have been drawn for inaccessible spaces (i.e., above plaster ceilings with no access panels) based upon findings in adjacent spaces. Similarly, motors, blowers, electrical panels, etc., were not de-energized or disassembled to examine concealed conditions. Such items should be considered to have asbestos as a component until proven otherwise.

Boilers were frequently constructed (i.e., lined, bedded, etc.) with asbestos refractory materials. Demolition and/or renovations to existing boiler units which may elicit a disturbance of suspect ACM should necessitate prior investigation to determine for the presence of ACM. In addition, fire doors that may be present in the surveyed areas were not tested intrusively and therefore should be considered to contain ACM until proven otherwise. Further examples of such assumptions include: elevator brakes, roofing felts and mastics, caulking, high voltage wiring, mechanical packing and gaskets, and underground services or piping.

#### 3.1.2 Assessment

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility. Priorities have been established for remedial action based on these combinations, and are given below.

#### Priority 1 (One)

Asbestos-containing material highly recommended to be removed, repaired or encapsulated.

#### Priority 2 (Two)

Asbestos-containing material could remain in place until system upgrading or renovations are to occur.

#### **Priority 3 (Three)**

Asbestos-containing material could remain in place until eventual building demolition.

#### 3.2 **LEAD-CONTAINING MATERIALS**

Paints/surface coatings observed in the surveyed areas were tested for lead content. Other building materials not tested for lead content (i.e., mortar, concrete) should be considered lead-containing until proven otherwise.

Currently in Ontario, there is no regulation that provides a definition of what the percent of lead in paint must be in order to be considered "lead-based paint". The Surface Coating Materials Regulations (SOR/2005-109) made under the Canada Consumer Product Safety Act specifies that the concentration of total lead present in a surface coating material must not be more than



600 mg/kg. The Surface Coatings Materials Regulations came into effect on April 19th, 2005 and was amended in November of 2010, which lowered the acceptable concentration of total lead present in a surface coating material to less than 90 mg/kg (SOR/2010-224). This lead content applies to any paint and/or surface coatings of products advertised, sold or imported into Canada. Coatings applied to furniture, pencils, artists' brushes, toys and articles that are intended for children would fall under the jurisdiction of this regulation. However, these levels are not specifically intended to determine what constitutes a "lead-based paint", it is merely a regulation to protect consumers of coated materials. Therefore, this regulation does not apply to construction projects where lead-based coatings may be disturbed during the course of renovations or construction.

To date, there is no simple correlation between the concentration of lead in paints/surface coatings and the resulting airborne lead levels that may be emitted if the coated material was to be disturbed or removed. However, the Environmental Abatement Council of Canada (EACC) "Lead Guideline for Construction, Renovation, Maintenance or Repair", published October 2014 (herein referred to as 'EACC Guideline'), outlines "virtually safe" lead levels for paints or surface coatings. Paints or coatings containing less than or equal to 0.1% lead by weight<sup>1</sup> are considered low-level lead paints or coatings. If these paints or coatings are disturbed in a manner, which uses normal dust control procedures, and does not exceed the particulate not otherwise specified (PNOS) time-weighted average (TWA) of 0.05 mg/m<sup>3</sup> set in Ontario Regulation 490/09, then worker protection from the inhalation of lead is not required. Projects that meet these guidelines must still adhere to general health and safety precautions, such as prohibiting eating, smoking, drinking or chewing gum in the work area. These projects must also implement dust suppression techniques and provide facilities for workers to wash their hands and face. Additionally, the Occupational Health and Safety branch of the Ministry of Labour (MOL) provides classifications of the types of specific lead operations, which are based on presumed airborne lead concentrations to which the worker will be exposed. The classifications are provided in the MOL publication, "Guideline: Lead on Construction Projects", published in September 2004 and revised in April 2011 (herein referred to as 'MOL Guideline'). The levels of airborne lead expected to be present in a work area is related to the types of work operations being used to disturb or remove the coatings; it is not a function of the percentage of lead within the coating. Based on this MOL Guideline, all paints/surface coatings are to be considered lead-containing unless they are tested and contain undetectable lead concentrations.

<sup>&</sup>lt;sup>1</sup> WHMIS reporting limit for lead in a safety data sheet or material safety data sheet.

Lead is also suspected to be a component in solder on plumbing fixtures throughout the building. Representative samples of solder joints suspected to contain lead were not collected. Other suspect lead-containing materials such as lead sheeting, conduit, pipes and lead-calcium battery plates were not sampled during this investigation, but were noted where applicable.

#### 3.2.1 Bulk Sampling for Lead in Paints

To verify lead content in paints, representative bulk samples of paints were retrieved for laboratory analysis for lead content. Paint samples were scraped down to the building base structure, with all possible layers present, then submitted to an independent laboratory. Samples were treated with a dilute nitric acid sample digestion prior to filtration. Analysis utilized for lead detection in filtered samples was Flame Atomic Absorption Spectroscopy (F.A.A.S.).

#### 3.3 SILICA-CONTAINING MATERIALS

Silica occurs naturally as crystalline or amorphous material. Crystalline silica is significantly more toxic than amorphous silica.

Silica may be present in the project area in two forms: i) amorphous-diatomaceous earth in pipe fittings and other insulation materials; and ii) free crystalline ( $\alpha$ -Quartz) in ceiling tiles, concrete, cement, brick, ceramic tiles, terra cotta block and hard plaster finishes. Testing for silica in these materials was not conducted, but its presence was noted.

#### 3.4 MERCURY-CONTAINING MATERIALS

Mercury may be a component in paints and can also be present as a liquid in thermometers, thermostats, and other mechanical equipment switches. Mercury vapour is present in fluorescent lamps.

#### 3.5 **ARESENIC-CONTAINING MATERIALS**

Arsenic is used in metallurgy for hardening copper, lead and alloys; in pigment production, in the manufacture of certain types of glass, in insecticides and fungicides and in rodent poisons, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing.

#### 3.6 **ACRYLONITRILE**

Acrylonitrile (ACN) (also known as vinyl cyanide) is an explosive, flammable liquid used in the manufacture of acrylic fibres, rubber-like materials and pesticide fumigants.

#### 3.7 BENZENE

Benzene, or Benzol, is a colourless liquid. It is used as an intermediate in the production of styrene, phenol, cyclohexane, and other organic chemicals, in the manufacture of detergents, pesticides, solvents, and paint removers. It is also found in gasoline.

#### 3.8 COKE OVEN EMISSIONS

Not applicable to this project area.

#### 3.9 ETHYLENE OXIDE

Ethylene oxide is a colourless gas liquefying below 12 degrees Celsius. It is used generally as a fumigant and sterilizing agent for medical equipment.

#### 3.10 ISOCYANATES

Isocyanates (HDI, MDI and TDI) are used in the production of polyurethane and as an elastomer in casting compounds, mastic, and textile coatings (IPDI).

#### 3.11 VINYL CHLORIDE

Vinyl Chloride, also known as chloroethylene, is a colourless gas but is handled as a liquid under pressure. It is used in the production of polyvinyl chloride resins and in organic synthesis.

#### 3.12 NON-DESIGNATED SUBSTANCES

#### 3.12.1 <u>PCB-containing Materials</u>

PCBs are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however, a review of a number of representative and accessible fluorescent light ballasts suspected to contain PCBs were included in the survey. In addition, accessible building hydraulic equipment (i.e., elevators/lifts) or electrical transformers observed

during the survey were visually reviewed. No sampling of materials for PCB content was conducted as a part of this survey. In addition, no other materials were reviewed/inspected as a part of this survey unless specified by the client. Thus, the following materials should be assumed, if present onsite, to contain PCBs until proven otherwise: cable insulation, thermal insulation materials (i.e., foam, felt), adhesives/tapes, plastics, caulking, lead-based paints and, various types of electrical equipment (i.e., voltage regulators, switches, bushings, electromagnets).

Polychlorinated biphenyl-containing ballasts reviewed were identified by model number, serial number, and date code, as listed in *Environment of Canada Identification of Lamp Ballasts Containing PCBs - Report EPS 2/CC/2 (revised), August 1991*.

#### 3.12.2 Mould

Fungi, also called mould or mildew, are microbiological organisms that can live and reproduce and potentially cause health problems in indoor environments. They are chlorophyll-lacking plant-like organisms that are unicellular (e.g., yeast) or grow in a multinucleate mass (e.g., bread mould), subsist on decomposed organic matter or nutrition from living hosts, and reproduce by production of spores 3 to 200  $\mu$ m in size. Mould growth inside buildings is due to excess moisture caused by leakages, condensation, or capillary movement of water into the building. They will generally not occur if materials are kept dry.

The presence of mould spores in indoor environments may not be significant in terms of the causation of fungal infestation since most micro-organism contamination does not become a problem until it becomes disturbed and is distributed into the ventilation system or air within the building. In other words, there may be little hazard if micro-organisms do not multiply or do not accumulate to harmful levels, if there is no means for micro-organisms to become airborne, or, if aerosolized micro-organisms do not reach susceptible receptors.

Fungi or moulds which are typically found on building materials that have become damaged due to moisture problems can cause or exacerbate allergic type symptoms in occupants who have a history of hypersensitivity diseases (e.g., asthma). Thus, people suffering from respiratory disorders or severe allergies may be at greater risk for developing health problems associated with exposures to fungi found in water damaged areas. Such people may need to be removed from the affected areas until remediation and clearance testing, if required, is completed. However, any decisions regarding medical removal must be based on recommendations made

by an occupational medicine specialist trained in symptomatology related to this type of exposure.

In order to define risk for areas that are suspected or confirmed to be contaminated with mould, the extent of water damage, and/or visible mould growth on building materials must be considered. THEM recommends the following criteria presented in <u>Table II</u> for determining risk levels (hazard categories) and associated remediation protocols. This criterion is based on the "Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation" and "Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines 2015, Edition 3".

TABLE II
Recommended Water Damage/Mould Risk Management Levels

Recommended trater builded, model mich management zevelo				
Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements		
0	No visible signs of mould growth, no evidence of category 2 or 3 water damage and no health complaints.	No remediation required; however, in some situations structural drying may be required.		
1	Small Areas (Source Containment)	<ul> <li>Work can be conducted by in-house staff trained in water damage/mould remedial techniques or by qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>No critical barriers required.</li> <li>Contaminated building materials can be contained with polyethylene sheeting and duct tape and removed.</li> </ul>		

Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection <sup>1</sup> and/or Moisture Measurements	Summary of General Recommended Remediation Requirements
2	Moderate Areas (Local Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>A polyethylene enclosure should be erected to isolate mould contaminated materials.</li> <li>A decontamination chamber may be required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>
3	Extensive Areas (Full Scale Containment)	<ul> <li>Work should be conducted by a qualified environmental contractor.</li> <li>Personnel conducting the work should be wearing the appropriate PPE.</li> <li>The mould contaminated room and/or building section should be isolated with critical barriers.</li> <li>Building materials within the remediation area that cannot be cleaned effectively must be sealed off with polyethylene barriers.</li> <li>A decontamination unit is required.</li> <li>The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.</li> </ul>

Note 1: May or may not include destructive testing.

#### 3.12.3 Ozone Depleting Substances

Ozone depleting substances such as fluorocarbons are commonly used as cooling agents in refrigeration equipment such as ice makers, refrigerators, chilled water drinking fountains, compressors and air conditioners. Commercial chlorofluorocarbon (CFC) production began with R–12 in 1931, R–11 in 1932, R–114 in 1933 and R–113 in 1934. The first hydrochlorofluorocarbon (HCFC) refrigerant, R–22 was produced in 1936. By 1963, these five products accounted for 98% of the total production of the organic fluorine industry.

Almost 50 years passed between the introduction of CFCs and recognition of their harm to the environment when released to the atmosphere. Specific concerns are related to their depletion of stratospheric ozone and to possible climate change by their action as greenhouse gases. The high stability of CFCs enables them to deliver ozone—depleting chlorine to the stratosphere.

The project area was visually inspected for refrigeration equipment and where possible, fluorocarbon content was determined by looking at appliance tags.

#### 4.0 FINDINGS

The following includes observations for any hazardous materials identified within the area surveyed. The survey focused on building materials and as such there may be Designated Substances in equipment that was present within the surveyed area.

#### 4.1 ASBESTOS

No suspect ACMs were observed within the Ball Park Booth or Pavillion, therefore no samples were collected.

#### **4.2 LEAD**

One (1) sample of suspect lead-based paint was collected from the Office Ball Park Booth. The sample was submitted to an independent laboratory, EMSL Canada Inc., for analysis. Results of the laboratory analysis are listed in <u>Table III</u> below. The Laboratory Certificate of Analysis is attached in Appendix I.

# TABLE III Summary of Lead Bulk Sampling Results Bluevale Ball Park Booth 21 Park Road, Bluevale, Ontario November 29<sup>th</sup>, 2023

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
LD-A-01	Ball Park Booth Interior	Grey Wall & Ceiling Paint	0.029	

The grey paint sampled was found to be a low-level lead paint in good condition. Lead is suspected to be present as a component in pipes and in solder used in pipe fittings.

#### 4.3 SILICA

Silica may be present in the building in insulation materials. Free crystalline silica ( $\alpha$ -Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

#### 4.4 MERCURY

Fluorescent light tubes identified within the building are suspected to contain mercury vapour.

#### 4.5 **ARSENIC**

No source was identified.

#### 4.6 **ACRYLONITRILE**

No source was identified.

#### 4.7 **BENZENE**

No source was identified.

#### 4.8 COKE OVEN EMISSIONS

Not applicable for the building.

#### 4.9 ETHYLENE OXIDE

No source was identified.

#### 4.10 ISOCYANATES

No source was identified.

#### 4.11 VINYL CHLORIDE

No source was identified.

#### 4.12 NON-DESIGNATED SUBSTANCES

#### 4.12.1 PCB

At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in the Revised Regulation of Ontario 362/90. In addition, requirements outlined in the federal regulation SOR/2008-273 – made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

No suspect PCB-containing transformers were noted in the areas of the building under study.

#### 4.12.2 **Mould**

No visible mould was observed within the surveyed building.

#### 4.12.3 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building.

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

The following summarizes hazardous building materials identified within the surveyed area.

#### 5.1 ASBESTOS

No asbestos-containing materials (ACM) were observed within the surveyed building. If suspect asbestos-containing materials are uncovered during renovation/demolition activities that were inaccessible at the time of the assessment, they should be assessed by a qualified person at that time.

#### 5.2 <u>LEAD</u>

Ontario Regulation 490/09, as amended by O. Reg. 189/19, *Designated Substances* – made under OHSA states that airborne levels of lead particles should not exceed 0.05 mg/m<sup>3</sup>. Any demolition

or stripping work should be performed under controlled conditions according to the Ontario Ministry of Labour guideline "Lead on Construction Projects", dated April 2011.

The disposal of construction waste containing lead is controlled by Ontario Regulation 347, *General Waste Management* – made under the Ontario Environmental Protection Act. Leachate tests for lead in construction waste must not exceed 5 mg/L in order to be disposed of at a local landfill without treatment.

#### 5.3 SILICA

Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline ( $\alpha$ -Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.

Precautions must be taken to prevent silica-containing particles from becoming airborne during the disturbance of silica-containing surfaces, such as during renovation or demolition projects. Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act. All work being carried out with silica-containing materials should be conducted following the guideline "Silica on Construction *Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

#### 5.4 MERCURY

Mercury vapour is present in tubes of fluorescent light fixtures. If these tubes are removed, they should be disposed of properly or recycled.

Precautions must be taken to prevent mercury vapours from becoming airborne during building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act.

#### 5.5 NON-DESIGNATED SUBSTANCES

#### 5.5.1 <u>PCB</u>

At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in the

Revised Regulation of Ontario 362/90. In addition, requirements outlined in the federal regulation SOR/2008-273 – made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

Proper removal, handling and storage of PCB-containing materials must follow Ontario Regulation 362, as amended by 232/11, *Waste Management - PCBs* and Ontario Regulation 347, *General Waste Management*, as well as Federal Regulations SOR/2008-27, *PCB Regulations* and SOR/97-109, *PCB Waste Export Regulations* — made under the Canadian Environmental Protection Act.

Ontario Regulation 347 designates PCB waste (containing PCBs at a concentration of more than fifty parts per million (ppm) by weight) as a hazardous waste and states that no person shall dispose of PCB waste by land disposal. In Ontario, the Ministry of Environment (MOE) puts the onus on the owner to perform a leachate test as per Leachate Criteria Testing (Schedule 4) of Ontario Regulation 347, on all waste that may be hazardous and in turn handle the waste according to the test results. Leachate tests for PCBs must not exceed 0.3 mg/L (TCLP) in order to be disposed of at a local landfill without treatment.

Releasing PCBs into the environment is prohibited under the Canadian Environmental Protection Act. This prohibition applies to all PCBs, without exception, at all times. The prohibition on release applies to all quantities at a concentration of 2 mg/kg or more for liquids and 50 mg/kg or more for solids. The mixing or diluting of PCBs or products containing PCBs with any other product is prohibited with any other product except to destroy the PCBs or recover them to destroy them in an authorized facility.

#### 5.5.2 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building. All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

#### 5.6 **GENERAL**

Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347, as amended – made under the Environmental Protection Act. In the event lead and/or Mercury waste may be generated as part of renovation or demolition activities, the waste may be subject to Leachate Criteria (Schedule 4) of this regulation.

Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities, notably materials that are suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

#### 6.0 <u>LIMITATIONS</u>

In this statement of limitations, the "Client" refers to the persons or entities to whom this report is addressed. "THEM" refers to T. Harris Environmental Management Inc. The "Contract" refers to any general, or project-specific written agreement, including project-specific scope of work documents, executed between THEM and the Client pertaining to the subject matter of this report.

This report is subject to the limitations set out below and any other limitations set out in the body of this report or in the Contract between THEM and the Client.

The investigation and assessment described in this report were conducted in accordance with the Contract agreed upon by the Client in a manner consistent with a reasonable level of care and skill normally exercised by members of the occupational hygiene consulting profession currently practising under similar conditions in the Province of Ontario and observing the code of ethics of the Canadian Registration Board of Occupational Hygiene (CRBOH) and the American Board of Industrial Hygiene (ABIH).

In preparing this report, THEM has relied on information provided by others, including without limitation, information concerning the history and operation of the site, and test results and analyses of other consultants, independent laboratories, or testing services. Except as expressly stated in this report, THEM has not made any independent verification of such information. Findings cannot be extended to portions of the site, which were unavailable for direct observation.

The assessment in this report has been made in the context of regulations which were in force and effect at the time of the assessment and which are specified in this report. The assessment did not take into account any regulations, which were not in effect at the date of the assessments, or any guideline or standard not specified in this report. Regulatory standards do not exist for all materials of a potentially hazardous nature.

The collection of any samples at the site (including the location of samples and the analytical parameters applied to the samples) was undertaken in accordance with the Contract agreed upon by the Client, based upon the information provided to THEM by the Client concerning existing site conditions. Conditions between sample locations (if any) may differ from those indicated in this report.

This report is intended solely for the use or uses specified in this report and/or the Contract. Use of this report for purposes other than those set out in this report and/or the Contract will be at the sole risk of the Client.

Copying of this report except as may be reasonably required for internal use by the Client and any distribution of this report to persons other than the Client in whole or in part, is not permitted without the express written permission of THEM.

This report is for the sole use of the Client. THEM makes no representation or warranty, either expressed or implied, to any third party with regard to this report and the work referred to in this report and expressly disclaims any, and accepts no duty of care to any third party or any responsibility or liability whatsoever to any third party for any loss, expenses, damages (direct, consequential or contingent), fines, penalties, or other harm that may be suffered or incurred by any third party as a result of any use of, any reliance placed upon, or any decision made or actions taken based upon this report or the work referred to herein.

In no event shall THEM be liable for any indirect, incidental, special or consequential damages, or damages from loss of profits, revenue, or use, incurred by either the client or any third party, whether in an action in tort or contract, even if THEM has been advised of the possibility of such damages. THEM's liability for damages shall in no event exceed the limit of available insurance coverage.

If new information concerning the subject matter of this report arises, THEM should be contacted to re-evaluate the conclusions of this report and to provide amendments as required.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

Joe D'Angelo, B.A. (Envs), AMRT, EP Project Manager Greg Balsden, B.Sc., AMRT Manager – Southwestern Ontario



## APPENDIX I LABORATORY CERTIFICATES OF ANALYSIS



#### EMSL Canada Inc.

2756 Slough Street, Mississauga, ON L4T 1G3

(289) 997-4602 / (289) 997-4607

http://www.EMSL.com torontolab@emsl.com CustomerID: CustomerPO: 55THAR50A L23-03777-05

552318685

ProjectID:

EMSL Canada Or

Attn: Greg Balsden

T. Harris Environmental, Inc. 931 Commissioners Rd. E.

Suite 100

London, ON N5Z 3H9

Project: Bluevale Ball Park Booth (L23-03777-05)

Phone: (519) 685-9048 Fax: (519) 685-1042 Received: 11/30/2023 10:11 AM

Collected: 11/29/2023

#### Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

Client SampleDescription	Collected Analyz	ed Weight	RDL	Lead Concentration
LD-A-01 552318685-0001	11/29/2023 11/30/20 Site: Ball Park Bootl Desc: Grey Wall Pa	n Interior	0.0097 % wt	0.029 % wt

Rowena Fanto, Lead Supervisor or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request. Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA LAP, LLC-ELLAP Accredited #196142

Initial report from 12/06/2023 08:30:23

### MUNICIPALITY OF MORRIS-TURNBERRY REPORT TO COUNCIL

TO: Mayor and Council

PREPARED BY: Trevor Hallam, CAO/Clerk

DATE: December 15, 2023

SUBJECT: Interim Report - Lowertown Community-Level Monitoring-Based Sewage Impact

Assessment

#### **RECOMMENDATION**

For information only.

#### **BACKGROUND**

During the 2023 budget process, Council allocated \$30,000.00 towards a community-level monitoring-based sewage impact assessment in Lowertown. The goal of the assessment is to establish a baseline of current nitrate levels in Lowertown, to reduce or remove the requirement for landowners to complete an individual, site specific nitrate study in conjunction with a development application, and to provide a regional and cumulative picture of the impact of nitrates from private sewage treatment systems on groundwater in Lowertown.

The project proposed the installation of eight monitoring wells on municipal property throughout Lowertown, with samples to be taken quarterly for the period of one year to inform a final report, with monitoring to continue thereafter to maintain up to date records.

#### **COMMENTS**

In August of 2023, eight monitoring wells were installed in Lowertown. In December of 2023, an interim report was delivered to the Municipality. The initial findings are as follows:

- Groundwater flow velocity was found to be relatively slow, as the watertable surface was found to be mostly below the granular upper deposits at most of the well sites, with flow occurring mostly in underlying finer silty deposits.
- Groundwater flow direction is towards the River, as expected.
- The nitrate impact downgradient of long-existing built-out areas is relatively modest for this 1<sup>st</sup> round of sampling.
- The nitrate impact downgradient of newer development areas is non-detectable to low, mainly due to slow groundwater flow velocity. Impact to monitoring wells downgradient of these areas may take 10's of years.

Unless the consultants from Ian D Wilson Associates Limited are advised otherwise, the monitoring program will proceed quarterly for one year as proposed. Once four seasons of results are collected, the impact downgradient of the long-existing built-out areas will be used to establish viable development density.

#### **ATTACHMENTS**

1. Interim Report - Community-Level Monitoring-Based Sewage Impact Assessment

#### **OTHERS CONSULTED**

Geoff Rether, Professional Geoscientist, Ian D Wilson Associates Limited.

Respectfully submitted,

₹revor Hallafi CAO/Clerk

# INTERIM REPORT COMMUNITY-LEVEL MONITORING-BASED SEWAGE IMPACT ASSESSMENT COMMUNITY OF LOWERTOWN MUNICIPALITY OF MORRIS-TURNBERRY

Prepared For: Municipality of Morris-Turnberry

Project 2020-29 December 19, 2023

IAN D. WILSON ASSOCIATES LIMITED CONSULTING HYDROGEOLOGISTS

Clinton, Ontario

Telephone (519) 233-3500 Fax (519) 233-3501

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# INTERIM REPORT COMMUNITY-LEVEL MONITORING-BASED SEWAGE IMPACT ASSESSMENT COMMUNITY OF LOWERTOWN MUNICIPALITY OF MORRIS-TURNBERRY

#### 1.0 **INTRODUCTION**

The Community of Lowertown is located within the northwestern periphery of the Municipality of Morris-Turnberry, generally within Lots 4 to 10, Concession B, geographic Township of Turnberry. Figure 1 shows the location and layout of the Community.

Lowertown is a privately-serviced community, with water supply provided by individual water wells and sewage disposal occurring through private subsurface sewage disposal systems.

Following completion of the October 26, 2020 Review of Hydrogeological Conditions and Constraints report for Lowertown (Wilson Associates), as directed by the Municipality a community-level, monitoring-based sewage impact assessment was initiated for Lowertown. The Municipality's main objective of the monitoring-based assessment was to develop a more comprehensive understanding of the development potential of the area using conventional septic systems, to establish a minimum lot size for Lowertown (recognizing geological conditions), and to minimize piecemeal development proposal-specific nitrate studies.

The assessment was conducted as follows:

- Installation of eight small-diameter monitoring wells, each screened to below the watertable surface, on municipally-accessible lands downgradient of portions of Lowertown that are most developed.
- Per Section 5.6.1 of Ministry of the Environment, Conservation and Parks (MECP) Procedure D-5-4, four seasons of groundwater samples are to be collected from the monitoring wells, and subjected to nitrate analysis. Four seasons of monitoring are required to eliminate seasonal variation from the results.
- The actual nitrate impact from built-out portions of the community will be used to model an acceptable development density based on actual impacts under actual climate and subsurface conditions.

Eight monitoring wells were installed throughout Lowertown during September and October 2023, and an initial round of monitoring well sampling was conducted October 24, 2023. This interim report provides a summary of the background setting of the Community, a summary of monitoring well installation information, and the results of the initial round of monitoring well sampling. Portions of the October 26, 2020 Review of Hydrogeological Conditions and Constraints report for Lowertown are incorporated in this interim report for ease of reference.

For this report, directional references assume that north is towards North Street.

#### 2.0 **COMMUNITY SETTING**

Lowertown is situated generally south of North Street, east of West Street, west of Arthur Street and the Maitland River, north of Amberley Road, and between Amberley Road and the Middle Maitland River.

Most of Lowertown is situated north and west of the Maitland River, where lands slope generally southward or southeastwards towards the River, with an overall relief of about 30m. According to Ontario Base Mapping, a tributary system of the Maitland River flows generally southwards through the middle of Lowertown, a smaller tributary of the Maitland River flows southwestern portion of Lowertown, and a third small tributary of the Maitland River flows southwestwards within the northwestern portion of Lowertown, crossing West Street west of Royal Road.

The smaller portion of Lowertown situated south of the Maitland River and the Middle Maitland River slopes relatively steeply to the north towards the Maitland River and the Middle Maitland River, with an overall relief of about 10m.

The portion of Lowertown north of the Maitland River is currently relatively lightly developed, with scattered residences located along most streets, and small subdivision development situated west of Helena Street between Turnberry Street and Royal Road, and along Turnberry Street from east of Mary Street to West Street. Industrial lands are developed in the northeastern portion of Lowertown.

The portion of Lowertown situated south of the Maitland River and the Middle Maitland River is relatively more densely developed, with numerous homes fronting on Amberley Road, the Turnberry Estates Trailer Park, and small subdivision development in the vicinity of Amberley Road and Helena Street.

It is understood from County mapping that most of the northern periphery of Lowertown, north of Royal Road and east of Mary Street, as well was east of Helena Street and immediately south of Royal Road, is currently zoned industrial. Lands generally west of Mary Street, as well as pockets of land in the block between Royal Road, Mary Street, Helena Street and Turnberry Street, are zoned residential. Much of the remainder of Lowertown between the Maitland River and Royal Road, generally east of Mary Street is zoned Floodway or Floodfringe, and will be un-developable.

The portion of Lowertown south of the Maitland River is zoned residential, residential park or highway commercial, except for lowlands near the Maitland River and the Middle Maitland River.

According to information provided by the Huron County Planning & Development Department (Figure 1), recent and potential proposed residential development is situated in the northeast, east of Alice Street and Helena Street, in the southwest near Turnberry Street and Mary Street, and in the south between Amberley Road and the Maitland River.

#### 3.0 GEOLOGY AND HYDROGEOLOGY

Lowertown is situated within the western periphery of the Teeswater Drumlin Field physiographic region of southern Ontario. However, the geomorphology of Lowertown is largely dominated by the Maitland and Middle Maitland Rivers, and associated floodways. According to the Ontario Geological Survey Map P.2967 "Quaternary Geology of the Wingham-Lucknow Area", the upper soils are as follows:

- Over the majority of Lowertown north of the Maitland River, the upper soils consist of glaciofluvial outwash gravel and gravelly sand, or glaciofluvial outwash sand closer to the River. Wetland areas are underlain by organic deposits.
- Within the northwestern periphery of Lowertown (i.e. north of Royal Road and west of Alice Street), the upper soils consist of ice-contact stratified drift of sand, gravel, silt or till.
- In the western half of the lands south of the Maitland River, the upper soils consist of glaciofluvial outwash gravel and gravelly sand. In the eastern half of the lands south of the Maitland River, the upper soils consist of Elma Till, a stony sandy silt to silt glacial till.

According to MECP water well records, the composition of the overburden can vary considerably throughout Lowertown. The upper granular deposits, where present, can be as much as 21m deep, however they are typically less than 10m deep. The upper granular deposits are indicated to be absent in the far north and south of Lowertown, as well as in some isolated locations within Lowertown. The upper granular deposits are most typically underlain by a fine-grained lower overburden (i.e. clay or hardpan), except in the northwestern periphery of Lowertown, where some deep overburden granular deposits are reported.

According to Ontario Geological Survey Map P. 296 "Bedrock Topography of the Lucknow-Wingham Area", the bedrock surface is relatively flat beneath the southwestern half of Lowertown at an approximate elevation of about 290m above sea level, but slopes steeply down into a buried bedrock valley beneath the northeastern half of Lowertown, to a base elevation of about 250m above sea level. Accordingly, based on Ontario Base Map land surface elevations, the overburden will range in depth between about 15m in the southwest to as much as 70m in the northeast. Based on the

depth of the Maitland River valley, there is potential for bedrock exposure on the base of the River in the southwestern periphery of Lowertown.

The bedrock beneath Lowertown consists of limestone or dolostone, with some shale, of the Detroit River Group.

Throughout Huron County the bedrock aquifer is the most commonly utilized aquifer, as it typically provides moderate to high yields of groundwater with acceptable water quality and good aquifer security. Due to the granular upper overburden and shallow watertable conditions beneath most of Lowertown, less secure shallow dug or bored wells have been historically used for water supply due to ease of obtaining groundwater. However, as discussed below, while some shallow wells may remain, the vast majority of private wells in Lowertown are drilled wells completed in the bedrock aquifer.

According to the Huron County Mapping Portal, much of Lowertown is mapped as a significant groundwater recharge area, due to granular upper soils. "GUDI" (groundwater under the direct influence of surface water) areas are mapped beneath the Maitland River, suggesting that it was interpreted that the River may flow on bedrock in some areas. A small "GUDI" area is also mapped on North Street, between Mary Street and Alice Street, however the local water well record data do not support this classification.

According to the Huron County Mapping Portal, Well Head Protection Areas associated with the Wingham Municipal water wells extend into the northeastern portion of Lowertown, mainly east of Alice Street and north of Royal Road. The Well Head Protection Areas generally extend northeastwards from the Wingham Municipal wells, indicating a southwesterly direction of groundwater flow in the bedrock aquifer. As described above, the overburden is very deep in the northeastern portion of Lowertown, and risk of impacts from development in Lowertown to the Wingham Municipal wells is very low.

Groundwater flow direction in shallow watertable aquifers (vs. the deep bedrock aquifer) typically follows surface drainage patterns. Accordingly, north of the Maitland River, shallow groundwater flow is anticipated to be generally south or southeastwards towards the Maitland River, with local flows towards the southward-flowing tributary of the Maitland River situated in the middle of Lowertown. Shallow groundwater south of the Maitland River is anticipated to flow north, towards the Maitland River.

#### 4.0 SUBSURFACE INVESTIGATION

#### 4.1 Borehole/Monitoring Well Installations:

Following receipt of valid utility locates, on September 11, 2023 and October 3, 2023 seven boreholes were completed on municipally-accessible lands most likely to be downgradient of developed areas and one borehole was completed on lands most likely to be upgradient of developed areas. The boreholes were advanced using a track-mounted power auger machine equipped with continuous flight augers. The boreholes were completed to below the watertable surface, and were all completed as 5.1cm-diameter monitoring wells (MW1 to MW8). Soil samples were collected from auger cuttings and field-identified at regular depth intervals. Selected representative samples were retained for subsequent laboratory analysis.

Visual logs of the borehole installations are included in the appendix. The locations of the boreholes are shown on Figure 1. The contractor's water well records for the monitoring well installations are also included in the appendix.

Eight representative samples, all from below the watertable surface in order to characterize groundwater flow conditions, were selected for laboratory analysis. The following table provides a summary of the soils analyses:

Borehole/ Sample	Depth (m)	G	Grain-Siz	e Distributi	on	Estimated Coefficient of	Estimated T-time	
Gampia.	(***)	Clay%	Silt%	Sand%	Gravel%	Permeability (cm/sec)	(minutes/ cm)	
MW1 S1	5.5 - 6.1	8	23	42	27	8x10 <sup>-5</sup>	20	
MW2 S2	8.2 - 9.1	10	38	32	20	2x10 <sup>-5</sup>	30	
MW3 S3	7.9 - 8.5	19	55	26	0	8x10 <sup>-6</sup>	35	
MW4 S4	2.4 - 3.1	6	30	28	36	6x10⁻⁵	25	
MW5 S5	4.0 - 4.6	26	74	0	0	3x10 <sup>-6</sup>	40	
MW6 S6	2.1 - 3.1	11	69	20	0	5x10⁻⁵	25	
MW7 S7	4.0 - 4.6	5	14	36	45	3x10 <sup>-4</sup>	15	
MW8 S8	5.5 - 6.1	12	84	4	0	5x10⁻⁵	25	

Note: The above coefficients of permeability and T-times are estimates based on field observation, grain-size analysis, experience with similar soils and guidelines published under the Ontario Building Code.

In summary, soil conditions below the watertable surface at the borehole locations mainly consist of silt to sandy silt with varying gravel and clay fractions.

As described in the visual borehole logs, soils above the watertable surface were visually characterized as relatively fine-grained silty sand at MW1 and MW2 south of the Maitland River, and either black organics or granular deposits (i.e. sands and gravels) at MW3 through MW8 north of the Maitland River.

Grain-size curves for the assessed soils are included in the appendix.

#### 4.2 Watertable Conditions:

On October 24, 2023, water levels in each of the monitoring wells were observed, the monitoring wells were purged (either by pumping three well casing volumes, or by pumping the well dry and allowing recovery), and an initial round of samples collected from each of the monitoring wells for nitrate content analysis. Nitrate is the critical contaminant in the context of groundwater impacts, per MECP Procedure D-5-4. All samples were collected in laboratory-supplied bottles, stored in an ice-packed cooler, and submitted to Bureau Veritas Laboratories under chain-of-custody for nitrate content analysis. The following summarizes groundwater information:

Monitoring Well	Approximate Ground		October 24, 2023	
	Elevation (m asl)*	Water Level (m bgl)	Approximate Water Level Elevation (m asl)	Nitrate Content (mg/L as N)
MW1	309.0	1.77	307.23	0.39
MW2	317.5	8.02	309.48	2.95
MW3	309.0	3.02	305.98	<0.1
MW4	305.0	0.29	304.71	2.94
MW5	310.0	2.71	307.29	<0.1
MW6	307.0	+0.15	307.15	0.96
MW7	311.5	1.32	310.18	2.77
MW8	321.0	6.49	314.51	0.51

Notes:

m asl = metres above sea level, m bgl = metres below ground level

A copy of the laboratory analytical report is included in the appendix.

<sup>\*</sup> Approximate ground surface elevation estimated from well location relative to contour information provided by Huron County Website mapping / Ontario Base Map.

Figure 1 provides an illustration of the approximate contours of the watertable surface (as the assumed ground surface elevation at each monitoring well is approximate) in the vicinity of the monitoring wells installed north of the Maitland River and the approximate inferred directions of shallow groundwater flow north of the River. Based on approximate water level elevation data, the watertable north of the Maitland River is inferred to flow generally southwards with an overall shallow slope of about 8x10<sup>-3</sup>., which is consistent with the drainage characteristics of the area. In the close vicinity of the River, the watertable surface exhibits a slightly shallower slope, in the range of 6x10<sup>-3</sup>.

Also illustrated on Figure 1 are estimated contours of the watertable surface in the vicinity of MW1 and MW2, the estimated contours based on approximate water levels in MW1 and MW2 and the assumption that groundwater south of the Maitland River flows towards the River. Based on the limited data south of the River, the watertable is estimated to flow north-northeastwards with a slightly steeper (relative to conditions north of the River) estimated slope of about 2x10<sup>-2</sup>.

Shallow groundwater flow velocity is estimated using the formula

v = ki/n

Where

v = linear velocityk = soil permeabilityl = watertable slope

n = soil porosity

Assuming a below-watertable surface permeability of  $3x10^{-4}$ cm/sec (upper range of permeability of samples from boreholes north of the River), a watertable surface slope of  $8x10^{-3}$  (October 2023) and a generic aquifer porosity of 30%, the overall estimated rate of shallow groundwater flow north of the River is in the range of 2 to 3m/year.

It should be cautioned that conditions between the broadly-spaced boreholes may differ, and based on the known presence of granular deposits in many areas of Lowertown, groundwater velocity may locally be higher.

#### 4.3 Initial Interpretation:

Per MECP Procedure D-5-4, the maximum permitted cumulative impact of individual subsurface sewage disposal systems (all situated on private lots) is 10mg/L nitrate in shallow groundwater. The results of the October 24, 2023 sampling of the eight monitoring wells indicate a maximum existing nitrate impact to groundwater in the range of 2mg/L to 3mg/L downgradient of the main longer-existing development areas. The analytical results of the initial round of samples are discussed as follows:

 MW8 is located on Mary Street, upgradient (north) of most development in Lowertown, and the water from MW8 was reported to contain a low level of nitrate (0.51mg/L). It is assumed that this low background nitrate level is a result of long-existing agricultural practices in areas north of MW8.

- MW2 is located downgradient (north) of a cluster of long-existing homes and commercial properties west of Helena Street, north of Amberley Road, and the water from MW2 was reported to contain 2.95mg/L nitrate. However, active agricultural fields are located south of Amberley Road, and a proportion of the nitrate content of the water from MW2 may also be agriculturally-derived. The nitrate content of the water from MW1, also located downgradient of a group of long-existing homes, was lower at 0.39mg/L. The watertable surface south of the River is somewhat deeper relative to ground surface than north of the River, upper soils are generally finer-grained than north of the River, and impacts to groundwater may be significantly delayed by long percolation times.
- MW4 is located downgradient (south) of a cluster of long-existing homes in the vicinity of Turnberry Street and Mary Street, and the water from MW4 was reported to contain 2.94mg/L nitrate. MW3 is located nearby MW4, but there was no detectable nitrate in the sample from MW3. However the homes upgradient (north) of MW3 are relatively recent, and full nitrate impact at MW3 may not have occurred as yet. Based on the above estimated groundwater flow velocity of about 3m/year, full impact of recent home construction to groundwater at MW3 may not occur for several tens of years.
- MW7 is located downgradient (south) of a cluster of long-existing homes along Mary Street near Royal Road, and the water from MW7 was reported to contain 2.77mg/L nitrate. This is a similar degree of impact to that at MW4.
- MW5 and MW6 are located generally downgradient (south) of a lower-density cluster of relatively recent homes, with the samples from these wells containing low levels of nitrate (i.e. non-detectable to 0.96mg/L). As with MW3, based on the above estimated groundwater flow velocity of about 3m/year, full impact of relatively recent home construction to groundwater in the vicinity of MW5 and MW6 may not occur for several tens of years.
- Per Section 5.6.1 of MECP Procedure D-5-4, four seasons of groundwater samples are to be collected from the monitoring wells, as the nitrate impact of sewage systems to shallow groundwater can vary seasonally. The initial round of samples from the monitoring wells indicates an overall modest level of impact to groundwater from monitoring wells that have been identified as being downgradient of long-existing clusters of sewage systems. Unless advised otherwise, the study will be continued to include sampling events on a quarterly basis through the late summer of 2024. Recommendations for future lot density will be provided once the full year of quarterly groundwater samples are collected, analyzed and interpreted.
- As above, the relatively slow overall estimated shallow groundwater velocity determined at the six monitoring wells located north of the Maitland River indicates that meaningful sewage impact to some of the monitoring wells may not occur from recent development for several tens of years.

Should there be any questions regarding the above analysis and initial round of results, please contact this office.

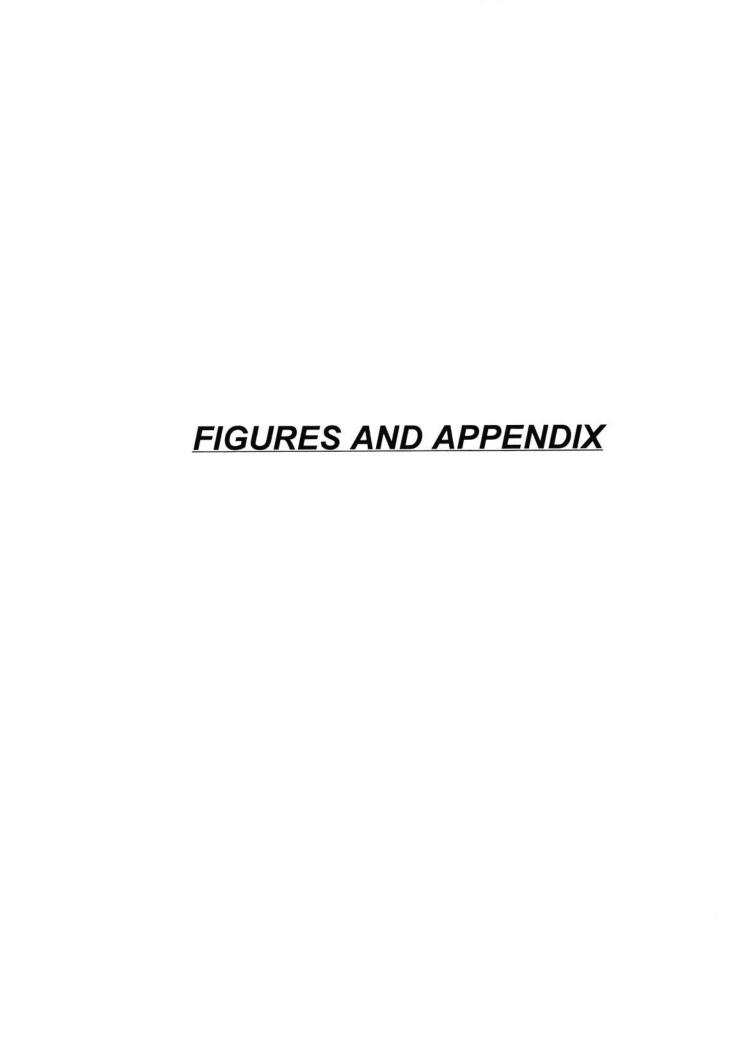
Yours sincerely,

IAN D. WILSON ASSOCIATES LIMITED

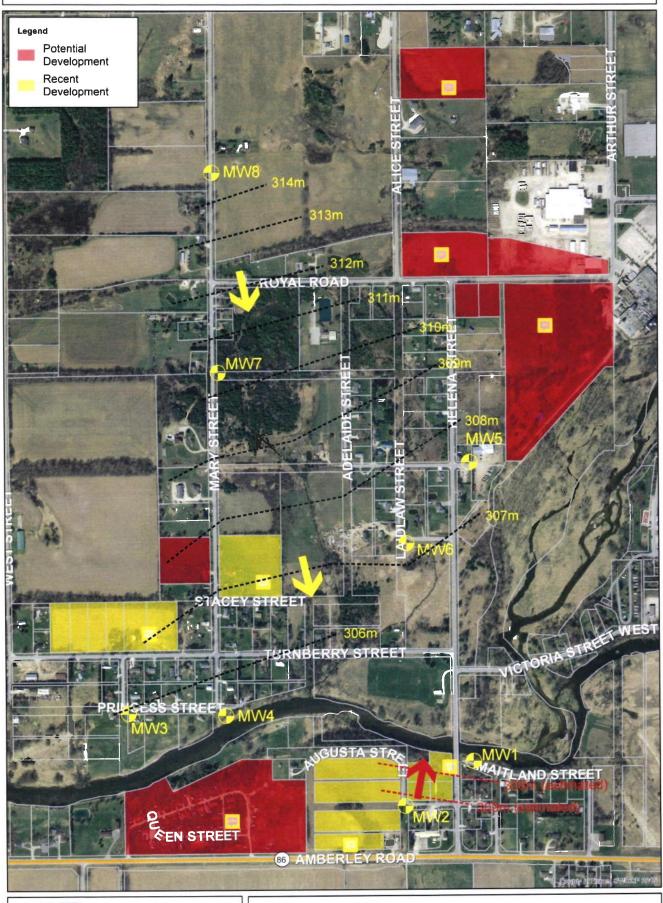
Geoffrey Rether, P.Geo.

December 19, 2023





## APPROXIMATE MONITORING WELL LOCATIONS AND ESTIMATED CONTOURS OF THE WATERTABLE SURFACE OCTOBER 24, 2023 FIGURE 1







#### Completed September 11 and October 3, 2023

#### BOREHOLE DEPTH (m) MATERIALS

MW1	0 - 0.2	dark brown TOPSOIL
	0.2 - 4.3	brown, compact, dry silty SAND with some stones
	4.3 - 5.5	grey, compact, dry SILT with some sand
	5.5 - 7.6	grey, compact, wet silty SAND, gravelly

- 5.1cm diameter PVC monitoring well with a 1.5m length of #10 slot PVC screen installed to 7.6m below grade. Imported sand set 5.5m to 7.6m, bentonite 5.5m to surface.
- Sample 1 5.5m to 6.1m

Clay - 8%

Silt - 23%

Sand- 42%

Gravel - 27%

Water level October 24, 2023 - 1.77m below grade

MW2	0 - 0.2	dark brown TOPSOIL
	0.2 - 0.9	red-brown, compact, dry silty fine SAND
	0.9 - 2.4	grey-brown, compact, dry SILT with some gravel and sand
	2.4 - 8.2	grey-brown, compact, dry sandy SILT
		grey, compact, wet SAND and SILT with some gravel and clay
	8.2 - 10.1	grey, compact, wet SAND and Sill with some graver and clay

- 5.1cm diameter PVC monitoring well with a 1.5m length of #10 slot PVC screen installed to 1.1m below grade. Imported sand set 7.9m to 10.1m, bentonite 7.9m to surface.
- Sample 2 8.2m to 9.1m

Clay - 10%

Silt - 38%

Sand- 32%

Gravel - 20%

Water level October 24, 2023 - 8.02m below grade

#### Completed September 11 and October 3, 2023

#### BOREHOLE DEPTH (m) MATERIALS

MW3	0 - 1.8	FILL - sand and gravel and topsoil
	1.8 - 2.4	brown, loose, dry GRAVEL with some sand and stones
	2.4 - 3.7	brown, loose, dry SAND and GRAVEL
	3.7 - 10.4	grey-brown, compact, dry to wet sandy SILT with some clay,
		stony

- 5.1cm diameter PVC monitoring well with a 1.5m length of #10 slot PVC screen installed to 10.4m below grade. Imported sand set 8.2m to 10.4m, bentonite 8.2m to surface.
- Sample 3 7.9m to 8.5m

Clay - 19%

Silt - 55%

Sand- 26%

Gravel - 0%

Water level October 24, 2023 - 3.02m below grade

MW4 0 - 0.9 black TOPSOIL and PEAT
0.9 - 2.4 grey, compact, wet silty SAND, stony
2.4 - 4.6 grey, compact, wet gravelly sandy SILT with traces of clay

- 5.1cm diameter PVC monitoring well with a 3.0m length of #10 slot
   PVC screen installed to 4.6m below grade. Imported sand set 1.2m to
   4.6m, bentonite 1.2m to surface.
- Sample 4 2.4m to 3.1m

Clay - 6%

Silt - 30%

Sand- 28%

Gravel - 36%

Water level October 24, 2023 - 0.29m below grade

#### Completed September 11 and October 3, 2023

#### BOREHOLE DEPTH (m) MATERIALS

MW5 0 - 0.9 FILL - topsoil and sand and gravel
0.9 - 4.0 brown, loose, dry to wet silty SAND and GRAVEL
4.0 - 6.1 grey, compact, wet clayey SILT

- 5.1cm diameter PVC monitoring well with a 1.5m length of #10 slot PVC screen installed to 6.1m below grade. Imported sand set 4.2m to 6.1m, bentonite 4.2m to surface.
- Sample 5 4.0m to 4.6m

Clay - 26

Silt - 74%

Sand-0%

Gravel - 0%

Water level October 24, 2023 - 2.71m below grade

MW6 0 - 0.8 black TOPSOIL and PEAT

0.8 - 4.0 grey, compact, wet SILT with some sand and clay

4.0 - 4.6 grey, compact, wet SILT

- 5.1cm diameter PVC monitoring well with a 3.0m length of #10 slot
   PVC screen installed to 4.6m below grade. Imported sand set 1.2m to 4.6m, bentonite 1.2m to surface.
- Sample 6 2.1m to 3.1m

Clay - 11%

Silt - 69%

Sand- 20%

Gravel - 0%

Water level October 24, 2023 - 0.15m above grade

#### Completed September 11 and October 3, 2023

#### BOREHOLE DEPTH (m) MATERIALS

MW7 0 - 1.1 black TOPSOIL and PEAT
1.1 - 4.0 brown, compact, dry to wet SILT with some sand
4.0 - 4.6 grey, compact, wet gravelly SAND with some silt and traces of clay

- 5.1cm diameter PVC monitoring well with a 1.5m length of #10 slot PVC screen installed to 4.6m below grade. Imported sand set 2.4m to 4.6m, bentonite 2.4m to surface.
- Sample 7 4.0m to 4.6m

Clay - 5%

Silt - 14%

Sand- 36%

Gravel - 45%

Water level October 24, 2023 - 1.32m below grade

MW8	0 - 0.2	dark brown TOPSOIL
	0.2 - 2.0	brown, loose, dry silty SAND and GRAVEL
	2.0 - 4.9	brown, loose, dry SAND
	4.9 - 7.6	brown, compact, dry to wet SILT with some clay and traces of
		sand

- 5.1cm diameter PVC monitoring well with a 1.5m length of #10 slot PVC screen installed to 7.6m below grade. Imported sand set 5.5m to 7.6m, bentonite 5.5m to surface.
- Sample 8 5.5m to 6.1m

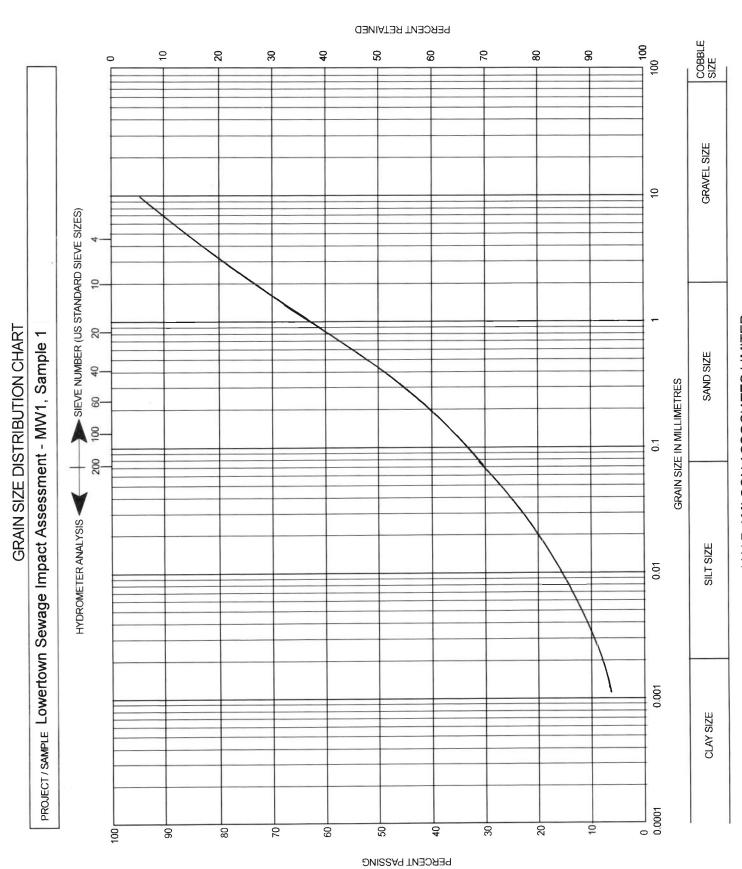
Clay - 12%

Silt - 84%

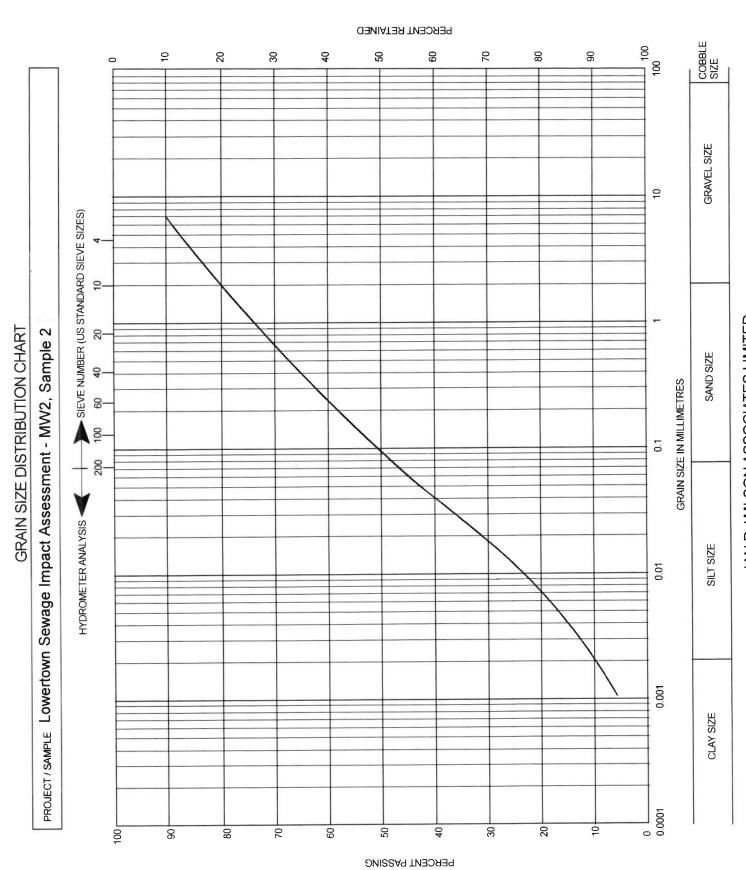
Sand-4%

Gravel - 0%

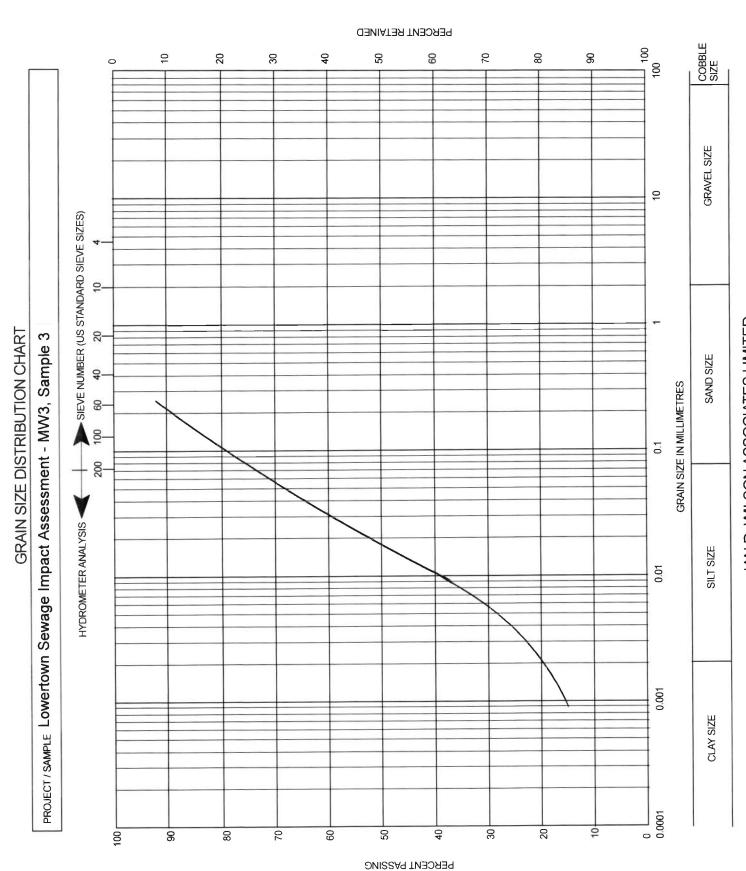
Water level October 24, 2023 - 6.49m below grade



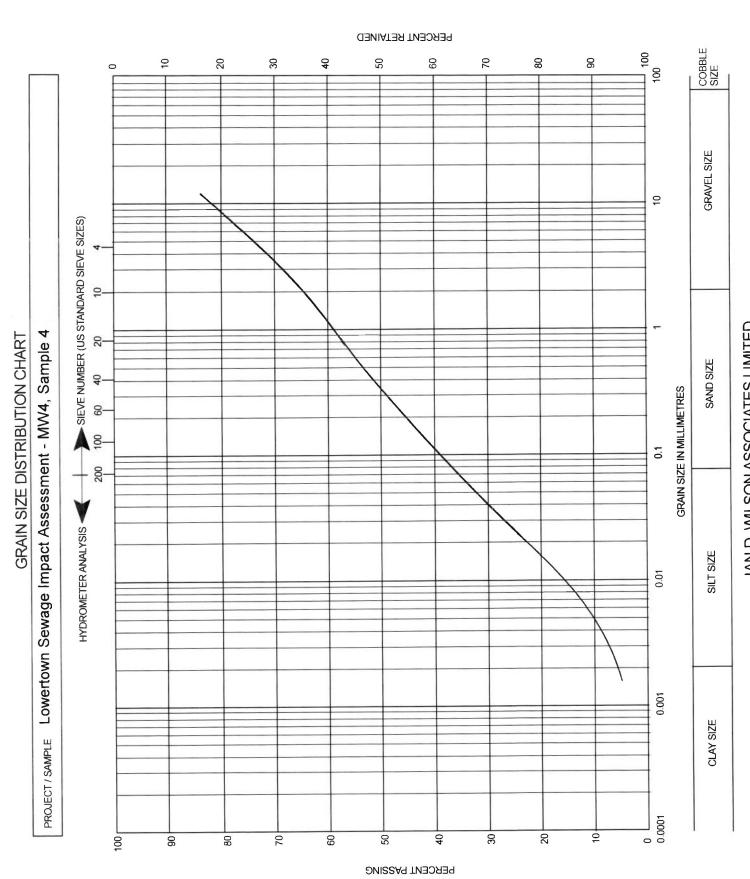
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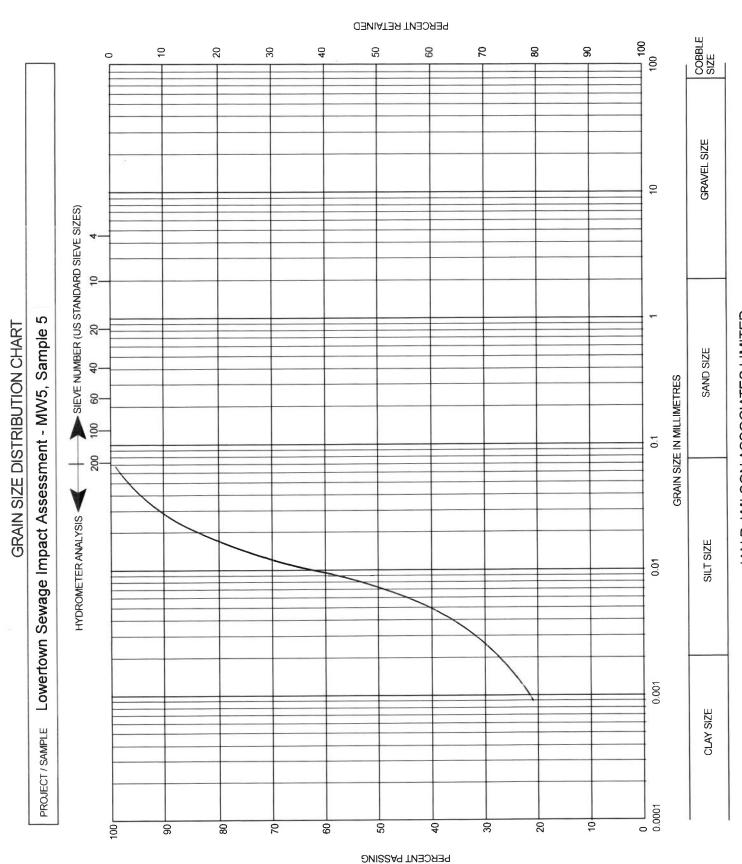
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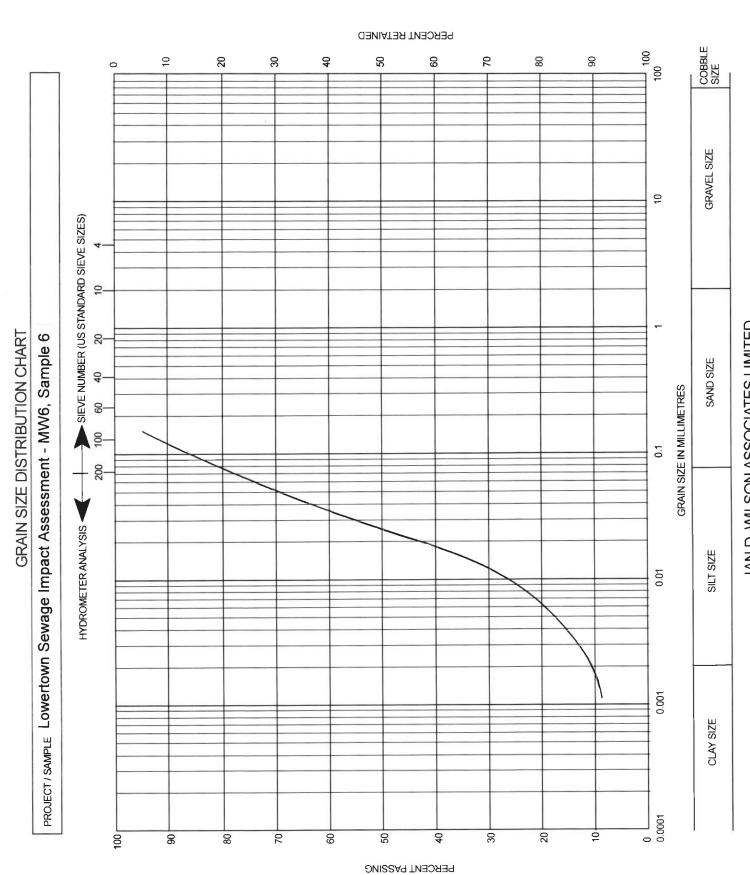
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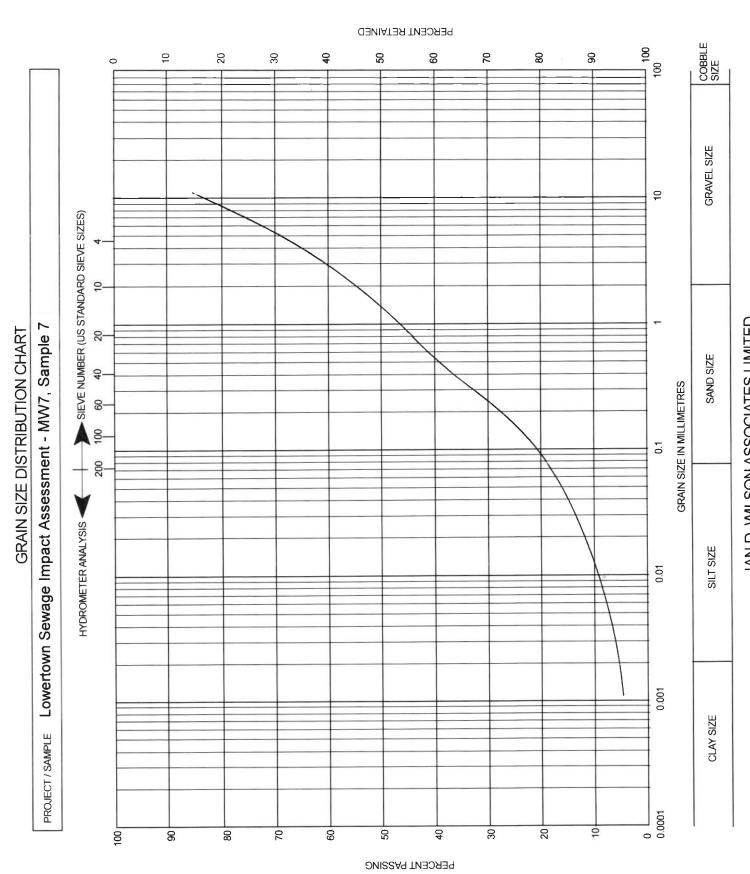
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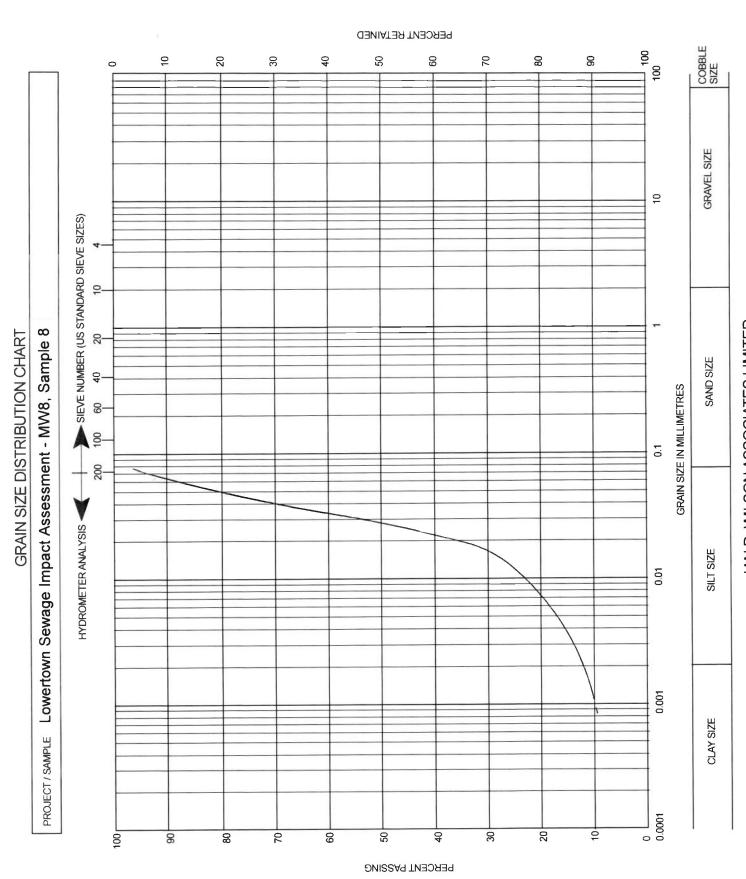
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IAN D. WILSON ASSOCIATES LIMITED



Site Location: Lowertown Your C.O.C. #: 789655

#### Attention: Geoff Rether

Ian D Wilson Associates Ltd PO Box 299 76722 Airport Rd Clinton, ON CANADA NOM 1L0

Report Date: 2023/10/30

Report #: R7885956 Version: 1 - Final

#### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C3X1985 Received: 2023/10/24, 16:24

Sample Matrix: Water # Samples Received: 8

	Date Date				
Analyses	Quantity	y Extracted	Analyzed	Laboratory Method	Analytical Method
Nitrate & Nitrite as Nitrogen in Water (1)	8	N/A	2023/10/28	3 CAM SOP-00440	SM 23 4500-NO3I/NO2B

#### Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

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Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

- \* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
- (1) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.



Site Location: Lowertown Your C.O.C. #: 789655

**Attention: Geoff Rether** 

lan D Wilson Associates Ltd PO Box 299 76722 Airport Rd Clinton, ON CANADA NOM 1L0

Report Date: 2023/10/30

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#### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C3X1985 Received: 2023/10/24, 16:24

**Encryption Key** 

Angoth reken

Archana Gothoskar Project Manager 30 Oct 2023 15:43:47

Please direct all questions regarding this Certificate of Analysis to: Archana Gothoskar, B.Sc., Project Manager Email: archana.gothoskar@bureauveritas.com Phone# (905) 817-5700

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lan D Wilson Associates Ltd Site Location: Lowertown

Sampler Initials: GR

#### **RESULTS OF ANALYSES OF WATER**

Bureau Veritas ID		XJV718	XJV719	XJV720	XJV721	XJV722	XJV723	XJV724			
		2023/10/24	2023/10/24	2023/10/24	2023/10/24	2023/10/24	2023/10/24	2023/10/24			
Sampling Date		14:00	14:15	14:30	13:35	14:40	13:47	14:55	. (		
COC Number		789655	789655	789655	789655	789655	789655	789655			
	UNITS	MW1	MW2	MW3	MW4	MW5	MW6	MW7	RDL	MDL	QC Batcl
Inorganics											
Nitrate (N)	mg/L	0.39	2.95	ND	2.94	ND	0.96	2.77	0.10	0.010	9008593

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas ID		XJV725						
Sampling Date		2023/10/24 15:05						
COC Number		789655						
	UNITS	MW8	RDL	MDL	QC Batch			
Inorganics								
Nitrate (N)	mg/L	0.51	0.10	0.010	9008591			
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



Ian D Wilson Associates Ltd Site Location: Lowertown

Sampler Initials: GR

#### **TEST SUMMARY**

Bureau Veritas ID: XJV718

Sample ID: MW1

Matrix: Water

Collected: 2023/10/24

Shipped:

Received: 2023/10/24

Date Analyzed Instrumentation Batch **Extracted** Analyst **Test Description** 9008591 2023/10/28 Nimarta Singh Nitrate & Nitrite as Nitrogen in Water LACH N/A

Bureau Veritas ID: XJV719

Sample ID: MW2

Matrix: Water Collected: 2023/10/24

Shipped: Received: 2023/10/24

**Date Analyzed Extracted** Analyst Instrumentation **Batch Test Description** 2023/10/28 Nimarta Singh 9008591 N/A LACH Nitrate & Nitrite as Nitrogen in Water

Bureau Veritas ID: XJV720

MW3 Sample ID:

> Water Matrix:

Collected: 2023/10/24

Shipped:

Received: 2023/10/24

Date Analyzed Analyst Batch Extracted Instrumentation **Test Description** 2023/10/28 Nimarta Singh 9008591 N/A LACH Nitrate & Nitrite as Nitrogen in Water

Bureau Veritas ID: XJV721 Sample ID: MMA

Matrix: Water Collected: 2023/10/24

Shipped:

Received: 2023/10/24

Date Analyzed Analyst Extracted Batch Instrumentation **Test Description** 2023/10/28 Nimarta Singh N/A 9008591 Nitrate & Nitrite as Nitrogen in Water LACH

Bureau Veritas ID: XJV722

Sample ID: MW5

Matrix: Water Collected: 2023/10/24

Shipped:

2023/10/24 Received:

**Date Analyzed** Analyst Instrumentation Batch Extracted **Test Description** 2023/10/28 Nimarta Singh LACH 9008591 N/A Nitrate & Nitrite as Nitrogen in Water

Bureau Veritas ID: XJV723

Sample ID: MW6

Matrix: Water Collected: Shipped:

2023/10/24

2023/10/24

Received: 2023/10/24

**Date Analyzed** Analyst **Extracted** Instrumentation **Batch Test Description** 2023/10/28 Nimarta Singh Nitrate & Nitrite as Nitrogen in Water LACH 9008591 N/A

Bureau Veritas ID: XJV724 Sample ID: MW7

Nitrate & Nitrite as Nitrogen in Water

Matrix: Water

N/A

Received:

Nimarta Singh

2023/10/28

Collected: 2023/10/24 Shipped:

Extracted Date Analyzed Analyst Instrumentation Batch **Test Description** 

LACH

9008591



lan D Wilson Associates Ltd Site Location: Lowertown Sampler Initials: GR

#### **TEST SUMMARY**

Bureau Veritas ID: XJV725 Sample ID: MW8 Matrix: Water

Collected: 2023/10/24

Shipped:

Received: 2023/10/24

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate & Nitrite as Nitrogen in Water	LACH	9008591	N/A	2023/10/28	Nimarta Singh



lan D Wilson Associates Ltd Site Location: Lowertown Sampler Initials: GR

#### **GENERAL COMMENTS**



lan D Wilson Associates Ltd Site Location: Lowertown

Sampler Initials: GR

#### **QUALITY ASSURANCE REPORT**

QA/QC								
Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9008591	NS3	Matrix Spike	Nitrate (N)	2023/10/28		104	%	80 - 120
9008591	NS3	Spiked Blank	Nitrate (N)	2023/10/28		101	%	80 - 120
9008591	NS3	Method Blank	Nitrate (N)	2023/10/28	ND,		mg/L	
					RDL=0.10			
9008591	NS3	RPD	Nitrate (N)	2023/10/28	0.89		%	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.



lan D Wilson Associates Ltd Site Location: Lowertown Sampler Initials: GR

#### VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Custina	Carrière	
Cristina Carrie	ere, Senior Scientific Specialist	

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



### Well Record - Regulation 903 Ontario Water Resources Act

#### Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.						M	IW1				
								V	/ell Tag Nu	ımber *	
								А	387104		
Type *											
✓ Construction	ı	A	bandonn	nent							
Measurement r	eco	rded in	: *								
Metric		✓ Ir	nperial								
1. Well Owne	er's	Infor	mation								
Last Name and	First	Name	or Orga	nization	is mandatory. *						
Last Name						First N	ame				
Organization Municipality of	Мо	rris-Tu	rnberry				Address morristurnb	erry.ca			
Current Addres	ss	2				-		r.			
Unit Number		Street 41342	Number		eet Name * rris Road			City/Tow Brussels		<i>25.</i> 44. 500 may	
Country Canada					Province Ontario				Postal Code Telephone Number 519-887-6137		
2. Well Loca	tion	1									
Address of We	II Lo	cation									
Unit Number	Stre n/a	et Num	nber *	Street N Maitlan	lame * id Street			Towi	nship		
Lot				Conces	sion		County/Dist	trict/Munic	cipality		
City/Town Wingham							Province Ontario			Ро	stal Code
UTM Coordinate	es Z	Zone *	Easting	ż	Northing *			Municipa	al Plan and	Sublot	Number
NAD 83		17	47381	8	4859326	Test	UTM in Map				
Other Monitoring we	ll is	located	d on the	road all	owance north of 1	61 Mai	tland St.				
3. Overburde	n an	nd Bed	rock M	aterial *							
Well Depth *			25		(ft)						
General Color	ur	Most C	ommon	Material	Other Materials		General Des	cription	Depth	From	Depth To
											Dogo 4 of P

			(ft)	(ft)
Brown	Topsoil		0	1
Brown	Sand	Gravel	1	18
Grey	Silt		18	25

#### 4. Annular Space \*

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
(ft)	(ft)		(cubic feet)
0	1	Concrete	0.155
1	18	Bentonite	4.2
18	25	Silica Sand	1.71

5. Method of C	construction *			
Cable Tool	Rotary (Conventional)	Rotary (Reverse)	Boring Air percussion	Diamond
Jetting	Driving Digging	Rotary (Air)	✓ Augering  Direct Push	
Other (specify	y)			
6. Well Use *				
Public	Industrial	Cooling & Air C	onditioning	
Domestic	Commercial	Not Used		
Livestock	Municipal Municipal	✓ Monitoring		
Irrigation	Test Hole	Dewatering		
Other (specify	y)			
7. Status of W	ell *			
Water Supply	Replaceme	ent Well	Test Hole	
Recharge We	ell Dewatering	y Well	✓ Observation and/or Monitoring Ho	ole
Alteration (Co	onstruction)	d, Insufficient Supply	Abandoned, Poor Water Quality	
Abandoned,	other (specify)			
Other (specify	y)			

#### 8. Construction Record - Casing \* (use negative number(s) to indicate depth above ground surface)

Inside Diameter	Open Hole <b>or</b> Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From	Depth To
(in)			(ft)	(ft)
2	Plastic	0.154	-3	20
4	Steel	0.125	-3	1

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9. Construction	on Re	ecord - S	creen									Mary and and a	A STATE	discos.
Outside Diameter (in)			(Plas	Mate tic, Galva		teel)			Slot Number		Depth (f			th To
2.375				Plas	stic				0.01		2	0	2	5
												C 100.00	A SHEET	
10. Water Det	ails					145								
Water found at	Depth		(ft)	Gas	Kind of v	water	Fres	h √L	Intested	Of	ther			
11. Hole Diam	neter					7								
De	epth F	rom		A. military and the	Depth	n To					Diamete	r		
	(ft)				(ft)	)					(in)			
	0				25						6.5			
12. Results o	f Wel	l Yield Te	esting											
Pumping Dis														
Explain														
If flowing give ra	ate													
Flowing					(0	3PM)								
Draw down														
Time (min)	Sta Lev		2	3	4	5	5 10	15	20	25	30	40	50	60
Water Level (ft)														
Recovery													_	
Time (mir	n)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Lev	vel													
After test of we	ll yield	l, water wa	S		· · · · · · · · · · · · · · · · · · ·		0							
Clear and s			ner (spe	T								I		
Pump intake se		Pumping ra		Duration	n of pum				ater leve	el end of	pumping	g Di	sinfected	
	(ft)		(GPM)		hrs +		min	<del> </del>			(ft)		Yes .	/ No
Recommended	l pump		Recom	mended			Nell produ	ction	(ODM)					
		(ft)			(GP	IVI)			(GPM)				7	ASLIVE)
13. Map of W	ell Lo	ocation *						- 144.05	Santa's	es midrati		VV.	-	Sinta.
Map 1. Please C	lick the	e map area	below to	import an	image file	to us	se as the ma	ар.	✓ Ma	ke map	area big	ger		



14. Information		
Well owner's information package delivered  ☐ Yes ✓ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) * 2023/10/03
Comments		

15. Well Con	tractor and We	ell Technician	Information					
Business Nam London Soil	e of Well Contrac Fest Ltd.	ctor *		Well Contractor's License Number * 7190				
Business Add	iress							
Unit Number	Street Number 712078		Street Name * Southgate Sdrd 71					
City/Town/Villa Dundalk	age *			Province ON			Postal Code * N0C 1B0	
Business Telephone Number 519-455-5777 Business Emainfo@london								
Last Name of Well Technician * McIntosh			First Name of Well Technician * Well Technician's Lice Tyler 4037			ian's License Number		

#### 16. Declaration \*

<sup>✓</sup> I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name
McIntosh
Tyler

Email Address
info@londonsoil.com

Signature

Digitally signed by Tyler McIntosh
ON: cn=Tyler Miclosh, setLondon Soil Test Ltd., ou.
email=info@londonsoil.com

Date Submitted (yyyyy/mm/dd)

2023/10/17

### 17. Ministry Use Only

Audit Number

NNU5 B27V



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Fields marked with	n an astei	risk (*) ar	e manda	atory.			M	W2		
							W	ell Tag Nu	ımber *	
							A:	387106		
Type *										
✓ Construction	A	bandonn	nent							
Measurement rec	orded in	ı: *								
Metric	✓ Ir	mperial								
1. Well Owner	s Infor	mation								
Last Name and Fi	rst Name	, or Orga	nization	is mandatory. *	<i>p</i>					
Last Name					First N	lame				
Organization Municipality of M	lorris-Tu	rnberry				Address )morristurnb	erry.ca			
<b>Current Address</b>										
Unit Number	Street 41342	Number		eet Name * orris Road	City/Towr Brussels					
Country Canada			•	Province Ontario			Postal Co			one Number 37-6137
2. Well Location	on									
Address of Well	Location								1811	
	treet Nun /a	nber *	Street   Augus	Name * ta Street			Towr	nship		
Lot			Conce	ssion		County/Dist	trict/Munic	ipality		
City/Town Wingham						Province Ontario	0.		Po	stal Code
UTM Coordinates	Zone *	Easting	*	Northing *			Municipa	al Plan and	Sublot	Number
NAD 83	17	47362	2	4859308	Test	UTM in Map				
Other Monitoring well	s locate	d on the	road a	llowance north of	189 Aug	gusta St.				
3. Overburden	and Bed	drock M	aterial	*						
Well Depth *		33		(ft)						
General Colour	Most 0	Common	Materia	Other Materia	ıls	General Des	scription	Depth	From	Depth To
										Page 4 of 8

			(ft)	(ft)
Brown	Topsoil		0	1
Brown	Sand	Gravel	1	25
Grey	Silt		25	33

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
(ft)	(ft)		(cubic feet)
0	1	Concrete	0.155
1	26	Bentonite	6.224
26	33	Silica Sand	1.71

5. Method of C	onstruction *			
Cable Tool	✓ Rotary (Conventional)	Rotary (Reverse)	Boring Air percussion	Diamond
Jetting	Driving Digging	Rotary (Air)	✓ Augering  Direct Push	
Other (specify	<b>/</b> )			
6. Well Use *				
Public	Industrial	Cooling & Air C	onditioning	
Domestic	Commercial	Not Used		
Livestock	Municipal	✓ Monitoring		
Irrigation	Test Hole	Dewatering		
Other (specify	/)			
7. Status of We	ell *			The second state of
Water Supply	Replaceme	ent Well	Test Hole	
Recharge We	ell Dewatering	ı Well	✓ Observation and/or Monitoring Ho	le
Alteration (Co	enstruction) Abandoned	d, Insufficient Supply	Abandoned, Poor Water Quality	
Abandoned, c	other (specify)			
Other (specify	/)			

## 8. Construction Record - Casing \* (use negative number(s) to indicate depth above ground surface)

Inside Diameter	Open Hole or Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From	Depth To
(in)			(ft)	(ft)
2	Plastic	0.154	-3	28
4	Steel	0.125	-3	1

9. Construction	on Rec	ord - S	creen	A STATE OF			S. Park		A PROPERTY.	O Marie C				
Outside Diamete (in)			(Plas		erial anized, Stee	el)			Slot Number		Depth (ft		Dept	
2.375				Pla	stic				0.01		28	3	3	3
10. Water Det	ails		3. 7		No. Sec. 10									
Water found at	Depth		(ft)	Gas	Kind of wa	ter	Fresl	h √L	Intested	O1	ther			
11. Hole Diam	neter										4 54			
De	epth Fro	m			Depth T	0					Diamete	Г		
	(ft)				(ft)						(in)			
	0				33						6.5			
								-20150 0 0000		- C	1000000000			9 35 25 35 10
12. Results of	f Well Y	ield Te	esting											
Pumping Dis	scontinu	ed												
Explain														
If flowing give ra	ate													
Flowing _					(GP	M)								
Draw down									1					
Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (ft)														
Recovery														I
Time (mi	n)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Lev	/el													
After test of we	ll yield, v	vater wa	is											
Clear and s			her (spe											
Pump intake se		mping ra			on of pumpir	ıg			ater leve	el end of	pumping	<b>'</b>	infected	
	(ft)		(GPM)		hrs +		min				(ft)		Yes ,	/ No
				nmended	d pump rate		ell produ	production						
		(ft)			(GPM)				(GPM)					NEW YOR
13. Map of W									1 18		- 78	11.595	1200	endia.
Map 1. Please C	lick the m	ap area	below to	import ar	n image file to	use	as the ma	ap.	✓ Ma	ke map	area big	ger		



14. Information		
Well owner's information package delivered  ☐ Yes ✓ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) * 2023/10/03
Comments		

15. Well Con	tractor and We	ell Technician	Information					
Business Nam London Soil	e of Well Contrac Test Ltd.	ctor *		Well Contractor's License Number * 7190				
Business Add	Iress							
Unit Number	Street Number 712078		Street Name * Southgate Sdrd 71					
City/Town/Villa Dundalk	ige *	'		Province ON			Postal Code * N0C 1B0	
Business Telephone Number 519-455-5777 Business Emainfo@londons								
Last Name of Well Technician * McIntosh		First Name of Well Technician * Tyler		Well Technician's License Number 4037				

#### 16. Declaration \*

<sup>✓</sup> I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name
McIntosh

First Name
Tyler

Signature

Digfally signed by Tyler McIntosh

Div. cn=Tyler McIntosh, o=London Soil Test Ltd., ou, one-more info@london So

#### 17. Ministry Use Only

Audit Number

**K39B J4FA** 



#### **Notice of Collection of Personal Information**

Fields marked wi	th an aster	isk (*) ar	e manda	tory.			M\	W3		
							We	ell Tag Nu	ımber *	
							A3	887122		
Type *										
✓ Construction	A	bandonn	nent							
Measurement re	corded in	*								
Metric	✓ In	nperial								
1. Well Owne	r's Inforr	nation								
Last Name and F	irst Name,	or Orga	nization	is mandatory. *						
Last Name					First Na	ame				
Organization Municipality of	Morris-Tu	rnberry				Address morristurnb	еггу.са			
Current Addres	S						v.			
Unit Number	Street 41342	Number		eet Name * rris Road			City/Towr Brussels			
Country Canada			'	Province Ontario			Postal Co		Telepho 519-88	ne Number 7-6137
2. Well Locat	ion									
Address of Wel	I Location		18				r.			
	Street Num <mark>n/a</mark>	nber *	Street N	lame * ss Street			Town	ship		
Lot			Conces	sion		County/Dis HURON	trict/Munic	ipality		
City/Town Wingham						Province Ontario			Pos	stal Code
UTM Coordinate	s Zone *	Easting	*	Northing *			Municipa	l Plan and	d Sublot I	Number
NAD 83	17	47315	66	4859848	Test	UTM in Map				
Other Monitoring wel	l is locate	d on the	road al	lowance west of 3	319 Prin	cess St.				
3. Overburder	and Bed	drock M	aterial '			LASTE!				1.5
Well Depth *		34		(ft)						
General Colou	ır Most C	Common	Material	Other Material	ls	General Des	scription	Depth	r From	Depth To
	52									Page 4 of 8

				(ft)	(ft)
Brown	Fill			0	4
Brown	Gravel	Sand	Stones	4	8
Brown	Sand	Gravel		8	12
Grey	Silt	Till	Boulders	12	34

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
(ft)	(ft)		(cubic feet)
0	1	Concrete	0.155
1	27	Bentonite	6.38
27	34	Silica Sand	1.71

5. Method of C	construction *			
Cable Tool	✓ Rotary (Conventional)	Rotary (Reverse	) Boring Air percussion	Diamond
Jetting	Driving Digging	Rotary (Air)	✓ Augering  Direct Push	
Other (specify	y)			
6. Well Use *				
Public	Industrial	Cooling & Air C	Conditioning	
Domestic	Commercial	■ Not Used		
Livestock	Municipal Municipal	✓ Monitoring		
Irrigation	Test Hole	Dewatering		
Other (specify	y)			
7. Status of W	ell <sup>*</sup>	E'		4.00
Water Supply	Replaceme	ent Well	Test Hole	
Recharge We	ell Dewatering	y Well	✓ Observation and/or Monitoring Ho	le
Alteration (Co	onstruction)	d, Insufficient Supply	Abandoned, Poor Water Quality	
Abandoned,	other (specify)			
Other (specify	y)			

## 8. Construction Record - Casing \* (use negative number(s) to indicate depth above ground surface)

Inside Diameter	Open Hole <b>or M</b> aterial (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From	Depth To
(in)			(ft)	(ft)
2	Plastic	0.154	-3	29
4	Steel	0.125	-3	1

9. Construction	on Reco	rd - S	creen											
Outside Diamete (in)			(Plas	Mate tic, Galva	erial anized, Stee	el)			Slot Number		Depth (ft			th To
2.375				Pla	stic				0.01		29	9	3	4
10. Water Det	tails													
Water found at	Depth		(ft)	Gas	Kind of wa	ter 🔲	Fresl	h 🗸 U	Intested	O1	ther			
11. Hole Diam	neter													
De	epth From	1			Depth T	0					Diamete	-		
	(ft)				(ft)						(in)			
	0				34						6.5			
12. Results o	f Well Yi	ield Te	esting											
Pumping Dis	scontinue	d												
Explain														
If flowing give ra	ate													
Flowing _					(GP	M)								
Draw down		(1)							,	_				
Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (ft)														
Recovery														
Time (mi	n)	1	2	3	4	5 /	10	15	20	25	30	40	50	60
Water Lev	/el													
After test of we	ll yield, w	ater wa	as											
Clear and s	and free	Ot	her (spe	cify)										
Pump intake se	et at Pun	nping ra		Duratio	n of pumpir	ng			ater leve	el end of	pumping	j Di:	sinfected	
	(ft)		(GPM)		hrs +		min				(ft)		Yes .	No
Recommended	l pump de	epth	Recom	ımended	pump rate	Well p	rodu	ction						
		(ft)			(GPM)				(GPM)					Marine State
13. Map of W	ell Loca	tion *						in the	appet Silver	a sinda A		51-500		1
Map 1. Please C	lick the ma	ap area	below to	import an	image file to	use as the	ne ma	ар.	✓ Ma	ke map	area big	ger		



14. Information		
Well owner's information package delivered  ☐ Yes ✓ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) * 2023/09/11
Comments		

15. Well Cor	tractor and We	ell Technician	Information				
Business Nam London Soil	ne of Well Contrac Test Ltd.	ctor *			Well Cont 7190	ractor's Licen	se Number *
Business Add	dress						
Unit Number	Street Number 712078	Street Nar Southgat	me * e Sdrd 71				
City/Town/Villa Dundalk	age *			Prov	vince		Postal Code * N0C 1B0
Business Tele 519-455-577	phone Number 7	Business Ema					
Last Name of McIntosh	Well Technician *		First Name of Well Technic Tyler	cian *		Well Technic	cian's License Numbe

#### 16. Declaration \*

<sup>✓</sup> I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name
McIntosh
Tyler

First Name
Tyler

Email Address
info@londonsoil.com

Date Submitted (yyyy/mm/dd)

Tyler McIntosh

Digately signed by Tyler McIntosh
DN: cn=Tyler McInt

## 17. Ministry Use Only

Audit Number

QG6C QOJ3



#### **Notice of Collection of Personal Information**

2193E (2020/01)

Fields marked with	n an aste	risk (*) ar	e mandat	tory.			M	W4		
								ell Tag Nu	ımber *	
							AS	387121		
Type *										
✓ Construction		bandonn	nent							
Measurement red	corded in	ı: *								
Metric	✓ lı	mperial								
1. Well Owner	's Infor	mation								
Last Name and Fi	rst Name	, or Orga	nization i	s mandatory. *						
Last Name					First Na	ame				
Organization Municipality of M	forris-Tu	rnberry			Email A	ddress morristurnb	еггу.са			
<b>Current Address</b>							i"			
Unit Number	Street 41342	Number		et Name * ris Road			City/Towr Brussels			
Country Canada			*	Province Ontario			Postal Co			one Number 37-6137
2. Well Location	on									
Address of Well	Location		W.							
	treet Nur /a	nber *	Street N Princes	lame * ss Street			Town	ship		
Lot			Conces	sion		County/Dis HURON	trict/Munic	ipality		
City/Town Wingham						Province Ontario			Po	stal Code
UTM Coordinates	Zone *	Easting	*	Northing *			Municipa	l Plan and	d Sublot	Number
NAD 83	17	47337	0	4859728	Test	UTM in Map				
Other Monitoring well	is locate	d on the	road all	owance east of 29	93 Princ	ess St.				
3. Overburden	and Be	drock M	aterial *	(Carea)					To FALL A	
Well Depth *		15		(ft)						
General Colour	Most	Common	Material	Other Materials	S	General Des	scription	Depth	From	Depth To
0.400F (0000)(04)										Page 4 of 8

				(ft)	(ft)
Black	Topsoil			0	3
Grey	Sand	Silty	Stones	3	8
Grey	Sand	Silty	Gravel	8	15

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
(ft)	(ft)		(cubic feet)
0	1	Concrete	0.155
1	4	Bentonite	0.78
4	15	Silica Sand	2.64

5. Method of Cons	struction *			
Cable Tool	Rotary (Conventional)	Rotary (Reverse)	Boring Air percussion	Diamond
Jetting	Driving Digging	Rotary (Air)	✓ Augering  Direct Push	
Other (specify)				
6. Well Use *				
Public	Industrial	Cooling & Air C	onditioning	
Domestic	Commercial	Not Used		
Livestock	Municipal	✓ Monitoring		
Irrigation	Test Hole	Dewatering		
Other (specify)				
7. Status of Well *				
Water Supply	Replaceme	ent Well	Test Hole	
Recharge Well	Dewatering	ı Well	Observation and/or Monitoring Hol	е
Alteration (Const	ruction) 🗌 Abandoned	l, Insufficient Supply	Abandoned, Poor Water Quality	
Abandoned, other	er (specify)			
Other (specify)				

### 8. Construction Record - Casing \* (use negative number(s) to indicate depth above ground surface)

Inside Diameter	Open Hole <b>or</b> Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From	Depth To
(in)			(ft)	(ft)
2	Plastic	0.154	-3	5
4	Steel	0.125	-3	1

9. Construction	on Reco	rd - S	creen												
Outside Diameter (in)	,		(Plas	Mate tic, Galva	erial anized, Ste	eel)			Slot Number		Depth (ft			th To ft)	
2.375				Plas	stic				0.01		5		1	5	
40 W-4 D-4													45649		
10. Water Det															
Water found at	Depth		(ft)	Gas	Kind of w	ater	Fres	n ✓ L	Intested	Ot	her				
11. Hole Diam	neter														
De	epth Fron	1			Depth	То					Diamete	Γ			
	(ft)				(ft)					(in)					
	0				15						6.5				
12. Results of	f Well Y	ield Te	esting												
Pumping Dis	scontinue	:d													
Explain															
If flowing give ra	ate														
Flowing _					(G	PM)									
Draw down															
Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60	
Water Level (ft)															
Recovery													T		
Time (mir	٦)	1	2	3	4	5	10	15	20	25	30	40	50	60	
Water Lev (ft)	/el														
After test of we	-														
Clear and s			her (spe									D:	indo store	10 *	
Pump intake se		nping ra		Duratio	n of pump	ıng	,		ater leve	ei end of	pumping		sinfected		
	(ft)		(GPM)		hrs +		min	1			(ft)		Yes [	<u>∕</u> No	
Recommended	pump de			imended	pump rate		eli produ	ell production							
40.55	2111	(ft)			(GPM	')			(GPM)			T THE S		GIN II	
13. Map of W	ell Loca	ition *													



14. Information		
Well owner's information package delivered  ☐ Yes ✓ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) * 2023/09/11

Comments

15. Well Cor	tractor and We	ell Technician	Information					
Business Nam London Soil	ne of Well Contrac Test Ltd.	tor *		Well Contractor's License Number * 7190				
Business Add	dress							
Unit Number	Street Number 712078		Street Name * Southgate Sdrd 71					
City/Town/Vills Dundalk	age *			Prov	vince		Postal Code * N0C 1B0	
Business Telephone Number 519-455-5777 Business Emainfo@london								
Last Name of Well Technician * McIntosh			First Name of Well Technician * Tyler			Well Technician's License Number 4037		

#### 16. Declaration \*

<sup>✓</sup> I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name
McIntosh

First Name
Tyler

Email Address
info@londonsoil.com

Signature

Date Submitted (yyyy/mm/dd)

Contain the Submitted (yyyy/mm/dd)

Dotomatic Contain the Submitted (yyyy/mm/dd)

2023/10/17

## 17. Ministry Use Only

**Audit Number** 

**EBOP 4XVF** 



#### **Notice of Collection of Personal Information**

Fields marked w	ith a	n asteri	sk (*) are	e manda	itory.	MW5					
								We	ell Tag Nu	mber *	
								A 3	887102		
Type *											
✓ Construction		Al	oandonm	nent							
Measurement r	eco	rded in:	*								
Metric		✓ Im	perial								
1. Well Owne	er's	Inforn	nation								
Last Name and	First	Name,	or Orga	nization	is mandatory. *	e e					
Last Name						First Na	ame				
Organization Municipality of	Мо	rris-Tur	nberry			Email Address mail@morristurnberry.ca					
Current Addres	ss							í			
Unit Number		Street 1 41342	Number <sup>1</sup>		eet Name * rris Road			City/Towr Brussels			
Country Canada	Province Ontario							Postal Co			ne Number 7-6137
2. Well Loca	tior	1									
Address of We	II Lo	cation		227							
Unit Number	Stre n/a	et Num	ber *	Street I Potter				Town	ship		
Lot				Conces	ssion		County/Dist	trict/Munic	ipality		
City/Town Wingham							Province Ontario			Pos	stal Code
UTM Coordinat	es :	Zone *	Easting	*	Northing *			Municipa	l Plan and	Sublot I	Number
NAD 83		17	47417	4	4859947	Test	UTM in Map				
Other Monitoring we	ll is	located	d on the	road al	lowance north of	160 Pott	er St.				
3. Overburde	n ar	nd Bed	rock M	aterial	*						
Well Depth *		:	20		(ft)						
General Colo	ur	Most C	ommon	Material	Other Material	s	General Des	scription	Depth	From	Depth To
											Page 4 of 8

			(ft)	(ft)
Black	Topsoil		0	1
Brown	Sand	Gravel	1	13
Grey	Silt		13	20

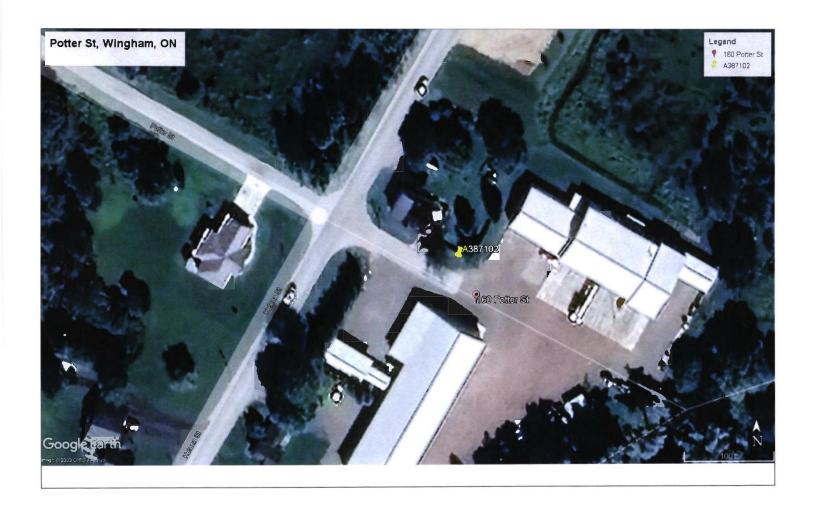
Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
(ft)	(ft)		(cubic feet)
0	1	Concrete	0.155
1	14	Bentonite	3.11
14	20	Silica Sand	1.4

5. Method of Construction *			
Cable Tool Rotary (Conventional	) Rotary (Reverse)	Boring Air percussion	Diamond
Jetting Driving Digging	Rotary (Air)	✓ Augering ☐ Direct Push	
Other (specify)			
6. Well Use `			
Public Industrial	Cooling & Air Co	onditioning	
Domestic Commercial	Not Used		
Livestock Municipal	✓ Monitoring		
☐ Irrigation ☐ Test Hole	Dewatering		
Other (specify)			
7. Status of Well *			
Water Supply Replacer	ment Well	Test Hole	
Recharge Well Dewateri	ng Well	✓ Observation and/or Monitoring Ho	ole
Alteration (Construction) Abandon	ed, Insufficient Supply	Abandoned, Poor Water Quality	
Abandoned, other (specify)			
Other (specify)			

### 8. Construction Record - Casing \* (use negative number(s) to indicate depth above ground surface)

o. Conociación ixo	ord odomig (doo nogotive names (e) to me	one copilities grant	,	
Inside Diameter	Open Hole or Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From	Depth To
(in)			(ft)	(ft)
2	Plastic	0.154	-3	15
4	Steel	0.125	-3	1

9. Construction	on Re	cord - Sc	reen												
Outside Diameter (in)	r		(Plas	Mate tic, Galva	erial anized, Ste	eel)		ľ	Slot Number		Depth From (ft)			Depth To (ft)	
2.375				Plas	stic				0.01		15	5	2	:0	
							26.77		SHEET		( 12 to 12 t	N. O.C.	PA SING		
10. Water Det	ails														
Water found at I	Depth		(ft)	Gas	Kind of w	ater	Fresh	n ✓ U	Intested	Ot	her				
11. Hole Diam	neter														
De	epth Fr	rom			Depth	То					Diameter	-			
	(ft)								(in)						
	0				20						6.5				
12. Results of	f Well	Yield Te	sting					* 1							
Pumping Dis	scontin	nued													
Explain															
If flowing give ra	ate														
Flowing _					(G	PM)									
Draw down															
Time (min)	Stat Lev		2	3	4	5	10	15	20	25	30	40	50	60	
Water Level (ft)															
Recovery							1						1	T	
Time (mi	n)	1	2	3	4	5	10	15	20	25	30	40	50	60	
Water Lev	/el														
After test of we	ll yield	, water wa	S												
Clear and s			ner (spe											10 t	
Pump intake se	et at P	Pumping ra	ate	Duratio	n of pump	ing			ater leve	el end of	pumping		sinfected		
	(ft)		(GPM)		hrs +		min				(ft)		Yes [	✓ No	
Recommended	d pump	depth	Recom	nmended	pump rate		/ell produ	ction							
		(ft)			(GPN	1)			(GPM)			T PIPORT	175-2514	20.300	
13. Map of W	ell Lo	cation *						name of the	hersika.	145519					
Map 1. Please C	lick the	map area	below to	import an	image file	to use	e as the ma	ap.	✓ Ma	ke map	area big	ger			



14. Information		
Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	
☐ Yes ✓ No		2023/10/03

Comments

15. Well Cor	tractor and We	ell Technician	Information					
Business Nam London Soil	e of Well Contrac Test Ltd.	etor *		Well Contractor's License Number * 7190				
Business Ad	dress							
Unit Number	Street Number 712078		Street Name * Southgate Sdrd 71					
City/Town/Villa Dundalk	age *			Prov	vince	Postal Code * N0C 1B0		
Business Tele 519-455-577	phone Number 7	Business Emai info@londons						
Last Name of Well Technician * McIntosh			First Name of Well Technician * Tyler		Well Te 4037	chnician's License Number *		

#### 16. Declaration \*

<sup>✓</sup> I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name
McIntosh

First Name
Tyler

Signature

Digitally signed by Tyler McIntosh

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### 17. Ministry Use Only

Audit Number

DRPP IKAB



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#### **Notice of Collection of Personal Information**

Fields marked v	vith	an astei	risk (*) ar	e manda	itory.			M\	/\6		
								We	ell Tag Num	nber *	
								A 3	87103		
Type *											
✓ Construction	1	A	bandonn	nent							
Measurement i	reco	rded in	*								
Metric		✓ Ir	mperial								
1. Well Own	er's	Infor	mation								
Last Name and	Firs	t Name	, or Orga	nization	is mandatory. *	v.					
Last Name						First Na	ame				
Organization Municipality of	f Mc	orris-Tu	rnberry			Email Address mail@morristurnberry.ca					
<b>Current Addre</b>	SS										
Unit Number		Street 41342	Number		eet Name * rris Road			City/Town Brussels	/Village		
Country Province Canada Ontario								Postal Co N0G 1H0			one Number 7-6137
2. Well Loca	tio	n			*						
Address of We	ell L	ocạtion									
Unit Number	Str n/a	eet Nun	nber *	Street N Laidlav	Name * v Street			Town	ship		
Lot				Conces	sion		County/Dist HURON	rict/Munici	pality		
City/Town Wingham							Province Ontario			Pos	stal Code
UTM Coordinat	tes	Zone *	Easting	*	Northing *			Municipa	Plan and	Sublot I	Number
NAD 83		17	47393	7	4859865	Test	UTM in Map				
Other Monitoring we	ell is	locate	d on the	road al	lowance east of 8	5 Laidla	w St.				
3. Overburde	n a	nd Bed	rock M	aterial <sup>*</sup>	*				1	5.70	
Well Depth *			15		(ft)						
General Colo	ur	Most 0	Common	Material	Other Materials	s	General Des	cription	Depth F	rom	Depth To
2193E (2020/01)											Page 4 of 8

			(ft)	(ft)
Brown	Topsoil		0	1
Brown	Peat		1	4
Grey	Sand	Silt	4	13
Grey	Silt		13	15

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
(ft)	(ft)		(cubic feet)
0	1	Concrete	0.155
1	4	Bentonite	0.78
4	15	Silica Sand	2.64

5. Method of Construction *			
☐ Cable Tool	Rotary (Reverse)	Boring Air percussion	Diamond
Jetting Driving Digging	Rotary (Air)	✓ Augering  Direct Push	
Other (specify)			
6. Well Use *			
Public Industrial	Cooling & Air C	onditioning	
Domestic Commercial	■ Not Used		
Livestock Municipal	✓ Monitoring		
☐ Irrigation ☐ Test Hole	Dewatering		
Other (specify)			
7. Status of Well *			
Water Supply Replacement	ent Well	Test Hole	
Recharge Well Dewatering	g Well	✓ Observation and/or Monitoring Ho	le
Alteration (Construction) Abandone	d, Insufficient Supply	Abandoned, Poor Water Quality	
Abandoned, other (specify)			
Other (specify)			

## 8. Construction Record - Casing \* (use negative number(s) to indicate depth above ground surface)

Inside Diameter	Open Hole or Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From	Depth To
(in)			(ft)	(ft)
2	Plastic	0.154	-3	5
4	Steel	0.125	-3	1

9. Construction	on Reco	rd - Sc	reen											
Outside Diameter (in)	-		(Plast	Mate tic, Galva		teel)		Slot Number			Depth From (ft)		om Depth	
2.375				Plas	stic				0.01		5	j	1	5
			C 175.00	AR. 1985	W 2.15%								C7724 45 15	7. 397
10. Water Det	ails						100	S. Service	Take"		11.3			
Water found at I	Depth		(ft)	Gas	Kind of	water	Fres	h ✓ U	ntested	Ot	her			
11. Hole Diam	eter	le de	1 2											
De	epth From				Depth	n To					Diamete	Γ		
	(ft)				(ft	)					(in)			
	0				15	5					6.5			
12. Results of	f Well Yi	eld Te	stina	44.							152			
Pumping Dis	0.00		<u> </u>		12					69.63	Land Sec			
Explain														
If flowing give ra	ate													
Flowing					((	GPM)								
Draw down														
Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (ft)														
Recovery														
Time (mir	۱)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Lev	/el													
After test of wel	ll yield, wa	ater wa	S											
Clear and sa	and free	Oth	ner (spe	cify)										
Pump intake se	t at Pum	iping ra	te	Duration	n of pum	ping		Final wa	ater leve	el end of	pumpin	g Dis	sinfected	1? *
	(ft)		(GPM)		hrs +		min				(ft)		Yes [	✓ No
Recommended	pump de	pth	Recom	mended	pump ra	ite We	ell produ	ction						
		(ft)			(GP	M)			(GPM)					- SECOND



14. Information		
Well owner's information package delivered  ☐ Yes ✓ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) * 2023/10/03
Comments		

15. Well Cor	itractor and We	ell Techniciar	n Information				
Business Nam London Soil	ne of Well Contrac Test Ltd.	ctor *			Well Cont 7190	ractor's Licen	se Number *
Business Add	dress						
Unit Number	Street Number 712078	Street Nati Southgat	me * e Sdrd 71				
City/Town/Villa Dundalk	age *			Pro ON	vince		Postal Code * N0C 1B0
Business Tele 519-455-577	phone Number 7	Business Ema					
Last Name of Well Technician *		First Name of Well Technician *		Well Technician's License Number 4037			

#### 16. Declaration \*

<sup>✓</sup> I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name
McIntosh

First Name
Tyler

Email Address
info@Iondonsoil.com

Date Submitted (yyyy/mm/dd)

Tyler McIntosh

Digitally signed by Tyler McIntosh
DN: cn=Tyler McIntosh
D

### 17. Ministry Use Only

Audit Number

JQMQ JJX3



#### **Notice of Collection of Personal Information**

Fields marked with	an aster	isk (*) are	e mandat	ory.			M	W7		
							W	ell Tag Nu	mber *	
							A:	387124		
Type *										
✓ Construction	A	bandonm	ent							
Measurement rec	orded in	*								
Metric	✓ In	nperial								
1. Well Owner's	s Infor	nation								
Last Name and Fir	st Name,	or Orga	nization is	s mandatory. *						
Last Name					First Na	ame				
Organization Municipality of M	orris-Tu	rnberry			Email A	ddress morristurnb	erry.ca			
<b>Current Address</b>	30		200				1			
Unit Number	Street 41342	Number *		et Name * ris Road			City/Towi			
Country Canada			'	Province Ontario			Postal Co			one Number 87-6137
2. Well Location	n						-			
Address of Well L	ocation									
Unit Number St	reet Num a	nber *	Street N Mary St				Towr	nship		
Lot			Concess	sion		County/Dis	trict/Munic	ipality		
						HURON			Da	stal Code
City/Town Wingham						Province Ontario			PC	ostai Code
UTM Coordinates	Zone *	Easting	*	Northing *			Municipa	al Plan and	Sublot	Number
NAD 83	17	47375	6	4860430	Test	UTM in Map				
Other Monitoring well is	s located	d on the	road alle	owance east of 8	3 Mary	St.				
3. Overburden a	and Bed	Irock M	aterial *			Laineau Del				
Well Depth *		15		(ft)				70		
General Colour	Most C	common	Material	Other Materials	S	General Des	scription	Depth	From	Depth To
										Page 4 of 8

				(ft)	(ft)
Black	Topsoil			0	1
Brown	Silt			1	10
Brown	Sand	Silty	Gravel	10	15

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
(ft)	(ft)		(cubic feet)
0	1	Concrete	0.155
1	8	Bentonite	1.71
8	15	Silica Sand	1.71

5. Method of Construction *			
Cable Tool Rotary (Conventional)	Rotary (Reverse)	Boring Air percussion	Diamond
Jetting Driving Digging	Rotary (Air)	Augering Direct Push	
Other (specify)			
6. Well Use *			
Public Industrial	Cooling & Air C	onditioning	
Domestic Commercial	Not Used		
Livestock Municipal	✓ Monitoring		
☐ Irrigation ☐ Test Hole	Dewatering		
Other (specify)			
7. Status of Well *			
☐ Water Supply ☐ Replacem	ent Well	Test Hole	
Recharge Well Dewaterin	ng Well	✓ Observation and/or Monitoring H	ole
Alteration (Construction) Abandone	ed, Insufficient Supply	Abandoned, Poor Water Quality	
Abandoned, other (specify)			
Other (specify)			

## 8. Construction Record - Casing \* (use negative number(s) to indicate depth above ground surface)

Inside Diameter	Open Hole <b>or</b> Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From	Depth To
(in)			(ft)	(ft)
2	Plastic	0.154	-3	10
4	Steel	0.125	-3	1

9. Constructio	n Rec	ord - Sc	reen											
Outside Diameter (in)			(Plast	Material (Plastic, Galvanized, Steel)				Slot Number D			Depth (fl		Dept (f	
2.375				Plastic					0.01		10	0	1	5
10. Water Deta	ile					4 5	100	Wa -						
Water found at D			(ft)	Gas	Kind of wa	ater	r  Fresh	ı 🗸 u	Intested	Ot	ther			
vvater round at D	Орит		(11)											
11. Hole Diame	eter								475					
Dep	oth Fro	om			Depth <sup>-</sup>	То					Diamete	r		
	(ft)				(ft)						(in)			
	0				15						6.5			
12. Results of	Well	Yield Te	sting				in cart							
Pumping Disc	continu	ued						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Explain														
If flowing give rat	te													
Flowing					(GI	P <b>M</b> )	)							
Draw down										,				
Time (min)	Stati Leve		2	3	4		5 10	15	20	25	30	40	50	60
Water Level (ft)												,		
Recovery														
Time (min)	)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Leve	el													
After test of well	yield,	water wa	s											
Clear and sa	nd fre	e 🗌 Oth	ner (spe	cify)										
Pump intake set	at P	umping ra	ite	te Duration of pumping				Final water level end of pumping Disinfected? *						
	(ft)		(GPM)		hrs +	_	min				(ft)		Yes .	/ No
Recommended	pump	depth	Recom	mended	pump rate	- 4	Well produ	ction						
		(ft)			(GPN	1)			(GPM)					5.6507710
13. Map of We	ell Lo	cation *							territoria.			100		
Map 1. Please Cli	ck the	map area	oelow to	import an	image file t	to u	se as the ma	ар.	✓ Ma	ke map	area big	ger		



14. Information		
Well owner's information package delivered  ☐ Yes ✓ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) * 2023/09/11
Comments		

15. Well Con	tractor and We	II Technician	Information				vil.		
Business Nam London Soil	e of Well Contrac Fest Ltd.		Well Contractor's License Number * 7190						
Business Add	iress								
Unit Number	Street Number 712078	Street Nam Southgate							
City/Town/Villa Dundalk	age *			Prov ON	vince		Postal Code * N0C 1B0		
Business Telephone Number 519-455-5777 Business Email info@londons									
Last Name of Well Technician * McIntosh			First Name of Well Technic Tyler	irst Name of Well Technician * yler			Well Technician's License Numbe 4037		

#### 16. Declaration \*

<sup>✓</sup> I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name
McIntosh

First Name
Tyler

Email Address
info@londonsoil.com

Signature

Date Submitted (yyyy/mm/dd)

Di. cn=Tyler McIntosh
Di. cn=Tyler McInto

#### 17. Ministry Use Only

Audit Number

**OBKQ H6P3** 



#### **Notice of Collection of Personal Information**

Fields marked v	vith a	an aster	risk (*) ar	e manda	tory.			MV	V8		
								We	ell Tag Nun	nber *	
								A 3	87123		
Type *											
✓ Construction	1	A	bandonn	nent							
Measurement	reco	rded in	: *								
Metric		✓ Ir	mperial								
1. Well Own	er's	Infor	mation								3562
Last Name and	Firs	t Name	, or Orga	nization i	s mandatory. *	10					
Last Name						First Na	ame				
Organization Municipality of	f Mo	orris-Tu	rnberry			Email A	ddress morristurnb	erry.ca			
Current Addre	SS			,			q				
Unit Number		Street 41342	Number		et Name * ris Road			City/Town Brussels	/Village		
Country Canada					Province Ontario			Postal Co N0G 1H0			one Number 7-6137
2. Well Loca	tio	n									
Address of We	ell Lo	ocation									
Unit Number	Stro n/a	eet Nun	nber *	Street N Mary S				Town	ship		
Lot				Conces	sion		County/Dist	rict/Munici	pality		
City/Town Wingham							Province Ontario			Pos	stal Code
UTM Coordinat	tes	Zone *	Easting	*	Northing *		1	Municipa	l Plan and	Sublot I	Number
NAD 83		17	47400	4	4860856	Test	UTM in Map				
Other Monitoring we	ell is	locate	d on the	road all	owance east of 10	07 Mary	St.				
3. Overburde	n a	nd Bed	drock M	aterial *			A STATE			A SA	4-2-
Well Depth *			25		(ft)				20.		
General Colo	our	Most 0	Common	Material	Other Materials	S	General Des	cription	Depth	From	Depth To
2193E (2020/01)											Page 4 of 8

			(ft)	(ft)
Black	Topsoil		0	1
Brown	Sand	Gravel	1	6.5
Brown	Sand		6.5	16
Brown	Silt		16	25

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
(ft)	(ft)		(cubic feet)
0	1	Concrete	0.155
1	18	Bentonite	4.2
18	25	Silica Sand	1.71

5. Method of Construc	tion *			
Cable Tool Rota	ary (Conventional)	Rotary (Reverse)	Boring Air percussion	Diamond
Jetting Driv	ing Digging	Rotary (Air)	✓ Augering  Direct Push	
Other (specify)				
6. Well Use *				
Public	Industrial	Cooling & Air Co	nditioning	
_ Domestic	Commercial	■ Not Used		
Livestock	Municipal	✓ Monitoring		
Irrigation	Test Hole	Dewatering		
Other (specify)				
7. Status of Well *				
Water Supply	Replaceme	nt Well	Test Hole	
Recharge Well	Dewatering	Well	✓ Observation and/or Monitoring Hole	•
Alteration (Construction	n) Abandoned	, Insufficient Supply	Abandoned, Poor Water Quality	
Abandoned, other (spe	ecify)			
Other (specify)				

## 8. Construction Record - Casing \* (use negative number(s) to indicate depth above ground surface)

Inside Diameter	Open Hole <b>or</b> Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From	Depth To
(in)			(ft)	(ft)
2	Plastic	0.154	-3	20
4	Steel	0.125	-3	1

9. Construction	on Reco	rd - Se	creen											
Outside Diamete (in)			(Plast	Mate tic, Galva	erial anized, Stee	el)		Slot Number			Depth From (ft)			th To t)
2.375				Pla	stic		0.01				20	0	2	5
		V 30 - 47 EV		Nie Jawerra					-2750 200		e terretak	enchier		
10. Water Det	ails									- 35				
Water found at	Depth		(ft)	Gas	Kind of wat	ter	Fresl	h 🗸 U	ntested	Ot	her			
11. Hole Diam	neter	N.O.												
De	epth From				Depth T	0	(C.D.)	1000			Diamete	r		
5.	(ft)				(ft)						(in)			
	0				25						6.5			
12. Results o	f Well Yi	eld Te	esting							XII.				
Pumping Dis	scontinue	1												
Explain														
If flowing give ra	ate													
Flowing					(GP	M)								
Draw down														
Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (ft)														
Recovery													T	
Time (mi	n)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Lev (ft)	/el													
After test of we	ll yield, wa	iter wa	S											
Clear and s			ner (spe									1		
Pump intake set at Pumping rate Duration of pur						g			ater leve	el end of	pumping	g Di	sinfected	
	(ft)		(GPM)		hrs +		min				(ft)		Yes .	<u> </u>
Recommended	l pump de		Recom	mended	pump rate	Well p	rodu	ction						
		(ft)			(GPM)			(GPM)						
13. Map of W	ell Loca	tion *			71			carby Jo	Daniel L	- Section	1	47.81		radition.
Map 1. Please C	lick the ma	р агеа	below to	import an	image file to	use as t	he ma	ар.	✓ Ma	ke map	area big	ger		



14. Information		
Well owner's information package delivered Yes  No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) * 2023/09/11
Comments		

15. Well Con	tractor and We	ell Technician	Information				
Business Nam London Soil	e of Well Contrac Test Ltd.	tor *			Well Cont 7190	ractor's Licens	se Number *
Business Add	dress						
Unit Number	Street Number 712078	Street Nam Southgate	_				
City/Town/Villa Dundalk	age *	'		Prov	vince		Postal Code * N0C 1B0
Business Tele 519-455-577	phone Number 7	Business Email info@londons					
Last Name of Well Technician * First Name of Well Technic McIntosh Tyler		ian *		Well Technic 4037	ian's License Number *		

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✓ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct

and accurate.

Last Name McIntosh
Tyler

Email Address info@londonsoil.com

Signature
Tyler McIntosh

Digitally signed by Tyler McIntosh
DN cn=Tyler McIntosh, p=London Soil Test Ltd., ou, email-info@londonsoil com, c=CA
Dete: 2023/10/17

# 17. Ministry Use Only

Audit Number

**ZYP6 TNT2** 

# MUNICIPALITY OF MORRIS-TURNBERRY REPORT TO COUNCIL

TO: Mayor and Council

PREPARED BY: Kim Johnston, Deputy Clerk

**DATE:** January 15, 2024

**SUBJECT:** 2023 Planning Update – 2<sup>nd</sup> half of 2023

#### **RECOMMENDATION**

For information only.

#### **BACKGROUND**

This report is being presented for the information of Council. While most planning matters come before Council, some approval authority has been delegated to staff. Staff will present a semi-annual report for the information of Council detailing all planning matters that have been approved by the municipality during the second half of the 2023 year.

#### **COMMENTS**

#### 1. Consents:

C03-2023 Vendeven Holdings Inc C04-2023 Vendeven Holdings Inc C05-2023 Vendeven Holdings Inc Plan 410, Part Park Lot 38, Royal Road Creation of a new residential lots No Appeal – May 16, 2023 3 concurrent applications

C13-2023 Paul Ryan

Conditions Met – December 14, 2023

Concession 11, Lot 6, and E Pt Lot 7, 41996 Glenannon Road

Creation of an agricultural lot.

C27-2023 Wayne & Michelle Fenton

Conditions Met - December 7, 2023

Concession 11, Lot 25, 39646 Glenannon Road

Creation of a new agricultural lot

C54-2023 Christopher and Colleen Michie

No Appeal - October 26, 2023

Concession 6, South ½ Lot 6 Surplus Farm Dwelling

C55-2023 Kevin & Kathryn Fitch Concession C, Part Lot 6 & Part Lot 7 Surplus Farm Dwelling No Appeal - October 26, 2023

C60-2023 Guert Rozendaal, Hendrik Rozendaal and Geertje Rozendaal

Concession 1, North Part Lots 43 & 44 No Appeal – November 7, 2023

Surplus Farm Dwelling

C61-2023 Evergreen Holsteins Inc No Appeal – December 13, 2023 Concession 1, North Part Lots 51 & 52

Surplus Farm Dwelling

C66-2023 Camaro Farms Ltd No Appeal – December 13, 2023 Concession 10, Part Lots 9 & 10

Surplus Farm Dwelling

#### 2. Site Plans:

SP01-2023 Sepoy Wiring 249 Arthur Street Industrial Building Agreement Signed, pending registration.

#### 3. Minor Variances:

No new Minor Variances to date.

#### 4. Temporary Use:

No new Temporary use by-law applications to date.

#### 5. Zoning By-Law Amendments:

MTu Z04-2023 William & Nancy Van Nienhius

Affidavit of No Appeal – August 10, 2023

Concession 5, Lot 2, 22R7118 Parts 16 and 17 - Brandon Road/Jane Street The purpose of the proposed zoning by-law amendment is to change the zoning of the subject lands from "VR1" Village Residential – Low Density to "VR2-Special" – Village Residential – Medium Density – Special. The lands are designated "Residential" as illustrated on Schedule 'B' Land Use Plan of the Municipality of Morris-Turnberry Official Plan. The proposed zoning would implement the Official Plan intent for these lands. The rezoning to VR2-Special would facilitate the development of a single detached dwelling with an Additional Residential Unit by recognizing the existing undersized lot size.

MTu Z04-2023 Suzanne Borrmann

Affidavit of No Appeal - August 10, 2023

Concession A, Lot 1 – 86924 Brussels Line,

The purpose of this zoning by-law amendment is to include additional provisions to the text of the existing special zoning on the subject property. A portion of the property is currently zoned AG3-11 (Agriculture Commercial-Industrial – Special Zone) as per previous zoning bylaw amendment (86-2006) which currently permits an automotive repair establishment and to recognize the minimum front yard depth of 11.8m. The applicant is seeking to permit the construction of an Additional Residential Unit within an existing accessory structure. The area affected by this zoning by-law amendment is approximately 2.61 ac (1.06 ha).

MTu Z05-2023 Pig by Pig Inc

Affidavit of No Appeal – September 27, 2023

Concession 6, Lot 20 – 41788 Cranbrook Road

The purpose of this zoning By-law Amendment application is to rezone a portion of the subject lands from ER1 (Extractive Resources) to AG1 (General Agricultural), NE1 (Natural Environment – Full Protection) and NE2 (Natural Environment – Limited Protection). It also proposed to amend the zoning from NE2 (Natural Environment – Limited Protection) to ER1 (Extractive Resources) to reflect the area of extraction as outlined in the Extraction License. The remainder of the property is not proposed to change

## 6. Deeming

No new Deeming bylaws to date.

#### 7. Official Plan Amendment

MTu OPA 12 Pig by Pig Inc

Final County Approval – October 26, 2023
Concession 6, Part Lot 20 – 41812 Cranbrook Road
The subject lands are approximately 34 hectares (84 acres). The Official Plan
Amendment Application (OPA 12-2023) is to amend Schedule B of the Municipality
of Morris-Turnberry's Official Plan to redesignate a portion of the lands from Mineral
Aggregates to Agriculture and Natural Environment to acknowledge the
rehabilitation of a gravel pit. It will also amend the boundary of the Natural
Environment to Mineral Aggregates to acknowledge the existing extraction area.

# **OTHERS CONSULTED**

Trevor Hallam, CAO/Clerk

Respectfully submitted,

Kim Johnston, Deputy-Clerk

# MUNICIPALITY OF MORRIS-TURNBERRY REPORT TO COUNCIL

TO: Mayor and Council

PREPARED BY: Trevor Hallam, CAO/Clerk

**DATE:** January 16, 2024

SUBJECT: Use of Delegated Authority 2023

# **RECOMMENDATION**

For information only.

# BACKGROUND

To improve administrative efficiency, Council has previously delegated the authority to issue approvals and execute certain agreements to the Clerk. This report is to provide Council with the details of when the delegate authority was used in 2023.

# **COMMENTS**

Type of Delegated Authority	Details	Date	By-Law
Agreement under Section 65 (2) of the <i>Drainage Act</i>	Thompson Lamont Deyelle Municipal Drain assessment apportionment agreement executed as a condition of Consent C27-2023	November 1, 2023	35-2019
Agreement under Section 65 (2) of the <i>Drainage Act</i>	Abraham Municipal Drain assessment apportionment agreement executed as a condition of Consent C55-2023	November 24, 2023	35-2019
Approval of Undisputed Consents	Recommendation for approval of Consent C11- 2023 - McKercher (Oldfield) - Surplus farm residence severance	March 27, 2023	11-2020
Approval of Undisputed Consents	Recommendation for approval of Consent C54- 2023 - Michie - Surplus farm residence severance	September 21, 2023	11-2020
Approval of Undisputed Consents	Recommendation for approval of Consent C55- 2023 - Fitch - Surplus farm residence severance	September 21, 2023	11-2020
Approval of Undisputed Consents	Recommendation for approval of Consent C60- 2023 - Rozendaal - Surplus farm residence severance	October 16, 2023	11-2020
Approval of Undisputed Consents	Recommendation for approval of Consent C61- 2023 - Evergreen Holsteins - Surplus farm residence severance	November 1, 2023	11-2020
Approval of Undisputed Consents	Recommendation for approval of Consent C66- 2023 - Camaro Farms Ltd (Metcalfe) - Surplus farm residence severance	November 7, 2023	11-2020
Site Plan Control Agreement	Sepoy Wiring, Wingham, Site Plan Agreement	December 14, 2023	99-2017

# **ATTACHMENTS**

None.

# **OTHERS CONSULTED**

None.

Respectfully submitted,

Trevor Hallari, CAO/Clerk



Report to the Council on January 16th, 2024

Subject: Operations Report Presented by: Mike Alcock

- **Recommendation:** That the Council of the Municipality of Morris-Turnberry receive the Public Works Operations Report for information

#### **Executive Summary:**

This report is intended to provide Council with an outline of Public Works Staff operations:

- Routine Road Patrols are being completed as scheduled and / or as required.
- > Regular Winter Patrols to check for winter related conditions began on November 15.
- All equipment is fully outfitted and ready to go for winter maintenance activities.
- Fall grading has been completed.
- > Public works staff if taking advantage of the weather conditions to complete Tree cutting along Municipal roads.
- The new woodchipper is working very well, allowing for much larger sections of wood to be fed through and chipped. This is improving efficiency and reducing the number of loads being hauled to the landfill which further improves efficiency.
- > Shop maintenance and vehicle maintenance is being completed as time permits and as required.
- > Grinding brush at the land fill was completed in early December.
- R.J. Burnside and Associates are putting the finishing touches on the Belgrave Storm Sewer Plan. A preliminary meeting was held to review work to date on this project.
- The Belgrave Water System reservoir was inspected last week. The inspection is a requirement of the MECP to determine if there are any repairs or cleaning required.
- > The results of the inspection show that there is no need for any repairs or cleaning to the reservoir until after the next inspection approximately 5 years from now.
- All full time and part time Public Works Staff completed winter maintenance training.
- The Provincial Government announced changes to legislation that will make it illegal for utility owners to charge excavators for locates. This is thanks to the Municipalities including Morris-Turnberry that expressed support for the advocacy AORS completed on behalf of Municipalities in Ontario.

Thank you.

Mike Alcock,

**Director of Public Works** 



Report to the Council on January 16<sup>th</sup>, 2024 Subject: Early Tender Approval Report

Presented by: Mike Alcock

- **Recommendation:** That the Council of the Municipality of Morris-Turnberry receive the Report on early tendering and give approval to the Director of Public Works to commence the tender process for the items below prior to budget approval.

\_\_\_\_\_\_

#### **Executive Summary:**

In order to provide continuity of services to our rate payers, many time sensitive items need to be tendered prior to budget approval. Reasons for these include things such as lead time, manufacturing time, and best value for the Municipality.

The public works department is requesting approval to begin the purchasing process prior to budget approval on the following items included in the proposed 2024 Public Works Budgets.

#### **Maintenance Gravel:**

Maintenance gravel which is included in the Proposed Draft Public Works budget is a high priority as well as time sensitive for various reasons.

In 2024 Maintenance gravel is scheduled for the South part of Turnberry and the North Part of Morris. This is accomplished using 1 contract to supply, deliver and spread maintenance gravel. The contract for 2024 will include approximately 36,000 tonnes of granular 'M' maintenance gravel.

Early tendering is important to give contractors time to prepare gravel stockpiles in the most beneficial locations for them and the Municipality. It is unlikely that the Municipality will expense any funds towards this maintenance gravel contract prior to budget approval.

#### **Dust Control:**

Dust Control which is included in the Proposed Draft Public Works budget is a high priority as well as time sensitive to ensure that the dust control products are applied at the right time of year for full effectiveness.

In 2023 the Public Works Department broadened the specifications to allow alternate dust control products. The products are all chloride based. The municipality uses lab test results and calculations to ensure quality control and equivalent effectiveness. Prior to 2023 we only used 35% calcium dust control, but following a trial completed in 2022 and the success in 2023, we have determined that other products perform equally as well and save the Municipality approximately \$42,000 or 22%. Securing a supplier of dust control is essential to ensure product availability and the timely delivery of dust suppressing materials.

#### **Roadside Mowing:**

Roadside mowing will need to be tendered this year. There is a very wide range of pricing when it comes to roadside mowing. In order to maintain as much competition with roadside mowing as possible early tendering is essential.

#### **Surface Treatment:**

Morris-Turnberry has approximately 11km of surface treated road that requires overlay included in the 2024 draft budget. In order to get the most competitive pricing we generally joint tender with other adjacent municipalities. To take advantage of joint tendering, we will need to be ready tender prior to final budget approval.

#### **Structure M070 on Moncrief:**

Structure M070 is a rigid frame bridge requiring repairs which is included in the proposed 2024 draft budget. Acquiring competitive bids from local contractors is best achieved with early tendering.

M070 is a 7.0m rigid frame bridge located on Moncrief Road west of Clyde Line on the Blyth Brook. The scope of work includes replacing the curbs and patch repairs to the deck ends and soffits.

#### **Equipment**

The expected timeline to receive the shoulder spreader that is included in the 2024 draft budget is approximately 8-12 weeks from the time of ordering. Tender preparation, tender period and Council Approval is expected to take an additional 6 weeks. Early tendering will help to ensure that equipment is received by the time it is required.

Other items in the Public Works Budgets that require Council approval are less time sensitive and will be tendered in late winter or early spring. If the budget is not approved by that point another report may be brought forward at that time.

#### **Comments:**

Early tendering is advantageous for many reasons and with the current market situations it is becoming more and more important to consider.

#### **Budget:**

There is no impact to the Public Works budget until tenders are awarded.

Thank you.

Mike Alcock,

**Director of Public Works** 

# MUNICIPALITY OF MORRIS-TURNBERRY REPORT TO COUNCIL

TO: Mayor and Council

PREPARED BY: Trevor Hallam, CAO/Clerk

**DATE:** January 16, 2024

SUBJECT: WGCC Fiscal Partnership Agreement

#### **RECOMMENDATION**

That Council authorize the execution of a Fiscal Partnership Agreement with the Wingham Golf and Curling Club by by-law, for the purpose of administering the Leland and Thora Vance fund recreation grant.

#### **BACKGROUND**

On September 26<sup>th</sup>, a request was received by email from Ruth MacDonald on behalf of the Wingham Golf and Curling Club (WGCC) to enter into a Fiscal Partnership Agreement. The WGCC is preparing an application to the <u>Leland and Thora Vance Fund</u> for a recreation grant.

Council approved the arrangement at the October 3<sup>rd</sup> meeting. On November 13<sup>th</sup>, it was announced that the WGCC's application was successful. Following the announcement, staff began drafting the attached agreement for the administration of the funds. The agreement was reviewed by the Municipality's solicitor, and required no edits.

On December 6<sup>th</sup> the full grant amount of \$ 117,375.00 was received by the municipality by electronic funds transfer and is currently being held pending its release in accordance with the terms of the agreement.

At their meeting on the 20<sup>th</sup> of December 2023, the Board of the WGCC reviewed the agreement and confirmed that they are amenable to its terms. An executed copy was returned to staff following that meeting.

#### **COMMENTS**

During the initial proposal discussions, staff did not make recommendations for any administrative fee to be made payable to the municipality for the work of administering the grant for the WGCC, so provisions for such were not included in the agreement.

The desire for a nominal fee to recover costs was expressed by Council at the January 9<sup>th</sup> budget meeting. It was subsequently confirmed with the Waterloo Region Community Foundation that an administrative fee would be an allowable expense under the terms of the grant. Staff have confirmed with Ms. McDonald that such a fee should be acceptable, and it will be presented to the WGCC Board at their next meeting.

The municipality will issue an invoice for \$1000.00, which is an amount that is sufficient to cover the legal costs incurred for the review of the agreement, and the staff time spent to date, and estimated to be spent through the rest of the term of the agreement.

As renovations have begun, once the agreement is executed funds for expenses to date will be released to the WGCC. Staff recommend that Council authorize the execution of the agreement under by-law.

#### **ATTACHMENTS**

1. Fiscal Partnership Agreement

# **OTHERS CONSULTED**

Sean Brophy, Treasurer Ruth McDonald, ArithmeTech Accountants and Consultants

Respectfully submitted,

Trevor Hallam, CAO/Clerk



#### CORPORATION OF THE MUNICIPALITY OF MORRIS-TURNBERRY

#### **BY-LAW NO. 3-2024**

Being a by-law to authorize the Mayor and Clerk to execute and affix the Corporate Seal to an agreement between the Municipality of Morris-Turnberry and the Wingham Golf and Curling Club establishing a fiscal partnership for the administration of the Leland and Thora Vance Fund recreation grant.

**WHEREAS** Section 9 of the *Municipal Act* 2001, S.O. 2001, c. 25 provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

**AND WHEREAS** it is deemed expedient to enter into an agreement with the Wingham Golf and Curling Club establishing a fiscal partnership and defining the terms for the administration of the Leland and Thora Vance Fund recreation grant;

**NOW THEREFORE,** the Council of the Corporation of the Municipality of Morris-Turnberry enacts as follows:

- 1. That the Fiscal Partnership Agreement with the Wingham Golf and Curling Club attached hereto and forming part of this by-law is hereby adopted;
- 2. That the Mayor and Clerk are authorized and directed to execute the Agreement and to affix thereto the Seal of the Corporation;
- 3. That this by-law shall come into force immediately upon its passing.

Read a FIRST and SECOND time this 16th day of January 2024

Read a THIRD time and FINALLY PASSED this 16th day of January 2024

Mayor,	Jamie F	Heffer	
•			

THIS	FISCAL	PARTNERSHIP	<b>AGREEMENT</b>	made in triplicate	on the	day of	
2023							

BETWEEN:

# THE CORPORATION OF THE MUNICIPALITY OF MORRIS-TURNBERRY (hereinafter referred to as the "Municipality") OF THE FIRST PART

- and -

#### WINGHAM GOLF AND CURLING INC. (hereinafter referred to as the "Recipient") OF THE SECOND PART

WHEREAS the Recipient is a registered not-for-profit organization in the Province of Ontario operating as Wingham Golf and Curling Inc, Ontario Corporation Number 368328.

AND WHEREAS the Recipient has successfully secured funding from the Leland and Thora Vance Fund administered by the Waterloo Region Community Foundation (WRCF) for improvements to its facilities (the "Project") in the amount of \$117,375.00 (the "Funds".

AND WHEREAS the Recipient is not a qualified donee as defined by the Canada Revenue Agency and so may not receive the Funds directly from the WRCF.

AND WHEREAS the Municipality, being a qualified donee as defined by the Canada Revenue Agency has agreed to enter into a Fiscal Partnership Agreement with the Recipient for the purpose of receiving, holding, and disbursing the Funds.

NOW THEREFORE WITNESSETH THAT in consideration of other good and valuable consideration and the sum of two dollars (\$2.00) paid by each of the parties to the other, the receipt and sufficiency of which are hereby acknowledged, the Recipient and the Municipality covenant, declare and agree as follows:

#### COMPONENTS OF THIS AGREEMENT

 The text and the following Schedules appended to this Agreement constitute the components as follows:

Schedule "A" – Application to the Leland and Thora Vance Fund Schedule "B" – Approval letter, Waterloo Region Community Foundation

#### SCOPE OF THE PROJECT

2. All activities undertaken for the Project shall be limited geographically to the premise owned and operated by the Recipient located at:

40292 Jamestown Road, Wingham Ontario PT LT 5 CON 1 MORRIS; PT LT 6 CON 1 MORRIS; PT LT 7 CON 1 MORRIS AS IN R163175; PT LT 7 CON 1 MORRIS &; PT LT 8 CON 1 MORRIS PT 2, 22R2675 41333-0103 (LT)

- The Recipient shall take such actions as necessary to procure the goods and services outlined in Schedule 'A' of this agreement.
- Only expenditures described in Schedule 'A' shall be eligible for reimbursement from the Funds.

#### RESPONSIBILITIES OF THE RECIPIENT

The Recipient shall be solely responsible for the administration, coordination, and execution of the Project.

- The Recipient shall keep detailed records of all expenses incurred in the execution of the Project, which shall be made available to the Municipality at any time upon request with 24 hours' notice.
- The Recipient shall provide evidence of capital purchases or completed work, to the satisfaction of the Municipality, at any time upon request with 24 hours' notice. Evidence may include but is not limited to photos, or inspections conducted by agents of the Municipality.
- 8. The Recipient acknowledges that the Funds or portions thereof shall only be released on a reimbursement or direct to supplier basis, in the sole discretion of the Municipality.
- The Recipient may submit receipts to the Municipality for reimbursement, which shall be accompanied by a written explanation of the reason for the expenditure and its eligibility.
- 10. The Recipient may submit invoices from suppliers or contractors to the Municipality for payment directly thereto, which shall be accompanied by a written explanation of the reason for the expenditure and its eligibility.
- 11. The Recipient acknowledges that the disbursement of any funds requires the approval of the Council of the Municipality, and accordingly shall submit requests for reimbursement or invoices for payment no later than 12:00 noon on any Thursday immediately preceding a meeting of the Council, and further acknowledges that payment will be issued no earlier than the day following the meeting of the Council.
- 12. The Recipient shall be solely responsible for fulfilling all requirements of the Leland and Thora Vance Fund by the communicated deadlines, including but not limited to reporting, communications guidelines, or other requirements as may be communicated by the Waterloo Region Community Foundation from time to time.

#### RESPONSIBILITIES OF THE MUNICIPALITY

- 13. The Municipality shall receive and hold the Funds for the sole purpose of disbursement to the Recipient, suppliers, or contractors for activities related to the Project in accordance with schedule "A". Responsibilities
- 14. The Municipality shall, through bookkeeping or other accounting practices, maintain a record of the Funds and disbursements therefrom separate from those of the Municipality. Such records shall be made available to the Recipient, Canada Revenue Agency or the WRCF at any time upon request with 24 hours' notice.
- 15. Upon receipt of a request for reimbursement or direct to supplier payment by the Recipient, accompanied by such proof as may be required by the Municipality, the Municipality shall issue payment to the Recipient, supplier, or contractor as soon as practicable following the meeting of Council at which the reimbursement or payment is approved.
- 16. The Municipality maintains the right to discontinue or refuse payments to the Recipient, suppliers or contractors at any time if not satisfied with the performance of the Recipient or the eligibility of any expenditure.

# BINDING PARTIES, ALTERATION, AMENDMENT, EFFECT, NOTICE

- 17. This Agreement may only be amended or varied by a written document of equal formality herewith duly executed by the parties hereto.
- 18. This Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of each of the Parties hereto.
- 19. The Agreement shall come into effect on the date of execution by the Municipality.
- The terms of this Agreement shall be binding upon the parties hereto until the exhaustion of the Funds, or July 31, 2025, whichever occurs first.
- 21. If, upon expiration of this agreement any portion of the Funds remains unspent and in the possession of the Municipality, such balance shall be returned to the WRCF.

Any notice required to be given pursuant to the terms hereto shall be in writing and mailed or delivered to the other at the following address:			
To the Recipient:	WINGHAM GOLF AND CURLING INC 40292 Jamestown Road, Wingham, Ontario NOG 2W0		
To the Municipality:	The Corporation of the Municipality of Morris-Turnberry 41342 Morris Road, PO Box 310, Brussels, ON NOG 1H0		
IN WITNESS WHEREOF the Recipient and the Mu to be affixed over the signatures of their respective	inicipality have caused their corporate seals signing officers.		
SIGNED, SEALED AND DELIVERED	WINGHAM GOLF AND CURLING INC  I/we have the authority to bind the Corporation.		
	AND		
	THE CORPORATION OF THE MUNICIPALITY OF MORRIS-TURNBERRY		

Clerk, Trevor Hallam





# FOR IMMEDIATE RELEASE – December 14th, 2023

Saugeen Valley Conservation Authority Appoints Erik Downing as Acting General Manager/Secretary-Treasurer

**ALL SAUGEEN WATERSHED MUNICIPALITIES** – Municipality of Arran-Elderslie, Municipality of Brockton, Township of Chatsworth, Municipality of Grey Highlands, Town of Hanover, Township of Howick, Municipality of Morris-Turnberry, Municipality of South Bruce, Township of Huron-Kinloss, Municipality of Kincardine, Town of Minto, Township of Wellington-North, Town of Saugeen Shores, Township of Southgate, Municipality of West Grey.

Saugeen Valley Conservation Authority (SVCA) is pleased to formally announce Erik Downing as the Acting General Manager/Secretary-Treasurer (GM/S-T). Erik has accepted this role following the leave of absence of Jennifer Stephens. Erik brings with him a wealth of experience and dedication to environmental conservation.

With over 20 years of professional experience in Conservation Authorities, Erik has dedicated his life to the cause of environmental conservation. He holds a BES in Environmental Studies from York University and is designated as a Provincial Offences Officer with Saugeen Conservation. Erik has managed the Environmental Planning and Regulations (EPR) department at SVCA for the last 10 years. His career spans across various Conservation Authorities, including Ganaraska Regions Conservation Authority, Halton Conservation, and the Toronto Region Conservation Authority, equipping him with a broad skill set and deep understanding of the challenges and opportunities facing SVCA.

Erik's appointment to SVCA is not only a professional milestone but a personal one. As a husband and a father to two, his family shares his deep and active connection to the Saugeen Watershed. His role at SVCA resonates with his family's values of preserving and enjoying the natural beauty of their home region.

"I have a profound appreciation for rural Ontario, and an understanding of the delicate balance needed with urban-rural boundaries. Witnessing the transformation of vast farmlands and natural spaces into urban developments during my formative years, I was drawn to the complexities of sustainable land use. My upbringing amidst the rich, albeit unrefined, valleys and woodlands, where historic family farms often gave way to uniform subdivisions, fueled my desire to delve deeper into environmental conservation and responsible development.

While provincial and municipal support may fluctuate, the impact of SVCA's collaboration with the residents within Saugeen Conservation's jurisdiction is unmistakably visible across the entire watershed. This cooperative effort consistently yields tangible, positive outcomes in our shared environment."

Erik Downing, SVCA GM/S-T(A)

As he steps into his new role, Erik is committed to continuing the legacy of SVCA, which is approaching 75 successful years. Erik sees the SVCA's role as crucial in co-managing natural resources alongside



residents, businesses, farmers, and other stakeholders. One of Erik's key convictions is the effectiveness of Conservation Authorities' watershed boundary management model, which he sees as the gold standard internationally in environmental conservation. His belief in this model, combined with his understanding of Saugeen Conservation's unique geographical and socio-economic climate, positions him perfectly to lead the organization into its future endeavors.

Erik is enthusiastic about the opportunities and challenges ahead and is dedicated to improving the approach of Conservation Authorities in general, as well as the specific operations of SVCA. He looks forward to working closely with the Board of Directors and all stakeholders to ensure a sustainable and prosperous future for the Saugeen Watershed, a place he and his family are proud to call home.



#### For more information, please contact:

**Ashley Richards** 

Communications Coordinator, Saugeen Valley Conservation Authority

Email: a.richards@svca.on.ca Cell: 519-369-4295



1078 Bruce Road 12 | P.O. Box 150 | Formosa ON Canada | NOG 1W0 | 519-364-1255 www.saugeenconservation.ca publicinfo@svca.on.ca

December 15th, 2023

To All Watershed Municipalities, Councils, and CAOs,

I am writing to you as the Acting General Manager/Secretary-Treasurer of the Saugeen Valley Conservation Authority (SVCA) regarding an important development concerning conservation authority fees for the year 2024.

The Ministry of Natural Resources and Forestry issued a new directive, as detailed in their letter dated December 13th. This directive, under the authority of subsection 21.3 (1) of the Conservation Authorities Act, extends the Minister's Direction issued on December 28, 2022, which mandated that conservation authorities should not alter fees related to planning, development, and permitting for the calendar year 2023. This extended Direction, effective from January 1, 2024, to December 31, 2024, is now similarly applicable to the fees for the same programs and services as specified for the year 2023. (Ministry's letter is attached).

This directive presents a significant challenge for SVCA. The budget for 2024, approved earlier by the SVCA Board of Directors, had incorporated a portion of the recommended increases from our 2023 Fee Review. These increases were crucial and approved by the Board with the intention of moving SVCA towards achieving cost recovery through our Environmental Planning and Regulation (EPR) fees. The provincial directives that restrict SVCA's ability to generate revenue, along with the continued decrease in direct funding from the province to Conservation Authorities, pose substantial challenges and have serious implications for our operational and financial stability.

The unexpected extension of the 2023 fee structure into 2024 impacts our financial planning and operational capabilities. In response to this development, we find it necessary to revisit and potentially revise our 2024 budget. This revision aims to accommodate the constraints imposed by the new Direction while continuing to effectively manage our conservation responsibilities.

We understand the implications this might have on our collaborative efforts and relationships with your respective councils and administrations. Therefore, the SVCA intends to propose new budgetary measures in the new year, which will be shared with you for review.

I appreciate your understanding and cooperation in this matter. SVCA remains committed to working collaboratively with all watershed municipalities to ensure the sustainable management and conservation of our shared natural resources.

Please feel free to reach out should you have any questions or require further clarification regarding this issue.

Sincerely,

**Erik Downing** 

General Manager/Secretary-Treasurer (Acting)

Saugeen Valley Conservation Authority

e.downing@svca.on.ca | 519-364-1255 ext. 241



#### Ministry of Natural Resources and Forestry

Office of the Minister

99 Wellesley St W Room 6630, Whitney Block Toronto ON M7A 1W3 Tel.: 416-314-2301

# Ministère des Richesses naturelles et des Forêts

Bureau du ministre

99, rue Wellesley Ouest Bureau 6630, Édifice Whitney Toronto ON M7A 1W3 Tél.: 416-314-2301



December 13, 2023

**TO:** All Conservation Authorities

**SUBJECT:** Extension of Minister's Direction for Conservation Authorities Regarding

Fee Changes Associated with Planning, Development and Permitting

Fees

I am writing with regards to conservation authority fees for the 2024 year. As you are aware, a Minister's Direction ("Direction") was issued on December 28, 2022, directing conservation authorities not to change fees for programs and services associated with planning, development and permitting for the 2023 calendar year. I have provided a copy of this previous direction for your reference.

Pursuant to my authority under subsection 21.3 (1) of the *Conservation Authorities Act*, I am issuing a new Direction that extends the previous Direction for the upcoming year (attached to this letter as Attachment A). The Direction will be in effect from January 1, 2024 to December 31, 2024 and applies to fees for the same programs and services specified in the Direction that was in effect for 2023.

If you have any questions, please contact Jennifer Keyes, Director, Resources Planning and Development Policy Branch, at 705-761-4831 or jennifer.keyes@ontario.ca.

Sincerely,

The Honourable Graydon Smith

Minister of Natural Resources and Forestry

The Honourable Paul Calandra, Minister of Municipal Affairs and Housing

c: The Honourable Andrea Khanjin, Minister of the Environment, Conservation and Parks



# Minister's Direction Issued Pursuant to Section 21.3 of the *Conservation Authorities*Act (this "Direction")

**WHEREAS** section 21.2 of the *Conservation Authorities Act* permits a Conservation Authority to charge a fee for a program or service if the program or service is included in the Minister's list of classes of programs and services in respect of which a Conservation Authority may charge a fee;

**AND WHEREAS** subsections 21.2 (6) and 21.2 (7) of the *Conservation Authorities Act* provide that a Conservation Authority shall adopt a written fee policy that includes a fee schedule listing the programs and services that it provides in respect of which it charges a fee, and the amount of the fee charged for each program or service or the manner in which the fee is determined (a "**Fee Schedule**");

**AND WHEREAS** subsection 21.2 (10) of the *Conservation Authorities Act* provides that a Conservation Authority may make a change to the list of fees set out in the fee schedule or to the amount of any fee or the manner in which a fee is determined, provided the authority shall give notice of the proposed change to the public in a manner it considers appropriate;

**AND WHEREAS** section 21.3 of the *Conservation Authorities Act* provides the Minister with the authority to give a written direction to an authority directing it not to change the amount of any fee it charges under subsection 21.2 (10), in respect of a program or service set out in the list referred to in subsection 21.2 (2), for the period specified in the direction;

**NOW THEREFORE** pursuant to the authority of the Minister of Natural Resources and Forestry under section 21.3, the Conservation Authorities set out under Appendix "A" of this Direction (the "Conservation Authorities" or each, a "Conservation Authority") are hereby directed as follows:

#### **Fee Changes Prohibition**

1. Commencing on the Effective Date and for the duration of the Term of this Direction, a Conservation Authority is prohibited from making a change under subsection 21.2 (10) of the Conservation Authorities Act to the amount of any fee or the manner in which a fee is determined in its fee schedule if such a change would have the effect of changing the fee amount for the programs and services described in paragraphs 2 and 3 of this Direction.

#### **Program and Service Fees Impacted**

2. This Direction applies to any fee set out in the Fee Schedule of a Conservation Authority, including without limitation fees for any mandatory program or service



(Category 1), municipal program or service (Category 2), or Conservation Authority recommended program or service (Category 3) related to reviewing and commenting on planning and development related proposals, applications, or land use planning policies, or for Conservation Authority permitting.

- 3. For greater certainty, this Direction applies to any fees in respect of the following programs or services provided under the Mandatory Programs and Services regulation (O. Reg. 686/21):
  - a. Section 6: programs and services related to reviewing applications and proposals under the *Aggregate Resources Act*, *Drainage Act*, *Environmental Assessment Act*, and the *Niagara Escarpment Planning and Development Act*, for the purpose of commenting on the risks related to natural hazards arising from the proposal,
  - b. Section 7: programs and services related to ensuring that decisions under the *Planning Act* are consistent with the natural hazards policies in the policy statements issued under section 3 of the *Planning Act* and are in conformance with any natural hazard policies included in a provincial plan as defined in section 1 of that Act,
  - c. Section 8: programs and services related to Conservation Authority duties, functions, and responsibilities to administer and enforce section 28 and its regulations, section 28.0.1, and section 30.1 of the *Conservation Authorities Act*,
  - d. Paragraph 4 of subsection 13 (3): programs and services related to reviewing and commenting on any proposal made under another Act for the purpose of determining whether the proposal relates to a significant drinking water threat or may impact any drinking water sources protected by a source protection plan, and
  - e. Subparagraph 4 iv of section 15: programs and services related to reviewing and commenting on proposals made under other Acts for the purpose of determining the proposal's impact on the Lake Simcoe Protection Plan and the Lake Simcoe watershed.

#### **Application**

- 4. This Direction, applies to all Conservation Authorities in Ontario, listed in Appendix "A" to this Direction.
- 5. For greater certainty, this Direction also applies to the Conservation Authorities listed in Appendix "A" to this Direction when such Conservation Authorities are meeting as a source protection authority under the *Clean Water Act*, 2006.

#### **Effective Date and Term**

6. This Direction is effective from January 1, 2024 (the "Effective Date").



7. The term of this Direction is the period from the Effective Date to December 31, 2024 (the "**Term**").

#### **Amendments**

8. This Direction may be amended in writing from time to time at the sole discretion of the Minister.

HIS MAJESTY THE KING IN RIGHT OF ONTARIO as represented by the Minister of Natural Resources and Forestry

The Honourable Graydon Smith

Minister of Natural Resources and Forestry

December 13, 2023



#### **APPENDIX A**

#### LIST OF CONSERVATION AUTHORITIES TO WHICH THE DIRECTION APPLIES

#### Ausable Bayfield CA

R.R. #3
71108 Morrison Line
Exeter ON N0M 1S5
Brian Horner
bhorner@abca.on.ca

## Cataraqui Region CA

Box 160 1641 Perth Road Glenburnie ON K0H 1S0 Katrina Furlanetto kfurlanetto@crca.ca

#### Catfish Creek CA

R.R. #5 8079 Springwater Road Aylmer ON N5H 2R4 Dusty Underhill generalmanager@catfishcreek.ca

#### **Central Lake Ontario CA**

100 Whiting Avenue Oshawa ON L1H 3T3 Chris Darling cdarling@cloca.com

#### **Credit Valley CA**

1255 Old Derry Rd Mississauga ON L5N 6R4 Quentin Hanchard quentin.hancard@cvc.ca

#### **Crowe Valley CA**

Box 416
70 Hughes Lane
Marmora ON K0K 2M0
Tim Pidduck
tim.pidduck@crowevalley.com

#### **Essex Region CA**

Suite 311
360 Fairview Ave West
Essex ON N8M 1Y6
Tim Byrne
tbyrne@erca.org



#### Ganaraska Region CA

Box 328
2216 County Road 28
Port Hope ON L1A 3V8
Linda Laliberte
llaliberte@grca.on.ca

#### **Grand River CA**

Box 729 400 Clyde Road Cambridge ON N1R 5W6 Samantha Lawson slawson@grandriver.ca

#### **Grey Sauble CA**

R.R. #4
237897 Inglis Falls Road
Owen Sound ON N4K 5N6
Tim Lanthier
t.lanthier@greysauble.on.ca

#### **Halton Region CA**

2596 Britannia Road West Burlington ON L7P 0G3 Hassaan Basit hbasit@hrca.on.ca

#### **Hamilton Region CA**

P.O. Box 81067 838 Mineral Springs Road Ancaster ON L9G 4X1 Lisa Burnside lisa.burnside@conservationhamilton.ca

#### Kawartha Region CA

277 Kenrei (Park) Road Lindsay ON K9V 4R1 Mark Majchrowski mmajchrowski@kawarthaconservation.com

#### **Kettle Creek CA**

R.R. #8
44015 Ferguson Line
St. Thomas ON N5P 3T3
Elizabeth VanHooren
elizabeth@kettlecreekconservation.on.ca



#### Lake Simcoe Region CA

Box 282 120 Bayview Parkway Newmarket ON L3Y 3W3 Rob Baldwin r.baldwin@lsrca.on.ca

#### Lakehead Region CA

Box 10427 130 Conservation Road Thunder Bay ON P7B 6T8 Tammy Cook tammy@lakeheadca.com

#### **Long Point Region CA**

4 Elm Street
Tillsonburg ON N4G 0C4
Judy Maxwell
jmaxwell@lprca.on.ca

#### **Lower Thames Valley CA**

100 Thames Street Chatham ON N7L 2Y8 Mark Peacock mark.peacock@ltvca.ca

#### **Lower Trent Region CA**

R.R. #1
714 Murray Street
Trenton ON K8V 5P4
Rhonda Bateman
rhonda.bateman@ltc.on.ca

#### **Maitland Valley CA**

Box 127 1093 Marietta Street Wroxeter ON N0G 2X0 Phil Beard pbeard@mvca.on.ca

#### Mattagami Region CA

100 Lakeshore Road Timmins ON P4N 8R5 David Vallier david.vallier@timmins.ca

#### Mississippi Valley CA

10970 Highway 7 Carleton Place ON K7C 3P1 Sally McIntyre smcintyre@mvc.on.ca



#### Niagara Peninsula CA

250 Thorold Road West, 3rd Floor Welland ON L3C 3W2 Chandra Sharma csharma@npca.ca

#### **Nickel District CA**

199 Larch St Suite 401 Sudbury ON P3E 5P9 Carl Jorgensen carl.jorgensen@conservationsudbury.ca

#### North Bay-Mattawa CA

15 Janey Avenue North Bay ON P1C 1N1 Chitra Gowda chitra.gowda@nbmca.ca

#### Nottawasaga Valley CA

8195 Line 8 Utopia ON L0M 1T0 Doug Hevenor dhevenor@nvca.on.ca

#### **Otonabee Region CA**

250 Milroy Drive Peterborough ON K9H 7M9 Janette Loveys Smith jsmith@otonabeeconservation.com

#### **Quinte CA**

R.R. #2
2061 Old Highway #2
Belleville ON K8N 4Z2
Brad McNevin
bmcnevin@quinteconservation.ca

#### **Raisin Region CA**

PO Box 429 18045 County Road 2 Cornwall ON K6H 5T2 Richard Pilon richard.pilon@rrca.on.ca

#### Rideau Valley CA

Box 599 3889 Rideau Valley Dr. Manotick ON K4M 1A5 Sommer Casgrain-Robertson sommer.casgrain-robertson@rvca.ca



#### Saugeen Valley CA

R.R. #1 1078 Bruce Road #12, Box #150 Formosa ON N0G 1W0 Jennifer Stephens j.stephens@svca.on.ca

#### Sault Ste. Marie Region CA

1100 Fifth Line East Sault Ste. Marie ON P6A 6J8 Corrina Barrett cbarrett@ssmrca.ca

#### **South Nation River CA**

38 Victoria Street
P.O. Box 29
Finch ON K0C 1K0
Carl Bickerdike
cbickerdike@nation.on.ca

#### St. Clair Region CA

205 Mill Pond Crescent Strathroy ON N7G 3P9 Ken Phillips kphillips@scrca.on.ca

#### **Toronto and Region CA**

101 Exchange Avenue Vaughan ON L4K 5R6 John MacKenzie john.mackenzie@trca.ca

#### **Upper Thames River CA**

1424 Clarke Road London ON N5V 5B9 Tracey Annett annettt@thamesriver.on.ca Ministry of the Environment, Conservation and Parks

110 17<sup>th</sup> St. East Owen Sound, ON N4K 0A5 Tel': 519 371-2901 Fax: 519 371-2905 Ministère de l'Environnement, de la Protection de la nature et des Parcs

101 17ème rue est Owen Sound, ON N4K 0A5 Tél.: 519 371-2901 Téléc.: 519 371-2905



File: SI-HU-MT-540 Belgrave DWS

December 20, 2023

The Municipality of Morris-Turnberry 41342 Morris Road, PO Box 310 Brussels, ON NOG 1H0

Attention: Mr. Trevor Hallam

Chief Administrative Officer/Clerk

thallam@morristurnberry.ca

Dear Mr. Hallam:

#### Re: November 3, 2023 Inspection – Belgrave Drinking Water System

Enclosed is a copy of the inspection report prepared for the Belgrave Drinking Water System under the Ministry's focused inspection protocol to assess compliance with *Safe Drinking Water Act* legislation. The report is based on conditions encountered at the time of inspection, and subsequent follow-up.

Section 19 of the Safe Drinking Water Act (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in "Taking Care of Your Drinking Water: A guide for members of municipal council" found under "Resources" on the Drinking Water Ontario website at <a href="https://www.ontario.ca/drinkingwater">www.ontario.ca/drinkingwater</a>.

In order to measure individual inspection results, the Ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal/external risk experts. The Inspection Summary Rating Record (IRR), **included as Appendix C of the inspection report**, provides the Ministry, the system owner and the local Public Health Unit with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspectors' Annual Report.

Should you note ar	ny errors or omissions	or have any concerns	s, please contact n	ne at (519) 270-2103,
or John Ritchie at (	(519) 371-2901.			

Al Petersen
Provincial Officer
Drinking Water and Environmental Compliance Division,
Water Section, Owen Sound District Office
al.petersen@ontario.ca

ec: Michael Alcock, Director of Public Works, Mun. of Morris-Turnberry, <a href="mailto:malcock@morristurnberry.ca">malcock@morristurnberry.ca</a>
Steve Walmsley, Project Manager, Veolia Water, <a href="mailto:steven.walmsley@veolia.com">steven.walmsley@veolia.com</a>
Gary Nicholson, Overall Responsible Operator, Veolia Water, <a href="mailto:gary.nicholson@veolia.com">gary.nicholson@veolia.com</a>
Sarah Telford, QA and Compliance Specialist, Veolia Water, <a href="mailto:sarah.telford@veolia.com">sarah.telford@veolia.com</a>
Lori Holmes, Public Health Manager – Env. Health, Huron Perth Public Health, <a href="mailto:lholmes@huroncounty.ca">lholmes@huroncounty.ca</a>
Huron Perth Public Health, <a href="mailto:safewater@hpph.ca">safewater@hpph.ca</a>
Donna Clarkson, SWP Specialist, Maitland Valley Conservation Authority, c/o <a href="mailto:dclarkson@abca.ca">dclarkson@abca.ca</a>
John Ritchie, District Manager, MECP Owen Sound District, <a href="mailto:john.s.ritchie@ontario.ca">john.s.ritchie@ontario.ca</a>
File: SI-HU-MT 540 Belgrave Drinking Water System, Municipality of Morris-Turnberry. 2023/24.





BELGRAVE DRINKING WATER SYSTEM 28 MCCREA ST, MORRIS-TURNBERRY, ON, NOG 1E0

# INSPECTION REPORT

System Number: 220008257

Entity: MUNICIPALITY OF MORRIS-

**TURNBERRY** 

VEOLIA WATER CANADA INC.

Inspection Start Date: October 24, 2023
Inspection End Date: December 05, 2023

Inspected By: Al Petersen

Badge #: 587

Ministry of the Environment, Conservation and Parks

Ministère de l'Environnement, de la Protection de la nature et des Parcs



(signature)	



#### INTRODUCTION

## **Purpose**

The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices.

This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.

This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

#### Scope

This report is based on a focused inspection of a "large municipal residential system". Although the inspection involved fewer activities than those normally undertaken in a detailed inspection, it contained critical elements required to assess key compliance issues.

Specifically, this review includes an assessment of compliance / conformance in relation to the following:

- Drinking Water Systems Regulation (O. Reg. 170/03);
- Certification of Drinking-Water System Operators and Water Quality Analyst Regulation (O. Reg. 128/04) with respect to facility certification, operator licensing and operating standards;
- Drinking Water System Licence 247-101, Issue 4, dated March 3, 2022, related to selected requirements;
- Drinking Water Works Permit 247-201, Issue 4, dated March 3, 2022, related to installed works and selected requirements, and
- Ontario Drinking Water Quality Standards based on water quality data generated since the previous inspection.

The inspection was conducted on November 3, 2023, consisting of:

- A. A visual inspection of the well heads;
- B. A visual inspection of the treatment equipment, instrumentation, controls and alarms;
- C. A check of the most current operating logs and records, and for the availability of operating manuals, as-built drawings and other information;

**Event Number:** 1-189122296 Page **3** of **25** 



- D. SCADA views of current operating conditions for equipment status, operational readings, critical chlorine residual alarm settings;
- E. Collection of sampling results, logs and other documents;
- G. A staff interview, and
- H. Testing residual disinfectant from the point of entry to the distribution system and distribution system.

Follow-up assessment included a review of the collected sampling results and operational documents. The inspection covers the period from January 1, 2023 to October 31, 2023...

#### **Systems/Components**

The Belgrave Drinking Water System serves a population of approximately 300 within the community of Belgrave, and therefore falls into the "large municipal residential" category under O. Regulation 170/03. The community of Belgrave straddles London Road, the boundary between North Huron on the west, and Morris-Turnberry on the east. A larger portion of the distribution system supplies the part of Belgrave located in Morris-Turnberry, while a smaller portion supplies a subdivision in North Huron. The Belgrave Drinking Water System is owned by the Municipality of Morris-Turnberry, and is operated by Veolia Water Canada. The North Huron portion of the distribution system is owned by Morris-Turnberry under by-law agreement 36-2010, which also lays out the terms of water supplied to North Huron customers, capital costs and maintenance / operations. Private well supplies also exist within the community.

The system consists of two deep wells (the Jane Street Well and the McCrea Street Well), each equipped with submersible pumps with a separate discharge line routed to the treatment plant, also located on McCrea Street on a separate lot. Raw water flows are first individually metered and dosed with potassium permanganate, combined into a common header and then filtered through each of three greensand units for iron removal. The filter effluent is then metered with sodium hypochlorite for primary disinfection and discharged into a two-cell below ground reservoir / chlorine contact chamber. The reservoir cells are operated in parallel. Each cell is designed with a single-wall baffle and each flows into a shared high-lift pump well through a 200 mm valve. The configuration and valving permits the cells to be removed from service, and allows them to overflow one into the other, but does not permit normal in-series operation. The level in the reservoir is monitored by an ultrasonic level transmitter, which the SCADA system uses to control operation of the well pumps in order to keep it within its operating level set points. The chlorine dosing system also provides secondary disinfection.

Treated water is fed from the high-lift well into the distribution system via three equal capacity submersible high lift pumps and six 630 L hydropneumatic storage tanks to buffer system pressure during power transfer and control pressure fluctuations. The high-lift pumps feed the pressure tanks, which maintain distribution pressure. The distribution system, is not equipped with hydrants, but has several blow-offs for flushing.

**Event Number:** 1-189122296 Page **4** of **25** 



#### **NON-COMPLIANCE**

This should not be construed as a confirmation of full compliance with all potential applicable legal requirements. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

**Event Number:** 1-189122296 Page **5** of **25** 



#### **RECOMMENDATIONS**

This should not be construed as a confirmation of full conformance with all potential applicable BMPs. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

**Event Number:** 1-189122296 Page **6** of **25** 



#### **INSPECTION DETAILS**

This section includes all questions that were assessed during the inspection.

Ministry Program: DRINKING WATER | Regulated Activity: DW Municipal Residential

Question ID	DWMR1000000	Question Type	Information			
Legislative Requirement(s): Not Applicable						
Question: Does this drinking	• •					

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

This drinking water system provides for both primary and secondary disinfection and distribution of water.

Chlorine disinfection for a secure groundwater supply is provided, as described in the "Systems/Components" section of the report Introduction.

Question ID	DWMR1007000	Question Type	Legislative			
Legislative Requirement(s): SDWA   O. Reg. 170/03   1-2   (1);						
Question:	170/03   1-2   (1),					

#### Question:

Is the owner maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials?

# Compliance Response(s)/Corrective Action(s)/Observation(s):

The owner was maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials.

The Jane Street and McCrea Street wells are both located outside but shielded from the elements in locked "dog houses". At the Jane Street well, the enclosure sits atop a concrete pad which is sealed around the well casing. At the new McCrea Street well, the enclosure sits atop some concrete and brick slabs, set in place around the casing, and the casing appears to be surrounded by sealing material at the ground surface. The casings are greater than 40 cm above the ground surface and equipped with secure vermin-proof well caps.

The enclosures in which each of the wells sit, are each elevated a few inches above the surrounding ground. The land around each well slopes away from its respective enclosure.

Both wells were drilled using conventional rotary drilling method, but the Jane Steet well record does not disclose any information as to placement of its annular seal. The annulus of the new McCrea well was sealed with neat cement for the entire length of the casing, from the surface down to bedrock. Raw water microbiological results for samples collected from each of the wells during the inspection period revealed no detections of coliform bacteria.

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Question ID	DWMR1009000	Question Type	Legislative			
Legislative Requirement(s):						
SDWA   31   (1);						
_						

#### Question:

Are measures in place to protect the groundwater and/or GUDI source in accordance with any MDWL and DWWP issued under Part V of the SDWA?

## **Compliance Response(s)/Corrective Action(s)/Observation(s):**

Measures were in place to protect the groundwater and/or GUDI source in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.

Although they are not measures to directly protect the aquifer, the Drinking Water System Licence contains the following generic conditions:

- 10.1 Nothing in this licence or the drinking water works permit shall be read as to permit:
- 10.1.1 The discharge of a contaminant into the natural environment that causes or is likely to cause an adverse effect; or
- 10.1.2 The discharge of any material of any kind into or in any waters or on any shore or bank thereof or into or in any place that may impair the quality of the water of any waters.

  10.2 All reasonable steps shall be taken to minimize and ameliorate any adverse effect on the natural environment or impairment of the quality of water of any waters resulting from the operation of the drinking water system including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

  10.3 Fulfillment of one or more conditions imposed by this licence or the drinking water works permit does not eliminate the requirement to fulfill any other condition of this licence or the drinking water works permit

The Belgrave drinking water treatment system generates process wastes from greensand filter backwash operations. Settled backwash sludge contained in the solids holding tank is removed for off-site disposal at the nearby Wingham sewage lagoons in the Municipality of North Huron. The operating authority's Emergency Procedures standard procedure MT-OM-15 includes a section on responding to spills.

Measures consisting of development of a well inspection and maintenance plan are also specified in Drinking Water System Licence Condition 16.2 under Schedule B, as follows: 16.2 The operations and maintenance manual or manuals, shall include at a minimum:

- 16.2.8 An inspection schedule for all wells associated with the drinking water system, including all production wells, standby wells, test wells and monitoring wells;
- 16.2.9 Well inspection and maintenance procedures for the entire well structure of each well including all above and below grade well components; and
- 16.2.10 Remedial action plans for situations where an inspection indicates non-compliance with respect to regulatory requirements and/or risk to raw well water quality.

The operating manual for the site includes a document (standard procedure MT-OM-17) entitled "Belgrave Operations Manual - Well Inspection and Maintenance Plan" which includes weekly

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and periodic checks and monitoring for the drinking water system in general but includes additional inspections to be done at the well heads, including:

- A. Visual inspection items to conduct at each well visit, including ensuring the well cap is secure, the area is free from potential sources of contamination, and the areas directly around the casings are "sanitary".
- B. Reference to having a below grade internal visual well checks done, using a flashlight, whenever a well cap is removed. This includes checking the condition of the interior casing and electrical wiring.
- C. Formal inspection items to complete whenever a well pump is pulled from its well, done by a licenced well contractor, including confirming the integrity of the well cap, seals, vent and screen.
- D. A recommendation to conduct a video inspection of a well each time a well pump is pulled from the well. The recommendation includes internal items to inspect, such as casing integrity, checking for seeps and the integrity of seals around plumbing inlets to the casing.
- E. A requirement to disinfect the well and pump prior to returning it to reconnecting it to the treatment system, including sample collection for microbiological analysis.
- F. Reference to reviewing raw water microbiological quality, turbidity and well levels for changes, turbidity changes to determine the need to contact the owner and a licenced well contractor for investigation.

Question ID	DWMR1014000	Question Type	Legislative	
Legislative Requirement(s):				
SDWA   31   (1);				

#### Question:

Is there sufficient monitoring of flow as required by the MDWL or DWWP issued under Part V of the SDWA?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

There was sufficient monitoring of flow as required by the Municipal Drinking Water Licence or Drinking Water Works Permit issued under Part V of the SDWA.

Condition 2.1 of the Drinking Water System Licence requires the owner to continuously measure and record:

- 2.1.1 The flow rate and daily volume of treated water that flows from the treatment subsystem to the distribution system.
- 2.1.2 The flow rate and daily volume of water that flows into the treatment subsystem.

The treated flow meter, which is placed upstream of the Tee connection with the pressure tanks, essentially only shows positive flow when the high lift pumps are on for recharging the tanks. This equates to flow into the distribution system.

Both connected well flows and the treated water discharge flow are equipped with Endress & Hauser Promag magnetic type flow meters. Flow rates are displayed on control panels mounted near each meter and analog signals are transmitted from the SCADA PLC to a computer

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terminal within the control room where they are recorded for data storage and review. A review of data provided for the inspection review shows that treated and raw flow rates are recorded at least every four minutes.

Question ID	DWMR1016000	Question Type	Legislative	
Legislative Requirement(s):				
SDWA   31   (1);				

#### Question:

Is the owner in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the MDWL issued under Part V of the SDWA?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the Municipal Drinking Water Licence issued under Part V of the SDWA.

Condition 1.1 of Schedule C of the Drinking Water System Licence states that the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed 596 m3/d.

Condition 2.3 of Schedule C of the Drinking Water System Licence requires the recording of specified information if the maximum rated capacity is exceeded, including the volume of the exceedance, the time and date of the measurement, the reason for the exceedance, and the duration of exceedance.

According to continuous SCADA recording, during the period of inspection, the maximum day flow of treated water was 187.4 m3, or approximately 31.4 % of the rated capacity. The daily average flow rate to the distribution system for the same period was approximately 92 m3/d.

Question ID	DWMR1018000	Question Type	Legislative	
Legislative Requirement(s):				
SDWA   31   (1);				

#### Question:

Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.

Works found were consistent with those identified in the Drinking Water System Description outlined in Schedule A of the Drinking Water Works Permit (DWWP). No other changes to the drinking water system were identified from log book entries. Issues found during the last inspection, including with the greensand filter rinse decant tank unprotected floor drain, and the

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chlorine analyser drainage back to the decant tank, were addressed to eliminated potential sources of raw water contamination.

Question ID	DWMR1025000	<b>Question Type</b>	Legislative	
Legislative Requirement(s):				
SDWA   31   (1);				

#### Question:

Were all parts of the drinking water system that came in contact with drinking water (added, modified, replaced or extended) disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.

Subsequent to maintenance in September 2023, log entries show that the Jane St well was disinfected in accordance with AWWA procedure C654 - 'Standard for Disinfection of Wells". The well was sampled and tested for microbiological parameters, and field measurements were made of the raw water turbidity. The well was returned to service when the microbiological samples returned clear results.

Question ID	DWMR1023000	Question Type	Legislative	
Legislative Requirement(s):				
SDWA   O. Reg. 170/03   1-2   (2);				

#### Question:

Do records indicate that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a DWWP and/or MDWL issued under Part V of the SDWA at all times that water was being supplied to consumers?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under O. Reg. 170/03 or a Drinking Water Works Permit and/or Municipal Drinking Water Licence issued under Part V of the SDWA at all times that water was being supplied to consumers.

The Procedure for Disinfection of Drinking Water in Ontario states that where the drinking-water system obtains water from a raw water supply which is ground water, the treatment process must consist of disinfection which achieves an overall performance that provides at a minimum 2-log (99%) removal or inactivation of viruses before the water is delivered to the first consumer. Meeting this criteria is determined by the CT disinfection concept, which uses the combination of a disinfectant residual concentration (in mg/L) and the effective disinfectant contact time (in minutes), to quantify the capability of a chemical disinfection system to provide effective pathogen inactivation to the required level. These requirements are reflected in Schedule E of the most recently issued version of the Drinking Water System Licence.

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Operating logs and continuous trends from January 1, 2023 to October 31, 2023 were reviewed. No instances of inadequately disinfected water were identified. Anomalies in trended data appear, and were found to be, attributed to chlorine analyser maintenance, repairs and replacement.

Question ID	DWMR1024000	Question Type	Legislative	
Legislative Requirement(s):				
SDWA   O. Reg. 170/03   1-2   (2);				

#### Question:

Do records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated as required?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated so that at all times and all locations in the distribution system the chlorine residual was never less than 0.05 mg/l free or 0.25 mg/l combined.

A review of available data from January 1, 2023 to October 31, 2023, revealed that:

- 1. Samples from the distribution system showed that none of the 88 grab samples taken during routine bacteriological sampling had free chlorine residuals less than 0.05 mg/L.
- 2. Records of continuous trending for the distribution free chlorine analyser located at the Humphrey monitoring station on Jordan Drive, show adequate residuals at that location. Approximately 87 additional grab samples taken at the Humphrey monitoring station, for verification and comparison with the analyser, yielded adequate residuals.

Question ID	DWMR1033000	Question Type	Legislative	
Legislative Requirement(s):				
SDWA   O. Reg. 170/03   7-2   (3); SDWA   O. Reg. 170/03   7-2   (4);				
O				

#### Question:

Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

The secondary disinfectant residual was measured as required for the large municipal residential distribution system.

Logs show that distribution system free chlorine residuals were taken, measured and recorded continuously, in conjunction with sampling under O. Reg. 170/03 s. 6-4 (1) and (2), which requires continuous testing for secondary disinfection distribution free chlorine residual to be completed and recorded at least every hour. Sampling by continuous analyser at the Humphrey monitoring station was recorded every four minutes. During interruptions in recording due to analyser cleaning, the operator manually took and recorded free chlorine residuals approximately every five minutes in lieu.

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Question ID	DWMR1030000	Question Type	Legislative
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#### Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 7-2 | (1); SDWA | O. Reg. 170/03 | 7-2 | (2);

#### Question:

Is primary disinfection chlorine monitoring being conducted at a location approved by MDWL and/or DWWP issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

Primary disinfection chlorine monitoring was conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved.

Continuous chlorine analyser samples are obtained from the point of entry downstream of the chlorine contact reservoir consistent with the Ministry's Procedure for Disinfection of Drinking Water in Ontario. A one inch service line is Teed from the high-lift discharge header, supplying the treated sample tap. A one-quarter inch line, fed off this sample line, supplies the analyser.

Question ID	DWMR1035000	Question Type	Legislative
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#### Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10;

#### Question:

Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.

Continuous monitoring results are recorded on the SCADA computer and the operators review the trended display and daily summaries, log their reviews on a printed hardcopy of the summary review worksheet and usually note their completion of the reviews in the log sheets and logbook. A review of logsheets and the logbook revealed these checks were occurring at the required frequency during the period of review, with one exception. The trend review done on August 8, 2023 was conducted 14.2 hours past the required 72 hour timeframe, with the previous review having been conducted the afternoon of August 4, 2023.

The operating authority's procedure MT-OM-12 "Daily Checks" requires the operator to check the PLC history from the previous site visit (< 72 hours) on the digital screen located on the instrument control panel. Operators must be reminded to adhere to this requirement.

Question ID	DWMR1038000	Question Type	Legislative
Legislative Requirement(s):			

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SDWA | O. Reg. 170/03 | 6-5 | (1)1-4;

#### Question:

Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.

Specifications for the Hach CLF10sc analyser show that it has a continuous sample rate with a response time of 140 seconds or less for 90% change (T90) at a stable temperature and pH. Specifications for the Hach CL17 analyser show that it conducts one complete sample cycle producing a test result every 2.5 minutes.

Analyser signal results for CT free chlorine residual and distribution free chlorine residual are transmitted to the SCADA system with average, minimum and maximum values determined and recorded at least every four minutes.

Question ID	DWMR1037000	Question Type	Legislative
Question ib	D 111111 (1007 000	Question Type	Logiolative

#### **Legislative Requirement(s):**

SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

#### Question:

Are all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or MDWL or DWWP or order, equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

All continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.

Hach CLF10sc and CL17 continuous chlorine monitors measure free chlorine on the reservoir outlet line and in distribution system at the Humphrey monitoring station during the period of inspection review. Reservoir outlet analyser low and high chlorine alarm settings were 0.4 mg/L and 3.0 mg/L respectively, with a low operational warning alarm of 0.7 mg/L. Distribution analyser low and high chlorine alarm settings were 0.4 mg/l and 2.0 mg/L respectively.

Alarms are enunciated via a Verbatim dialer to the on-call operator's phone and then to a sequence of numbers in turn until the alarm is acknowledged. A site attendance is required to respond to the alarm and clear the dialer alarm or it repeats the dialing sequence again after one hour.

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Question ID	DWMR1040000	Question Type	Legislative
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#### Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10;

#### Question:

Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.

Operating logs show that the continuous chlorine analysers were serviced and cleaned on a regular basis. Routine checks of on-line instrument versus hand-held units are also done.

Question ID	DWMR1108000	Question Type	Legislative
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#### Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

#### Question:

Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by O. Reg. 170/03, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.

Log entries showed that alarms for prescribed alarm events were not triggered during the period of inspection review. However, the operator was alerted to a high chlorine alarm, triggered on May 5, 2023. The operator arrived on-site within 16 minutes of receiving the alarm and resolved the issue.

Question ID	DWMR1099000	Question Type	Information
Legislative Requirement(s):			
Not Applicable			

#### Question:

Do records show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03)?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

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Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03).

The following water quality was noted from the owner's results in samples collected from January 1, 2023 to October 31, 2023:

- (i) Available microbiological data from Belgrave drinking water system sampling during the review period show that microbiological quality consistently met the requirements of the Ontario Drinking Water Quality Standards. None of the 132 routine distribution and treated samples obtained yielded an adverse E-Coli or Total Coliform count.
- (ii) Two of the 88 raw water samples from the Jane and McCrae wells yielded detection of coliforms; both single coliform counts from the Jane well, taken on consecutive weeks.
- (iii) Trihalomethane samples from the distribution system yielded an average concentration of 0.0127 mg/L for the last four quarters of sampling, below the drinking water standard of 0.100 mg/L (moving annual average). The Technical Support Document for Ontario Drinking Water Quality Standards, Objectives and Guidelines indicates that trihalomethanes in drinking water are primarily produced by the reaction of chlorine and the naturally occurring organics (precursors) in the water.
- (iv) Quarterly samples for nitrates/nitrites were near detection limits, averaging 0.0155 mg/L in the last four quarters; less than the Ontario Drinking Water Quality Standard of 10 mg/L.
- (v) The May 11, 2020 sample for fluoride analysis yielded a result of 1.49 mg/L, just below the drinking water standard of 1.50 mg/L. Elevated fluoride concentrations are naturally occurring in groundwater in local geology.

Free chlorine residuals measured during treated and distribution water audit sampling were acceptable. Audit readings are found in Appendix B.

#### Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 10-2 | (1); SDWA | O. Reg. 170/03 | 10-2 | (2); SDWA | O. Reg. 170/03 | 10-2 | (3);

#### Question:

For LMR systems, are all microbiological water quality monitoring requirements for distribution samples being met?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a large municipal residential system were being met.

In addition to raw microbiological sampling, O. Regulation 170/03 requires the owner and operating authority to take a minimum of one sample per week and at least 8 samples per month, from the distribution system. All samples must be analysed for E. coli and total coliforms. In addition, at least 25% of the distribution microbiological samples must be analysed for heterotrophic plate count (HPC).

The owner surpassed minimum requirements. The distribution system was generally sampled

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by the operating authority at a minimum of two locations every week, from two separate sample stations, resulting in a minimum of eight samples per month. Half of the distribution samples taken were analysed for HPC.

Question ID	DWMR1083000	Question Type	Legislative
Legislative Requ	uirement(s):		
SDWA   O. Reg.	SDWA   O. Reg. 170/03   10-3;		

#### Question:

For LMR systems, are all microbiological water quality monitoring requirements for treated samples being met?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

All microbiological water quality monitoring requirements prescribed by legislation for treated samples were being met.

O. Regulation 170/03 also requires the owner and operating authority to take a minimum of one treated water sample per week and analyse it for E. coli, total coliforms and heterotrophic plate count (HPC).

Treated samples were taken each week.

Question ID	DWMR1096000	Question Type	Legislative
Legislative Requirement(s):			
SDWA   O. Reg.	170/03   6-3   (1);		

#### Question:

Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.

Question ID	DWMR1084000	<b>Question Type</b>	Legislative
Legislative Requirement(s):			
SDWA   O. Reg. 170/03   13-2;			
İ			

#### Question:

Are all inorganic water quality monitoring requirements prescribed by legislation conducted within the required frequency?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

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Provided that previous sample results haven't exceeded one-half maximum acceptable concentration (MAC) for any parameter under Schedule 23, O. Regulation 170/03 Schedule 13-2 requires that samples must be taken and analysed for Schedule 23 parameters every 36 months.

Samples for analysis of these parameters were taken January 27, 2020 and therefore were not required to be sampled within the period of inspection review.

Schedule 6-1.1 (7) states that for samples required to be taken every 36 months and tested for a parameter, the owner and the operating authority shall ensure that at least one sample that is taken during a 36-month period for the purpose of being tested for that parameter is taken not more than 60 days before or after the third anniversary of the day a sample was taken for that purpose in the previous 36-month period.

Question ID	DWMR1085000	Question Type	Legislative
Legislative Requirement(s):			

SDWA | O. Reg. 170/03 | 13-4 | (1); SDWA | O. Reg. 170/03 | 13-4 | (2); SDWA | O. Reg. 170/03 | 13-4 | (3);

#### Question:

Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

Provided that previous sample results haven't exceeded one-half maximum acceptable concentration (MAC) for any parameter under Schedule 24, O. Regulation 170/03 Schedule 13-4 requires that samples must be taken and analysed for Schedule 24 parameters every 36 months.

Samples for analysis of these parameters were taken January 27, 2020 and therefore were not required to be sampled within the period of inspection review.

Schedule 6-1.1 (7) states that for samples required to be taken every 36 months and tested for a parameter, the owner and the operating authority shall ensure that at least one sample that is taken during a 36-month period for the purpose of being tested for that parameter is taken not more than 60 days before or after the third anniversary of the day a sample was taken for that purpose in the previous 36-month period.

Question ID	DWMR1086000	<b>Question Type</b>	Legislative	
Legislative Requirement(s):				
SDWA   O. Reg. 170/03   13-6.1   (1); SDWA   O. Reg. 170/03   13-6.1   (2); SDWA   O. Reg.				
170/03   13-6.1   (3); SDWA   O. Reg. 170/03   13-6.1   (4); SDWA   O. Reg. 170/03   13-6.1				

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(5); SDWA | O. Reg. 170/03 | 13-6.1 | (6);

#### Question:

Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

All haloacetic acid water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.

As required under O. Regulation 170/03 Schedule 13-6.1, samples must be taken and analysed for haloacetic acids in every calendar quarter. Samples must be taken no less than 60 days and no greater than 120 days after the sample taken in the previous three-month period. Samples were taken as required, and within the prescribed time frame.

Question ID	DWMR1087000	Question Type	Legislative
	1 4/3		

#### Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-6 | (1); SDWA | O. Reg. 170/03 | 13-6 | (2); SDWA | O. Reg. 170/03 | 13-6 | (3); SDWA | O. Reg. 170/03 | 13-6 | (4); SDWA | O. Reg. 170/03 | 13-6 | (5); SDWA | O. Reg. 170/03 | 13-6 | (6);

#### Question:

Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.

As required under O. Regulation 170/03 Schedule 13-6, samples must be taken and analysed for Trihalomethanes in every calendar quarter. Samples must be taken no less than 60 days and no greater than 120 days after the sample taken in the previous three-month period. Samples were taken as required, and within the prescribed time frame.

Question ID	DWMR1088000	Question Type	Legislative
Legislative Requirement(s):			

#### SDWA | O. Reg. 170/03 | 13-7;

Question:

#### Question:

Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

As required under O. Regulation 170/03 Schedule 13-7, samples must be taken and analysed for nitrate and nitrite every 3 months. Sub-section 6-1.1(4) under Schedule 6 of O. Regulation

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170/03 requires that samples which must be taken every three months and tested for a parameter, must be taken at least 60 days and no longer than 120 days after a sample was taken for the previous three month period. Samples were taken and within the required time frame.

Question ID	DWMR1089000	Question Type	Legislative
Legislative Requ	uirement(s):		
SDWA   O. Reg. 170/03   13-8;			

#### Question:

Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

O. Regulation 170/03 Schedule 13-8 requires sampling and analysis of sodium every 60 months. A sample for analysis of sodium was taken January 31, 2023. The previous sodium sample was taken March 5, 2018.

Question ID	DWMR1090000	<b>Question Type</b>	Legislative
Legislative Requirement(s):			
SDWA   O. Reg. 170/03   13-9;			

#### Question:

Where fluoridation is not practiced, are all fluoride water quality monitoring requirements prescribed by legislation conducted within the required frequency?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

O. Regulation 170/03 Schedule 13-9 requires sampling and analysis of fluoride every 60 months. A sample for analysis of sodium was taken May 11, 2020 and therefore was not required to be sampled within the period of inspection review.

Question ID	DWMR1059000	Question Type	Legislative
Legislative Requ	uirement(s):		
SDWA   O. Reg. 128/04   28;			

#### Question:

Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

**Event Number:** 1-189122296 Page **20** of **25** 



The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.

A copy of the overall process schematic diagram for the Belgrave treatment system is available in the operations manual.

Detailed as-built drawings are also available, as discussed above. In addition to standard procedures, the operations manual contains an overview of the Belgrave Drinking Water System. The design engineer's operations manual contains unit operations descriptions in further detail.

An overall map of the distribution system and hardcopy as-built drawings provide operators with an identification of distribution system infrastructure.

Question ID	DWMR1060000	Question Type	Legislative
Legislative Requ	uirement(s):		
SDWA   31   (1);			

#### Question:

Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.

Condition 16.2 under Schedule B of the Drinking Water System licence includes the following conditions regarding procedures to be maintained in the operations manual:

- 16.2.1 The requirements of this licence and associated procedures;
- 16.2.2 The requirements of the drinking water works permit for the drinking water system;
- 16.2.3 A description of the processes used to achieve primary and secondary disinfection within the drinking water system, including where applicable:
- a) A copy of the CT calculations that were used as the basis for primary disinfection under worst case operating conditions; and
- b) The validated operating conditions for UV disinfection equipment, including a copy of the validation certificate;
- 16.2.4 Procedures for monitoring and recording the in-process parameters necessary for the control of any treatment subsystem and for assessing the performance of the drinking water system;
- 16.2.5 Procedures for the operation and maintenance of monitoring equipment;
- 16.2.6 Contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown;
- 16.2.7 Procedures for dealing with complaints related to the drinking water system, including the recording of the nature of the complaint and any investigation and corrective action taken in respect of the complaint;
- 16.2.8 An inspection schedule for all wells associated with the drinking water system, including all production wells, standby wells, test wells and monitoring wells;

**Event Number:** 1-189122296 Page **21** of **25** 



16.2.9 Well inspection and maintenance procedures for the entire well structure of each well including all above and below grade well components; and

16.2.10 Remedial action plans for situations where an inspection indicates noncompliance with respect to regulatory requirements and/or risk to raw well water quality.

A review of the available operating manual and standard operating procedures suggests that these conditions appear to be satisfied. The operations manual contains a procedure entitled: "MT-OM-02 Chlorine System and CT Value".

A separate Contingency Plan document contains a number of standard procedures for potential emergency situations or service disruptions plus listings of emergency contact numbers and a communications protocol.

An assessment of compliance with items 6.2.8 to 6.2.10 relating to well inspection schedule and maintenance procedures was discussed previously.

Question ID	DWMR1061000	<b>Question Type</b>	Legislative

#### Legislative Requirement(s):

SDWA | O. Reg. 128/04 | 27 | (1); SDWA | O. Reg. 128/04 | 27 | (2); SDWA | O. Reg. 128/04 | 27 | (3); SDWA | O. Reg. 128/04 | 27 | (4); SDWA | O. Reg. 128/04 | 27 | (5); SDWA | O. Reg. 128/04 | 27 | (6); SDWA | O. Reg. 128/04 | 27 | (7);

#### Question:

Are logbooks properly maintained and contain the required information?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

Logbooks were properly maintained and contained the required information.

Logs and records kept largely met the requirements under section 27 of O.Reg. 128/04.

Question ID	DWMR1062000	Question Type	Legislative		
Legislative Requirement(s):					
SDWA   O. Reg. 170/03   7-5;					

#### Question:

Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.

Free chlorine residual and other operational testing, such as turbidity and pH, conducted during regular compliance and operational sampling, was done by the operating authority's certified

**Event Number:** 1-189122296 Page **22** of **25** 



operators.

**Question ID** DWMR1071000 **BMP Question Type** 

#### Legislative Requirement(s):

Not Applicable

#### Question:

Has the owner provided security measures to protect components of the drinking water system?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

The owner had provided security measures to protect components of the drinking water system.

Both the Jane Street and McCrae Street wells are located in a lockable metal "dog houses". Both structures are fitted with padlocks.

The Belgrave reservoir and high lift pumphouse/motor control room is located within a brick building enclosure, equipped with lockable steel entry doors, intruder contact alarms and keycode access alarm. There are no windows within the high lift other than a security grade window in the control room. Reservoir access hatches are all located within the building enclosure.

Question ID	DWMR1073000	Question Type	Legislative		
Legislative Requirement(s):					
SDWA   O. Reg. 128/04   23   (1);					

#### Question:

Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

The overall responsible operator had been designated for each subsystem.

The communications protocol located in the site's Contingency Plan identifies the overall responsible operator (ORO) and ORO backup operators for the Belgrave system. The ORO has current WT class II and WDS class III certification, satisfying the class I water distribution and class I water treatment sub-system certifications for the drinking water system.

Question ID	DWMR1074000	<b>Question Type</b>	Legislative
Legislative Requision SDWA   O. Reg. 1	` '		

#### Question:

Have operators-in-charge been designated for all subsystems which comprise the drinking water system?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

**Event Number: 1-189122296** Page 23 of 25



Operators-in-charge had been designated for all subsystems which comprise the drinking water system.

The communications protocol located in the site's Contingency Plan similarly identifies the eligible operators in charge (OIC) for the system.

The operator in charge signs a designated field in the log book for the day, or is identified by the operator attending the site.

Question IDDWMR1075000Question TypeLegislativeLegislative Requirement(s):SDWA | O. Reg. 128/04 | 22;

#### Question:

Do all operators possess the required certification?

#### **Compliance Response(s)/Corrective Action(s)/Observation(s):**

All operators possessed the required certification.

A review of operational log and log sheet entries revealed that, during the inspection period, operators possessed certifications applicable to the type and level of Belgrave's drinking water sub-system classifications.

Question IDDWMR1076000Question TypeLegislativeLegislative Requirement(s):<br/>SDWA | O. Reg. 170/03 | 1-2 | (2);

#### Question:

Do only certified operators make adjustments to the treatment equipment?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

According to operating logs reviewed for the period assessed, only certified operators made adjustments to the treatment equipment.

 Question ID
 DWMR1117000

 Legislative Requirement(s):
 Question Type
 Information

Not Applicable

#### Question:

Are there any other DWS related items that should be recognized in this report?

#### Compliance Response(s)/Corrective Action(s)/Observation(s):

The following items are noted as being relevant to the Drinking Water System:

Under O. Regulation 170/03 Schedule 6-10. (1), a record is required to be made for every sample required by the Regulation. The February 28, 2023 chain of custody form for

**Event Number:** 1-189122296 Page **24** of **25** 



microbiological samples did not include a recording of free chlorine residuals tested at the same time the samples were taken. February 2023 log sheets included the results for the February 28, 2023 treated water and Humphrey sample station residuals, but not the residual from the Hamilton Rd sample station. Follow-up with the operator confirmed that the test results for all locations were included in his field diary, but were just not transferred into the chain of custody form. The operating authority was advised to include the field diary excerpt into the records for the drinking water system.

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## Ministry of the Environment, Conservation & Parks Drinking Water System Inspection Report Appendix A

Stakeholder Appendix		

# **Key Reference and Guidance Material for Municipal Residential Drinking Water Systems**

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles in the table below or use your web browser to search for their titles. Contact the Ministry if you need assistance or have questions at 1-866-793-2588 or waterforms@ontario.ca.

For more information on Ontario's drinking water visit www.ontario.ca/drinkingwater



PUBLICATION TITLE	PUBLICATION NUMBER
FORMS:	
Drinking Water System Profile Information	012-2149E
Laboratory Services Notification	012-2148E
Adverse Test Result Notification	012-4444E
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	Website
Procedure for Disinfection of Drinking Water in Ontario	Website
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	Website
Filtration Processes Technical Bulletin	Website
Ultraviolet Disinfection Technical Bulletin	Website
Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments	Website
Certification Guide for Operators and Water Quality Analysts	Website
Guide to Drinking Water Operator Training Requirements	9802E
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	Website
Drinking Water System Contact List	7128E01
Ontario's Drinking Water Quality Management Standard - Pocket Guide	Website
Watermain Disinfection Procedure	Website
List of Licensed Laboratories	Website





## Ministry of the Environment, Conservation & Parks Drinking Water System Inspection Report Appendix B

-	 	
MECP Audit Sample Results		

#### **Appendix**

#### **Ministry Audit Samples - Operational Results**

Sample Type	Location  Belgrave Drinking Water System	Date/Time Nov 3, 2023	Bacti Sample	Field Reading		Owner's Sample / Analyser Reading	
		,		Cl₂ mg/L	turb. NTU	Cl₂ mg/L	turb. NTU
Treated	Treated POE – main pumphouse	1:02 p.m.	N	1.40 free	-	1.40 free <sup>1</sup>	-
Distribution	Distr. @ Humphrey monitoring station	1:35 p.m.	N	1.24 free	-	1.25 free <sup>1</sup>	-

<sup>&</sup>lt;sup>1</sup> Continuous analyser reading – Free Chlorine



# Ministry of the Environment, Conservation & Parks Drinking Water System Inspection Report Appendix C

Inspection Rating Record		

#### Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2023-24)

**DWS Name:** BELGRAVE DRINKING WATER SYSTEM

**DWS Number:** 220008257

**DWS Owner:** MUNICIPALITY OF MORRIS-TURNBERRY

**Municipal Location:** MORRIS-TURNBERRY

Regulation: O.REG. 170/03

**DWS Category:** DW Municipal Residential

**Type of Inspection:** Focused **Inspection Date:** Oct-24-2023

Ministry Office: Owen Sound District Office

**Maximum Risk Rating: 454** 

Inspection Module	Non Compliance Risk (X out of Y)
Capacity Assessment	0/30
Certification and Training	0/42
Logbooks	0/18
Operations Manuals	0/28
Reporting & Corrective Actions	0/21
Source	0/14
Treatment Processes	0/189
Water Quality Monitoring	0/112
Overall - Calculated	0/454

Inspection Risk Rating: 0.00%

Final Inspection Rating: 100.00%

#### Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2023-24)

**DWS Name:** BELGRAVE DRINKING WATER SYSTEM

**DWS Number:** 220008257

**DWS Owner Name:** MUNICIPALITY OF MORRIS-TURNBERRY

Municipal Location: MORRIS-TURNBERRY

Regulation: O.REG. 170/03

**DWS Category:** DW Municipal Residential

**Type of Inspection:** Focused **Inspection Date:** Oct-24-2023

Ministry Office: Owen Sound District Office

All legislative requirements were met. No detailed rating scores.

**Maximum Question Rating: 454** 

Inspection Risk Rating: 0.00%

FINAL INSPECTION RATING: 100.00%



# Application of the risk methodology used for measuring municipal drinking water system inspection results

This document describes the risk rating methodology which has been applied to the findings of the Ministry's municipal residential drinking water system inspection results since fiscal year 2008-09.

The Ministry of the Environment (MOE) has a rigorous and comprehensive inspection program for municipal residential drinking water systems (MRDWS). Its objective is to determine the compliance of MRDWS with requirements under the *Safe Drinking Water Act* and associated regulations. It is the responsibility of the municipal residential drinking water system owner to ensure their drinking water systems are in compliance with all applicable legal requirements.

This document describes the risk rating methodology, which has been applied to the findings of the Ministry's MRDWS inspection results since fiscal year 2008-09. The primary goals of this assessment are to encourage ongoing improvement of these systems and to establish a way to measure this progress.

MOE reviews the risk rating methodology every three years to account for legislative and societal changes that affect acceptable risk levels. As a result of the most recent review, the methodology has been modified to present an improved metric for the evaluation of the risk/safety of MRDWS operations.

The Ministry's Municipal Residential Drinking Water Inspection Protocol contains up to 14 inspection modules and consists of approximately 120 regulatory questions. Those protocol questions are also linked to definitive guidance that ministry inspectors use when conducting MRDWS inspections. The questions address a wide range of regulatory issues, from administrative procedures to drinking water quality monitoring. Additionally, the inspection protocol contains a number of non-regulatory questions.

A team of drinking water specialists in the ministry have assessed each of the inspection protocol regulatory questions to determine the risk (not complying with the regulation) to the delivery of safe drinking water. This assessment was based on established provincial risk assessment principles, with each question receiving a risk rating referred to as the Question Risk Rating. Based on the number of areas where a system is deemed to be non-compliant during the inspection, and the significance of these areas to administrative, environmental, and health consequences, a risk-based inspection rating is calculated by the ministry for each drinking water system.

It is important to be aware that an inspection rating that is less than 100 per cent does not mean that the drinking water from the system is unsafe. It shows areas where a system's operation can improve. To that end, the ministry works with owners and operators of systems to make sure they know what they need to do to achieve full compliance.

The inspection rating reflects the inspection results of the specific drinking water system for the reporting year. Since the methodology is applied consistently over a period of years, it serves as a comparative measure both provincially and in relation to the individual system. Both the drinking water system and the public are able to track the performance over time, which encourages continuous improvement and allows systems to identify specific areas requiring attention.

The ministry's annual inspection program is an important aspect of our drinking water safety net. The ministry and its partners share a common commitment to excellence and we continue to work toward the goal of 100 per cent regulatory compliance.

#### **Determining Potential to Compromise the Delivery of Safe Water**

The risk management approach used for MRDWS is aligned with the Government of Ontario's Risk Management Framework. Risk management is a systematic approach to identifying potential hazards; understanding the likelihood and consequences of the hazards; and taking steps to reduce their risk if necessary and as appropriate.

The Risk Management Framework provides a formula to be used in the determination of risk:

Risk = Likelihood (of the consequence) × Consequence

Every regulatory question in the inspection protocol possesses a likelihood value (L) for an assigned consequence value (C) as described in Table 1 and Table 2.

Table 1:

Likelihood of Consequence Occurring	Likelihood Value
0% - 0.99% (Possible but Highly Unlikely)	<u>r</u> = 0
1 - 10% (Unlikely)	<u>L</u> = 1
11 - 49% (Possible)	L = 2
50 - 89% (Likely)	L = 3
90 - 100% (Almost Certain)	<u>L</u> = 4

#### Table 2:

Consequence	Consequence Value
Medium Administrative Consequence	<u>C</u> = 1
Major Administrative Consequence	C = 2
Minor Environmental Consequence	<u>C</u> = 3
Minor Health Consequence	<u>C</u> = 4
Medium Environmental Consequence	C = 5
Major Environmental Consequence	<u>C</u> = 6
Medium Health Consequence	C = 7
Major Health Consequence	C = 8

The consequence values (0 through 8) are selected to align with other risk-based programs and projects currently under development or in use within the ministry as outlined in Table 2.

The Question Risk Rating for each regulatory inspection question is derived from an evaluation of every identified consequence and its corresponding likelihood of

#### occurrence:

- All levels of consequence are evaluated for their potential to occur
- Greatest of all the combinations is selected.

The Question Risk Rating quantifies the risk of non-compliance of each question relative to the others. Questions with higher values are those with a potentially more significant impact on drinking water safety and a higher likelihood of occurrence. The highest possible value would be  $32 (4\times8)$  and the lowest would be  $0 (0\times1)$ .

Table 3 presents a sample question showing the risk rating determination process.

Table 3: Does the Operator in Charge ensure that the equand evaluated?  Risk = Likelihood × Consequence						
<u>C</u> =1	C=2	<u>C</u> =3	C=4			
Medium Administrative Consequence	Major Administrative Consequence	Minor Environmental Consequence	Minor Health Consequence			
L=4 (Almost Certain)	L=1 (Unlikely	L=2 (Possible)	L=3 (Likely)			
R=4	R=2	R=6	R=12			

#### **Application of the Methodology to Inspection Results**

Based on the results of a MRDWS inspection, an overall inspection risk rating is calculated. During an inspection, inspectors answer the questions that relate to regulatory compliance and input their responses as "yes", "no" or "not applicable" into the Ministry's Laboratory and Waterworks Inspection System (LWIS) database. A "no" response indicates non-compliance. The maximum number of regulatory questions asked by an inspector varies by: system (i.e., distribution, stand-alone), type of inspection (i.e., focused, detailed), and source type (i.e., groundwater, surface water).

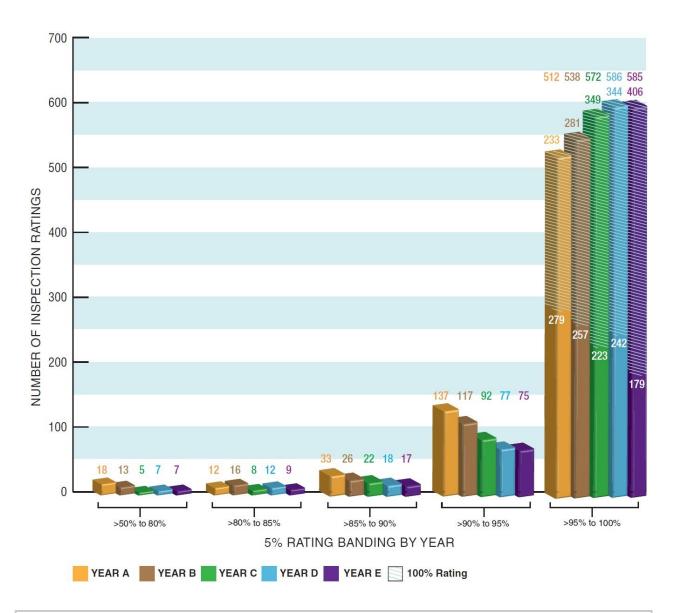
The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

#### Application of the Methodology for Public Reporting

The individual MRDWS Total Inspection Ratings are published with the ministry's Chief Drinking Water Inspector's Annual Report.

Figure 1 presents the distribution of MRDWS ratings for a sample of annual inspections. Individual drinking water systems can compare against all the other inspected facilities over a period of inspection years.

Figure 1: Year Over Year Distribution of MRDWS Ratings



Year Over Year Distribution of MRDWS Rating					
	Year A	Year B	Year C	Year D	Year E
>50% to 80%	18	13	5	7	7

	Year A	Year B	Year C	Year D	Year E
>80% to 85%	12	16	8	12	9
>85% to 90%	33	26	22	18	17
>90% to 95%	137	117	92	77	75
>95% to 100%	233	281	349	344	406

#### Reporting Results to MRDWS Owners/Operators

A summary of inspection findings for each system is generated in the form of an Inspection Rating Record (IRR). The findings are grouped into the 14 possible modules of the inspection protocol, which would provide the system owner/operator with information on the areas where they need to improve. The 14 modules are:

- 1. Source
- 2. Permit to Take Water
- 3. Capacity Assessment
- 4. Treatment Processes
- 5. Process Wastewater
- 6. Distribution System

- 7. Operations Manuals
- 8. Logbooks
- 9. Contingency and Emergency Planning
- 10. Consumer Relations
- 11. Certification and Training
- 12. Water Quality Monitoring
- 13. Reporting, Notification and Corrective Actions
- 14. Other Inspection Findings

For further information, please visit Drinking Water Ontario (https://www.ontario.ca/drinkingwater) .

Updated: June 24, 2021 Published: May 19, 2016

#### Belgrave Summary (with SCADA Data)

November, 2023

WELL FLOW McCrea	Max: Average: Total:	Flow, L/s 3.92 3.64	Volume, m3 71.42 58.08 1,742.44		Max: 81.72 Average: 69.57 Total: 2,087.16	m3 m3 m3	
Jane	Max:	1.54	35.55		SCADA On-Line Analy	zer	
	Average:	1.42	27.96		CL2 Residual (free):		
	Total:		838.70		Max:	1.51	mg/L
	2.22				Min:	1.25	mg/L
Combined:	Min:		65.70		Average:	1.39	mg/L
	Max:		106.97 86.04				
	Average: Total:		2,581.14				
-	Total		2,301.14				
TURBIDITIES		<b>McCrea</b>	<u>Jane</u>		Treated Water Grab F	Residuals:	
	Max:	0.14	0.17	NTU	CL2 Residual (free):		
	Min:	0.14	0.17	NTU	Max:	1.43	mg/L
	Average:	0.14	0.17	NTU	Min:	0.42	mg/L
# Grab	Samples:	1	1		Average:	1.32	mg/L
					# Grab Samples:	17	
CHEMICAL USE							
Chlorine:		<u>Pump # 1</u>	<u>Pump # 2</u>		CHLORINATION ON D		ON SYSTE
Total	Litres	0.00	78.95		Humphrey On-Line A	nalyzer:	
Total	U	0.00	5.13		CL2 Residual (free)	4.24	
Average, mg/L	Dosage	0.00	7.71		Max:	1.34	mg/L
					Min:	1.29	mg/L
Potassium Permang	ganate:				Average:	1.22	mg/L
Total	Litres	91.17	41.69				
Total	kg	1.82	0.83		Distribution Grab Res	siduals:	
Average, mg/L	Dosage	1.08	1.26		CL2 Residual (free)		
					Max:	1.36	mg/L
					Min:	1.15	mg/L
					Average:	1.25	mg/L
					# Grab Samples:	23	

#### **BACTERIOLOGICAL TESTING**

Treated Water to Distribution Jane Raw Water

Tests Done: 4 Tests Done: 4
E.Coli Found: 0 E.Coli Found: 0
Total Coliform Found: 0

Heterotrophic Plate Counts McCrea Raw Water

 Tests Done:
 4
 Tests Done:
 4

 Counts >500/mL:
 0
 E.Coli Found:
 0

Total Coliform Found: 0

**Distribution Water** 

Tests Done: 9
E.Coli Found: 0

Total Coliform Found: 0

**Heterotrophic Plate Counts** 

Tests Done: 4
Counts > 500/mL: 0

#### Operators that operated the system:

Gary NicholsonWater Treatment - Class 2July 31, 2025Ryan MackayWater Treatment - Class 1May 31, 2024Jeff JohnstonWater Treatment - Class 2April 30, 2024

Kole Kennedy Water Treatment -OIT

#### **Belgrave Summary (with SCADA Data)**

December, 2023

WELL FLOW McCrea	Max: Average: Total:	Flow, L/s 3.97 3.68	Volume, m3 68.09 54.62 1,693.12		Max: 70.53 Average: 60.10 Total: 1,863.05	m3 m3 m3	
Jane	Max: Average: Total:	1.54 1.43	26.54 20.98 650.35		SCADA On-Line Analy CL2 Residual (free): Max: Min:	<u>rzer</u> 1.53 1.25	mg/L mg/L
Combined:	Min: Max: Average: Total:		66.36 94.63 75.60 <b>2,343.47</b>		Average:	1.39	mg/L
TURBIDITIES	Max:	McCrea 0.20	<u>Jane</u> 0.17	NTU	Treated Water Grab F CL2 Residual (free):	Residuals:	
	Min: Average:	0.20 0.20	0.17 0.17	NTU NTU	Max: Min:	1.51 1.23	mg/L mg/L
# Gra	Grab Samples: 1 1		Average: # Grab Samples:	1.38 23	mg/L		
Chlorine:		Pump # 1	Pump # 2		CHLORINATION ON D	ISTRIBUTI	ON SYSTE
Total	Litres	0.00	87.72		<b>Humphrey On-Line A</b>	nalyzer:	
Total	0	0.00	5.71		CL2 Residual (free)		
Average, mg/l	. Dosage	0.00	8.49		Max:	1.42	mg/L
					Min:	1.33	mg/L
Potassium Perman	ganate:				Average:	1.24	mg/L
Total		92.71	35.19				
Total	kg	1.85	0.70		Distribution Grab Res	siduals:	
Average, mg/l	. Dosage	1.28	1.03		CL2 Residual (free)		
					Max:	1.35	mg/L
					Min:	1.15	mg/L
					Average:	1.25	mg/L
					# Grab Samples:	31	

#### **BACTERIOLOGICAL TESTING**

Treated Water to Distribution Jane Raw Water

Tests Done: 4 Tests Done: 4
E.Coli Found: 0 E.Coli Found: 0
Total Coliform Found: 0 Total Coliform Found: 0

Heterotrophic Plate Counts McCrea Raw Water

 Tests Done:
 4
 Tests Done:
 4

 Counts >500/mL:
 0
 E.Coli Found:
 0

Total Coliform Found:

**Distribution Water** 

Tests Done: 8
E.Coli Found: 0

Total Coliform Found: 0

**Heterotrophic Plate Counts** 

Tests Done: 4
Counts >500/mL: 0

#### Operators that operated the system:

Gary NicholsonWater Treatment - Class 2July 31, 2025Ryan MackayWater Treatment - Class 1May 31, 2024Jeff JohnstonWater Treatment - Class 2April 30, 2024

Kole Kennedy Water Treatment -OIT

# FINANCIAL INDICATOR REVIEW

(Based on 2022 Financial Information Return)

#### Morris-Turnberry M

Date Prepared: 18-Dec-23

MSO Office: Western

Prepared By: S. Haley

Tier LT

 2022 Households:
 1,337

 2022 Population
 3,590

 2023 MFCI Index
 3.5

Median Household Income: 70,208

Taxable Residential Assessment as a

% of Total Taxable Assessment: 54.4%

Own Purpose Taxation: 4,776,748

LOW

LOW

LOW

# SUSTAINABILITY INDICATORS

Indicator	Ranges		Actuals	South - LT -		Level of Risk
				Median	Average	
		2018	7.9%	7.6%	8.9%	LOW
	Low: < 10%	2019	7.4%	7.4%	8.4%	LOW
otal Taxes Receivable less Allowance for Uncollectibles as a % of Total Taxes Levied	Mod: 10% to 15%	2020	6.2%	7.2%	8.5%	LOW
Total Taxes Levied	High: > 15%	2021	4.4%	6.5%	7.3%	LOW
		2022	4.6%	6.7%	7.2%	LOW
		2018	1.3%	42.7%	41.6%	LOW
	Low: > -50%	2019	2.8%	45.7%	50.1%	LOW
Net Financial Assets or Net Debt as % of Own Source Revenues	Mod: -50% to -100%	2020	3.4%	55.0%	57.7%	LOW
	High: < -100%	2021	15.1%	53.6%	60.2%	LOW
		2022	67.9%	52.8%	57.0%	LOW
		2018	13.8%	64.0%	71.5%	MODERATE
	Low: > 20%	2019	30.2%	73.3%	78.8%	LOW
Total Reserves and Discretionary Reserve	Mod: 10% to 20%	2020	32.3%	82.4%	87.5%	LOW
Funds as a % of Municipal Expenses	High: < 10%	2021	44.3%	84.3%	90.7%	LOW
		2022	92.1%	81.7%	88.6%	LOW
		2018	-103.2%	344.1%	475.6%	HIGH
	Low: > 50%	2019	-127.4%	420.4%	541.9%	HIGH
Cash Ratio (Total Cash and Cash Equivalents as a % of Current	Mod: 50% to 25%	2020	105.4%	470.1%	550.2%	LOW
Liabilities)	High: < 25%	2021	302.0%	523.3%	592.1%	LOW
		2022	594.1%	432.1%	540.8%	LOW
FLE	XIBILITY IN	DICA	TORS			
		2018	1,6%	2.5%	3.1%	LOW
	Low: < 5%	2019	1.7%	2.6%	3.1%	LOW
ebt Servicing Cost as a % of Total Revenues (Less Donated TCAs)	Mod: 5% to 10%	2020	1.5%	2.2%	3.1%	LOW
- '	High: >10%	2021	1.8%	2.5%	2.9%	LOW
		2022	1.4%	2.2%	2.8%	LOW
		2018	46.1%	43.7%	46.0%	LOW
	Low: < 50%	2019	46.2%	43.9%	46.2%	LOW
losing Amortization Balance as a % of Total Cost of Capital Assets	Mod: 50% to 75%	2020	46.6%	45.2%	46.6%	LOW
(Asset Consumption Ratio)	High: > 75%	2021	45.2%	45.1%	46.9%	LOW
		2022	45.6%	45.2%	47.4%	LOW
		2018	3.3%	12.5%	13.9%	LOW
	Low: > -1%	2019	10.8%	18.7%	23.1%	LOW
Annual Surplus / (Deficit) as a % of Own Source Revenues	Mod: -1% to -30%	2020	8.1%	16 9%	17 1%	IOW

2020

2021

2022

8.1%

41.5%

54.2%

16.9%

17.1%

18.1%

17.1%

16.6%

17.7%

Mod: -1% to -30%

High: < -30%

The data and information contained in this document is for informational purposes only. It is not an opinion about a municipality and is not intended to be used on its own - it should be used in conjunction with other financial information and resources available. It may be used, for example, to support a variety of strategic and policy discussions.

#### FINANCIAL INDICATOR REVIEW

(Based on 2022 Financial Information Return)

Morris-Turnberry M

#### NOTES

Financial Information Returns ("FIRs") are a standard set of year-end reports submitted by municipalities to the Province which capture certain financial information. On an annual basis, Ministry staff prepare certain financial indicators for each municipality, based on the information contained in the FIRs. It is important to remember that these financial indicators provide a snapshot at a particular moment in time and should not be considered in isolation, but supported with other relevant information sources. In keeping with our Financial Information Return review process and follow-up, Ministry staff may routinely contact and discuss this information with municipal officials.

#### Supplementary Indicators of Sustainability and Flexibility

The following is a summary, adapted from the Chartered Professional Accountants of Canada Statement of Recommended Practice (SORP) 4.

- A government (including a municipality) may choose to report supplementary information on financial condition, to expand on and help explain the government's financial statements.
- Supplementary assessment of a government's financial condition needs to consider the elements of sustainability and flexibility.
- Sustainability in this context may be seen as the degree to which a municipality can maintain its existing financial obligations both in
  respect of its service commitments to the public and financial commitments to creditors, employees and others without inappropriately
  increasing the debt or tax burden relative to the economy within which it operates.
- Sustainability is an important element to include in an assessment of financial condition because it may help to describe a government's
  ability to manage its financial and service commitments and debt burden. It may also help to describe the impact that the level of debt
  could have on service provision.
- Flexibility is the degree to which a government can change its debt or tax level on the economy within which it operates to meet
  its existing financial obligations both in respect of its service commitments to the public and financial commitments to creditors,
  employees and others.
- Flexibility provides insights into how a government manages its finances. Increasing taxation or user fees may reduce a municipality's flexibility to respond when adverse circumstances develop if the municipality approaches the limit that citizens and businesses are willing to bear.
  - A municipality may temporarily use current borrowing, subject to the requirements set out in the Municipal Act to meet expenses and certain other amounts required in the year, until taxes are collected and other revenues are received. Municipal current borrowing cannot be carried over the long term or converted to long term borrowing except in very limited circumstances.
- For each element of financial condition, the report on indicators of financial condition should include municipality-specific indicators
  and municipality-related indicators. It may be useful to also include economy-wide information when discussing financial condition.

#### Additional Notes on what Financial Indicators may indicate:

Total Taxes Receivable less Allowance for Uncollectibles as a % of Total Taxes Levied - Shows how much of the taxes billed are not collected.

Net Financial Assets or Net Debt as % of Own Source Revenues - Indicates how much property tax and user fee revenue is servicing debt.

Reserves and Reserve Funds as a % of Municipal Expenses - Indicates how much money is set aside for future needs and contingencies.

Cash Ratio (Total Cash and Cash Equivalents as a % of Current Liabilities) - Indicates how much cash and liquid investments could be available to cover current obligations.

Debt Servicing Cost as a % of Total Revenues (Less Donated TCAs) - Indicates how much of each dollar raised in revenue is spent on paying down existing debt.

Closing Amortization Balance as a % or Total Cost of Capital Assets (Asset Consumption Ratio) - Indicates how much of the assets' life expectancy has been consumed.

Annual Surplus / (Deficit) (Less Donated TCAs) as a % of Own Source Revenues - Indicates the municipality's ability to cover its operational costs and have funds available for other purposes (e.g. reserves, debt repayment, etc.)

The Northern and Rural Municipal Fiscal Circumstances Index (MFCI) is used by the Ministry of Finance to calculate the "Northern and Rural Fiscal Circumstances Grant" aimed at northern as well as single and lower-tier rural municipalities. The index measures a municipality's fiscal circumstances. The MFCI is determined by six indicators: Weighted Assessment per Household, Median Household Income, Average Annual Change in Assessment (New Construction), Employment Rate, Ratio of Working Age to Dependent Population, and Per Cent of Population Above Low-Income Threshold. A lower MFCI corresponds to relatively positive fiscal circumstances, whereas a higher MFCI corresponds to more challenging fiscal circumstances. (Note: the MFCI index is only available for northern and rural municipalities)

# FINANCIAL INDICATOR REVIEW

(Based on 2022 Financial Information Return)

Morris-Turnberry M

#### CALCULATIONS

Total Taxes Rec, less Allowance for Uncollectibles as % of Total Taxes Levied

Net Financial Assets or Net Debt as % of Own Source Revenues

Total Reserves and Reserve Funds as a % of Municipal Expenses
Cash Ratio (Total Cash and Cash Equivalents as a % of Current Liabilities)
Debt Servicing Cost as a % of Total Revenues (Less Donated TCAs)
Closing Amortization Balance as a % or Total Cost of Capital Assets (Asset Consumption Ratio)

Annual Surplus / (Deficit) (Less Donated TCAs) as a % of Own Source Revenues

SLC 70 0699 01 / (SLC 26 9199 03 - SLC 72 2899 09)

SLC 70 9945 01 / (SLC 10 9910 01 - SLC 10 0699 01 - SLC 10 0899 01 - SLC 10 1098 01 - SLC 10 1099 01 - SLC 10 1811 01 - SLC 10 1812 01 - SLC 10 1813 01- SLC 10 1814 01 - SLC 10 1830 01 - SLC 10 1831 01 - SLC 12 1850 04)

(SLC 60 2099 02+SLC 60 2099 03)/(SLC 40 9910 11-SLC 12 9910 03-SLC 12 9910 07) SLC 70 0299 01 / (SLC 70 2099 01 + SLC 70 2299 01)

(SLC 74 3099 01 + SLC 74 3099 02) / (SLC 10 9910 01 - SLC 10 1831 01) SLC 51 9910 10 / SLC 51 9910 06

(SLC 10 2099 01 - SLC 10 1831 01) / (SLC 10 9910 01 - SLC 10 0699 01 -

SLC 10 0899 01 - SLC 10 1098 01 - SLC 10 1099 01 - SLC 10 1811 01 - SLC 10 1812 01 - SLC 10 1813 01- SLC 10 1814 01 - SLC 10 1830 01 - SLC 10 1831 01 - SLC 12 1850 04)

(Based on 2022 Financial Information Return)

Morris-Turnberry M

Huron Co

Date Prepared: MSO Office: Prepared By:

Printed: 18/12/2023

December 18, 2023 Western S. Haley

2022 FIR Load Status: Last Updated:

Accepted Clean
October 24, 2023

 2022 Households:
 1,337

 2022 Population:
 3,590

 2023 MFCI Index:
 \*8

 3.5

Median Household Income (2016): \*4 70,208
2023 Annual Repayment Limit: 1,188,910
Borrowing Capacity 7% over 10 yrs: 8,350,405

#### STATISTICAL INFORMATION

							2022 AVER/	GES I	FOR:				
	2018	2019	2020	2021	2022	Souti	n - LT - Counties - Rural		PROVINCE	22/21 %	21/20 %	20/19 %	19/18 %
	FY18	FY19	FY20	FY21	FY22								
Population *3	3,496	3,496	3,496	3,590	3,590		6,827		41,306	0.0%	2.7%	0.0%	0.0%
Households *3	1,317	1,322	1,322	1,318	1,337		3,435		16,643	1.4%	-0.3%	0.0%	0.4%
Municipal Expenses *7	\$ 5,425,811	\$ 5,566,311	\$ 5,586,066	\$ 5,308,071	\$ 5,788,863	\$	12,048,724	\$	143,260,127	9.1%	-5.0%	0.4%	2.6%
Own Source Revenues	\$ 4,398,222	\$ 4,683,170	\$ 4,868,450	\$ 5,275,007	\$ 5,612,487	\$	11,441,981	\$	115,916,793	6.4%	8.4%	4.0%	6.5%
Own Source Revenue per Household	\$ 3,340	\$ 3,542	\$ 3,683	\$ 4,002	\$ 4,198	\$	3,431	\$	4,030	4.9%	8.7%	4.0%	6.1%
Own Source Revenue as a % of Total Revenues (Less Donated TCAs)	76.6%	74.8%	78.7%	68.8%	63.1%		76.5%		72.2%	-8.4%	-12.6%	5.3%	-2.4%
Total Revenues	\$ 5,742,152	\$ 6,264,196	\$ 6,184,920	\$ 7,667,696	\$ 8,901,640	\$	14,757,137	\$	172,567,476	16.1%	24.0%	-1.3%	9.1%
Annual Repayment Limit	\$ 1,033,404	\$ 880,111	\$ 1,026,976	\$ 1,082,025	\$ 1,138,153	\$	2,811,714	\$	18,410,552	5.2%	5.4%	16.7%	-14.8%
Own Purpose Taxation	\$ 3,611,182	\$ 3,697,911	\$ 4,173,984	\$ 4,345,690	\$ 4,776,748	\$	7,010,475	\$	65,877,645	9.9%	4.1%	12.9%	2.4%
Direct Water Billings as % of Gross Water Expenditures	5.3%	3.4%	0.0%	3.9%	0.1%		72.8%		67.1%				
Taxable Res. Assessment as a % of Total Taxable Assessment	57.7%	55.5%	54.9%	54.7%	54.4%		81.2%		79.7%				

#### DISCOUNTED WEIGHTED ASSESSMENT \*1 (Source: Financial Information Return)

						ZUZZ AVERA	GES FUR:
	2018	2019	2020	2021	2022	South - LT - Counties - Rural	PROVINCE
Taxable	426,895,225	466,902,868	515,535,081	521,794,264	528,753,984	1,192,711,258	9,237,115,135
PIL	712,085	795,054	1,001,770	1,036,090	1,036,090	18,286,899	119,655,204
Total	427,607,310	467,697,921	516,536,851	522,830,354	529,790,074	1,210,998,158	9,356,770,339

(Based on 2022 Financial Information Return) Morris-Turnberry M **Huron Co** 

Date Prepared: MSO Office: December 18, 2023 Western S. Haley

2022 FIR Load Status:

Accepted Clean Last Updated: October 24, 2023 2022 Households: 1,337 2022 Population: 3,590 2023 MFCI Index: \*8 3.5

70,208 Median Household Income (2016): \*4 1,188,910 2023 Annual Repayment Limit: Borrowing Capacity 7% over 10 vrs: 8,350,405

Prepared By: S. Haley							202	3 MFCI Index:		3.5		Вс	orrow	ing Capacity 7% o	over 10 yrs:		8,350,405	
			R	ESIDEN	TIAL T	AXE	S											
												2022 AVER/	AGES	FOR:				
		2018		2019	2020			2021		2022	South	- LT - Counties - Rural		PROVINCE	22/21 %	21/20 %	20/19 %	19/18 %
# of Residential Households		1,243		1,247		1,250		1,257		1,257		3,518		11,878	0.0%	0.6%	0.2%	0.3%
Avg Municipal Property Taxes Per Avg Residential Household	\$	2,344	\$	2,331	\$	2,578	\$	2,665	\$	2,808	\$	2,597	\$	2,628	5.3%	3.4%	10.6%	-0.6%
Avg Total Property Taxes per Avg Residential Household	\$	2,653	\$	2,639	\$	2,897	\$	2,989	\$	3,132	\$	2,991	\$	3,018	4.8%	3.2%	9.8%	-0.5%
Avg Total Property Taxes per Avg Residential Household																		
as a % of Median Household Income (Tax Effort)		3.8%		3.8%	4.1%			4.3%		4.5%		4.2%		4.6%				
# of Residential Households Excluding Recreational Properties (Excl. RDUs)		1,222		1,226		1,229		1,234		1,234		2,873		11,414	0.0%	0.4%	0.2%	0.3%
Avg Municipal Property Taxes Per Avg Residential Household (Excl. RDUs)	\$	2,359		2,347		2,598	ς	2,685	Ś	2,829	5	2,579	s	2,606	5.3%	3.4%	10.7%	-0.5%
Avg Total Property Taxes per Avg Residential Household (Excl. RDUs)	\$	2,670		2,657		2,918		3,012	\$	3,155		2,969		2,989	4.8%	3.2%	9.8%	-0.5%
Avg Total Property Taxes per Avg Residential Household (Excl. RDUs)		,	•	,		,		- , -	·	,	·	,		,				
as a % of Median Household Income (Tax Effort)		3.8%		3.8%	4.2%			4.3%		4.5%		4.2%		4.5%				
D. D	ESIDEN	TIAL T	АХ	RATE	S *2 (Sour	ce: Fi	nancia	al Informati	on Re	turn)								
			A A						on ite									
		2018		2019	2020			2021		2022					22/21 %			
Lower / Single-Tier General Rate		0.0079644		0.0074139		077124		0.0078634		0.0084372					7.3%	2.0%	4.0%	-6.9%
Upper-Tier General Rate		0.0047851		0.0046423		045702		0.0046056		0.0047037					2.1%	0.8%	-1.6%	-3.0%
Education Rate		0.0017000		0.0016100		015300		0.0015300		0.0015300					0.0%	0.0%	-5.0%	-5.3%
			Т	AXES	RECEIV	ABL	E											
												2022 AVER/	AGES	FOR:				
		2018		2019	2020			2021		2022	South	- LT - Counties - Rural		PROVINCE	22/21 %	21/20 %	20/19 %	19/18 %
Total Taxes Receivable less Allowance for Uncollectibles	\$	524,833	Ś	512,558		70,897		341,414	\$	387,751	S	966,349	Ś	4,636,533	13.6%	-27.5%	-8.1%	-2.3%
Total Taxes Rec. less Allowance for Uncollectibles as % of Total Taxes Levied	7	7.9%	_	7.4%	6.2%		7	4.4%	Ť	4.6%	Ť	7.2%	Ť	7.9%	.5.5/0	27.1370	511,0	2.570
Current Year Taxes Receivable as % of Total Taxes Receivable		58.2%		70.1%	62.5%			71.3%		82.5%		68.7%		63.5%				
Working & Contingency Reserves and Discretionary Reserve Funds as % of Current Yr Taxes Rec.		6.6%		39.0%	42.2%			69.0%		287.2%		275.4%		380.0%				
Previous and Prior Years Taxes Receivable as % of Total Taxes Receivable		35.8%		24.7%	32.1%			23.2%		14.4%		22.5%		26.6%				

(Based on 2022 Financial Information Return) Morris-Turnberry M

**Huron Co** 

Date Prepared: MSO Office: Prepared By:

Printed: 18/12/2023

December 18, 2023 Western S. Haley

2022 FIR Load Status:

Last Updated: October 24, 2023

Accepted Clean

1,337 2022 Households: 3,590 2022 Population: 2023 MFCI Index: \*8 3.5

Median Household Income (2016): \*4 70,208 1,188,910 2023 Annual Repayment Limit: Borrowing Capacity 7% over 10 yrs: 8,350,405

				G R	RANT	S											
												2022 AVER	AGES FOR:				
		2018		2019		2020		2021		2022	Sout	h - LT - Counties - Rural	PROVINCE	22/21 %	21/20 %	20/19 %	19/18 %
Total Unconditional Grants	\$	665,700	\$	957,373	\$	588,400	\$	492,791	\$	385,000	\$	986,864	\$ 4,384,309	-21.9%	-16.2%	-38.5%	43.8%
Ontario Municipal Partnership Fund	\$	665,700	\$	581,900	\$	508,600	\$	442,500	\$	385,000	\$	972,360	\$ 1,122,354	-13.0%	-13.0%	-12.6%	-12.6%
As % of Municipal Expenses		12.3%		10.5%		9.1%		8.3%		6.7%		9.2%	8.2%				
Other	\$	-	\$	375,473	\$	79,800	\$	50,291	\$	-	\$	14,504	\$ 3,261,955	-100.0%	-37.0%	-78.7%	0.0%
Total Ontario Conditional Grants	\$	325,351	\$	86,935	\$	287,985	\$	802,087	\$	717,544	\$	953,762	\$ 27,861,950	-10.5%	178.5%	231.3%	-73.3%
As a % of Municipal Expenses		6.0%		1.6%		5.2%		15.1%		12.4%		8.1%	14.0%				
Total Ontario Conditional and Unconditional Grants																	
As a % of Municipal Expenses		18.3%		18.8%		15.7%		24.4%		19.0%		16.1%	22.5%				
				COV	/ID -	1 9											
COVID-19 Municipal Operating Funding Allocations - Actual								2020		2021		TOTAL					
- Phase 1 Allocation							\$	79,800									
- Phase 2 Application Based Allocation							\$	-									
- Phase 2 2021 Allocation									\$	19,000							
2021 Provincial COVID-19 Recovery Funding for Municipalities									\$	26,291							
Total COVID-19 Municipal Operating Funding							\$	79,800	\$	45,291	\$	125,091					
COVID-19 Municipal Funding - Amounts Recognized						2020		2021		2022		TOTAL					
Safe Restart Agreement - Municipal Operating Funding					\$	79,800	\$	45,291	\$	-	\$	125,091					
Provincial COVID-19 Recovery Funding for Municipalities						,,,,,,	\$	-	\$		\$	-	* Note: Because a mur	nicipality has re	ecognized a	ll of their	funding,
TOTAL COVID-19 MUNICIPAL OPERATING FUNDING RECOGNIZED					s	79,800	\$	45,291	\$	-	\$	125,091	does not necessarily i			all of their	funding.
								Fu	unding	not recognized:	\$	-	Some may still be in a	i reserve / rese	rve fund.		
Safe Restart Agreement - Public Transit Funding					\$		c		\$		\$						
Social Services Relief Fund (SSRF)					\$			-	\$		\$	-					
Social Selvices Nellei Fullu (SSNF)					ş	•	Ş	-	ş	-	ş	-					
						2020		2021		2022							
Total COVID-19 Expenses as reported on SLC 42 6009 01					\$	8,678	\$	36,467	\$	10,225							
			T	OTAL D	EBT	BURD	ΕN										

							2022 AVER	AGES I	FOR:				
	2018	2019	2020	2021	2022	South	n - LT - Counties - Rural		PROVINCE	22/21 %	21/20 %	20/19 %	19/18 %
Total Debt Burden	\$ 886,486	\$ 849,911	\$ 1,664,476	\$ 1,573,258	\$ 1,492,830	\$	3,711,214	\$	69,959,372	-5.1%	-5.5%	95.8%	-4.1%
Per Household	\$ 673	\$ 643	\$ 1,259	\$ 1,194	\$ 1,117	\$	1,172	\$	1,448	-6.5%	-5.2%	95.8%	-4.5%
Debt Servicing Cost	\$ 89,374	\$ 104,610	\$ 91,841	\$ 141,540	\$ 128,086	\$	460,402	\$	6,744,958	-9.5%	54.1%	-12.2%	17.0%

(Based on 2022 Financial Information Return)

Morris-Turnberry M

Huron Co

Date Prepared: MSO Office: Prepared By:	December 18, 2023 Western S. Haley	2022 FIR Load Status: Last Updated:	Accepted Clea October 24, 20						2022 Households: 2022 Population: 2023 MFCI Index: *8	1,337 3,590 3.5		202	ousehold In 3 Annual Re ng Capacity	epayment L	mit:		70,208 1,188,910 8,350,405	
Per Household			\$	68 \$		79 \$		69 \$	107	\$ 96	\$ 13	3 \$	19	2 -10	.8%	54.6%	-12.2%	16.6%
As a % of Municipal Expenses			1.6%		1.9%		1.6%		2.7%	2.2%	3.4%		3.7%					
As a % of Own Purpose Taxation			2.5%		2.8%		2.2%		3.3%	2.7%	6.4%		7.1%					
As a % of Own Source Revenue			2.0%		2.2%		1.9%		2.7%	2.3%	3.7%		4.3%					
As a % of Total Revenues (Less Donated TCAs)			1.6%		1.7%		1.5%		1.8%	1.4%	2.8%		3.1%					
Debt Service Coverage Ratio (Target: Ratio >= 2)			12		14		15		22	32	34		36					

(Based on 2022 Financial Information Return)

Morris-Turnberry M

Huron Co

MSO Office:

Closing Amortization Balance as a % of Total Cost of Capital Assets (Asset Consumption Ratio)

December 18, 2023 Western

2022 FIR Load Status: Last Updated:

Accepted Clean
October 24, 2023

46.1%

46.2%

2022 Households: 1,337 2022 Population: 3,590 2023 MFCI Index: \*8 3.5 

 Median Household Income (2016): \*4
 70,208

 2023 Annual Repayment Limit:
 1,188,910

 Borrowing Capacity 7% over 10 yrs:
 8,350,405

Prepared By: S. Haley						2023 MFCI Index: *	8	3.5		В	orrov	wing Capacity 7%	over 10 yrs:		8,350,405	
	LIAB	ILITI	E S (Includ	ling Post-l	mployr	nent Benefits)										
										2022 AVER	RAGES	FOR:				
	2018		2019	2020		2021		2022	South	- LT - Counties - Rural		PROVINCE	22/21 %	21/20 %	20/19 %	19/18
Temp. Loans for Current Purposes as % of Municipal Expenses	0.0%		0.0%	0.0%		0.0%		0.0%		0.3%		0.4%	22/21/0	21/20 %	20/17/0	17710
Post-Employment Benefits	\$	- \$		\$	- S		\$		\$	154,270	S	28,105,362	0.0%	0.0%	0.0%	0.0%
Total Reserves and Reserve Funds for Post-Employment Benefits	\$	- \$		\$	- \$		\$		\$	35,002		5,714,151	0.0%	0.0%	0.0%	0.0%
	RI	SERV	/ES AND	RESE	RVE	FUNDS										
										2022 AVER	RAGES	FOR:				
	2018		2019	2020		2021		2022	South	- LT - Counties - Rural		PROVINCE	22/21 %	21/20 %	20/19 %	19/18 :
Total Reserves	\$ 750	,305 \$	1,679,219	\$ 1,8	04,428 \$	2,353,213	\$	5,331,408	\$	6,987,791	\$	41,337,402	126.6%	30.4%	7.5%	123.8
Total Discretionary Reserve Funds	\$	- \$		\$	- \$		\$	-	\$	3,990,870	\$	52,411,103	0.0%	0.0%	0.0%	0.0%
Total Reserves and Discretionary Reserve Funds	\$ 750	,305 \$	1,679,219	\$ 1,8	04,428 \$	2,353,213	\$	5,331,408	\$	10,978,660	\$	93,748,505	126.6%	30.4%	7.5%	123.8
Per Household	\$	570 \$	1,270	\$	1,365 \$	1,785	\$	3,988	\$	3,277	\$	3,563	123.3%	30.8%	7.5%	123.0
As a % of Total Taxes Receivable	143.0%		327.6%	383.2%		689.3%		1375.0%		1103.3%		1260.5%				
As a % of Municipal Expenses	13.8%		30.2%	32.3%		44.3%		92.1%		88.6%		76.7%				
As a % of Own Purpose Taxation	20.8%		45.4%	43.2%		54.2%		111.6%		152.7%		140.3%				
			FINANCI	AL AS	SETS	_						_				
										2022 AVER	RAGES	FOR:				
	2018		2019	2020		2021		2022	South	- LT - Counties - Rural		PROVINCE				
Net Financial Assets or Net Debt as a % of Total Revenues (Less Donated TCAs)	1.0%		2.1%	2.7%		10.4%		42.8%		44.9%		42.2%				
Net Financial Assets or Net Debt as % of Own Source Revenues	1.3%		2.8%	3.4%		15.1%		67.9%		57.0%		59.3%				
Net Working Capital as a % of Municipal Expenses	14.2%		11.4%	30.0%		45.8%		92.9%		96.7%		77.1%				
Net Book Value of Capital Assets as a % of Cost of Capital Assets	52.1%		52.0%	51.5%		53.1%		54.0%		53.6%		54.4%				
Asset Sustainability Ratio (Target: > 90%)	314.6%		158.7%	143.7%		288.3%		232.7%		181.1%		191.4%				

46.6%

45.2%

45.6%

47.4%

47.0%

(Based on 2022 Financial Information Return) Morris-Turnberry M

**Huron Co** 

Date Prepared: MSO Office: Prepared By:

Printed: 18/12/2023

December 18, 2023 Western S. Haley

2022 FIR Load Status:

Accepted Clean Last Updated: October 24, 2023

1,337 2022 Households: 3,590 2022 Population: 2023 MFCI Index: \*8 3.5

Median Household Income (2016): \*4 70,208 1,188,910 2023 Annual Repayment Limit: Borrowing Capacity 7% over 10 yrs: 8,350,405

2022 AVERACES FOR

2022 AVERAGES FOR:

#### SURPLUS / DEFICIT

							ZUZZ AVEK	AGES	ruk;				
	2018	2019	2020	2021	2022	Sout	h - LT - Counties - Rural		PROVINCE	22/21 %	21/20 %	20/19 %	19/18 %
Annual Surplus / (Deficit) (Less Donated TCAs)	\$ 145,757	\$ 506,806	\$ 394,380	\$ 2,187,973	\$ 3,043,278	\$	2,352,105	\$	22,224,530	39.1%	454.8%	-22.2%	247.7%
Annual Surplus / (Deficit) (Less Donated TCAs) Adjusted for Ontario Budget Reg. 284/09)	\$ 968,564	\$ 1,374,588	\$ 1,349,668	\$ 2,996,157	\$ 3,939,488	\$	4,291,192	\$	37,414,066	31.5%	122.0%	-1.8%	41.9%
Annual Surplus / (Deficit) (Less Donated TCAs) as a % of Own Source Revenues	3.3%	10.8%	8.1%	41.5%	54.2%		17.7%		20.7%				
Current Ratio (Target: >= 100%)	249.6%	229.5%	490.4%	516.3%	789.1%		711.0%		628.6%				

# OTHER INDICATORS

	2018	2019	2020	2021	2022	South - LT - Counties - Rural	PROVINCE
Rates Coverage Ratio (Target: >=40%)	73.5%	76.2%	78.0%	90.6%	88.5%	78.5%	73.2%
Cash Ratio (Total Cash and Cash Equivalents as a % of Current Liabilities)	-103.2%	-127.4%	105.4%	302.0%	594.1%	540.78%	460.27%
Operating Balance as a % of Total Revenues (Less Donated TCAs)*5	2.7%	8.1%	6.4%	28.5%	34.2%	13.9%	14.6%
Cumulative Annual Growth Rate *6	-1.6%	2.2%	-1.0%	10.8%	11.8%	-0.7%	-0.4%
Interest Payments as a % of Total Revenues (Less Donated TCAs)	0.9%	1.1%	0.9%	0.7%	0.5%	0.7%	0.7%

(Based on 2022 Financial Information Return)

Morris-Turnberry M

Huron Co

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MSO Office:

Prepared By:

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 1,337

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 2023 MFCI Index:
 \*8

 3.5

Median Household Income (2016): 4 70,208
2023 Annual Repayment Limit: 1,188,910
Borrowing Capacity 7% over 10 yrs: 8,350,405

#### VULNERABILITY MEASURES

							2022 AVER/	AGES	FOR:				
	2018	2019	2020	2021	2022	Sout	h - LT - Counties - Rural		PROVINCE				
Own Source Revenue as a % of Total Revenues (Less Donated TCAs)	76.6%	74.8%	78.7%	68.8%	63.1%		76.5%		72.2%	-8.4%	-12.6%	5.3%	-2.4%
Own Source Revenue per Household	\$ 3,340	\$ 3,542	\$ 3,683	\$ 4,002	\$ 4,198	\$	3,431	\$	4,030	4.9%	8.7%	4.0%	6.1%
Avg Municipal Property Taxes Per Avg Residential Household	\$ 2,344	\$ 2,331	\$ 2,578	\$ 2,665	\$ 2,808	\$	2,597	\$	2,628	5.3%	3.4%	10.6%	-0.6%
as a % of Median Household Income (Tax Effort)	3.8%	3.8%	4.1%	4.3%	4.5%		4.2%		4.6%				

#### SUPPLEMENTARY INDICATORS OF SUSTAINABILITY, FLEXIBILITY AND VULNERABILITY

The following is a summary, adapted from the Chartered Professional Accountants of Canada Statement of Recommended Practice (SORP) 4:

- A government (including a municipality) may choose to report supplementary information on financial condition, to expand on and help explain the government's financial statements.
- Supplementary assessment of a government's financial condition needs to consider, at a minimum, the elements of sustainability, flexibility and vulnerability.
- Vulnerability in this context may be seen as the degree to which a municipality is dependent on sources of funding outside its control or influence or is exposed to risks that could impair its ability to meet its existing financial obligations both in respect of its service commitments to the public and financial commitments to creditors, employees and others.
- Vulnerability is an important element of financial condition because it provides insights into a municipality's reliance on funding sources outside its direct control or influence and its exposure to risks.
   A municipality whose vulnerability is relatively low has greater control over its financial condition.
- For each element of financial condition, the report on indicators of financial condition should include municipality-specific indicators and municipality-related indicators. It may be useful to also include economy-wide information when discussing financial condition.

#### ADDITIONAL NOTES ON WHAT FINANCIAL MEASURES MAY INDICATE:

#### Own Source Revenue as a % of Total Revenues (Less TCAs)

Indicates the extent to which a municipality has a high proportion of revenues for its own sources, reducing its impact to a change in transfers from other levels of government.

#### Own Source Revenue per Household

Indicates the demand for resources and the municipality's ability and willingness to provide resources.

#### Average Municipal Property Taxes per Average Residential Household

Indicates the level of taxes on residential households for municipal purposes.

#### Average Municipal Property Taxes per Average Residential Household as a % of Average Household Income

Indicates the portion of a ratepayer's income used to pay municipal property taxes.

(Based on 2022 Financial Information Return)

Morris-Turnberry M

Huron Co

Date Prepared: MSO Office: Prepared By: December 18, 2023 Western S. Haley

2023

2022 FIR Load Status: Last Updated:

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October 24, 2023

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 2022 Population:
 3,590

 2023 MFCI Index:
 \*8

 3.5

 Median Household Income (2016): '4
 70,208

 2023 Annual Repayment Limit:
 1,188,910

 Borrowing Capacity 7% over 10 yrs:
 8,350,405

The data and information contained in this document is for informational purposes only. Any use of the data and information in this document should be done by qualified individuals.

This information is not intended to be used on its own and should be used in conjunction with other financial information and resources available.

#### NOTES

- 1\* 2018, 2019, 2020, 2021 and 2022 assessment uses phase-in assessment based on 2016 property values.
- 2\* Average tax rates are calculated where necessary when amalgamations occur.
- 3\* Household and Population data are as reported by the municipality on Schedule 02 of the FIR.
- 4\* Median Household Income Source: Ministry of Finance Statistics Canada's measure of median income for all private households in 2015.
- 5\* Total Revenues include revenues from other municipalities.
- 6\* The Cumulative Annual Growth Rate has been measured over a three year period. Infrastructure Ontario uses a five year period.
- 7\* Total Municipal Expenses exclude amounts for other municipalities
- 8\* MFCI index Source: Ministry of Finance (2022 OMPF Calculation). This index is available for northern and rural municipalities only.

#### NUMBER OF MUNICIPALITIES IN COMPARISON GROUPS

	South - LT - Counties -Rural	Province
2018	148	444
2019	148	444
2020	148	441
2021	145	434
2022	113	360

(Based on 2022 Financial Information Return)

Morris-Turnberry M

Huron Co

Date Prepared: MSO Office: Prepared By: December 18, 2023 Western S. Haley

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 Median Household Income (2016): \*4
 70,208

 2023 Annual Repayment Limit:
 1,188,910

 Borrowing Capacity 7% over 10 yrs:
 8,350,405

#### CALCULATIONS

STATISTICAL INFORMATION

Population \*3
Households \*3

Municipal Expenses \*7

Own Source Revenues

Own Source Revenue per Household

Own Source Revenue as a % of Total Revenues (Less Donated TCAs)

**Total Revenues** 

Annual Repayment Limit

Own Purpose Taxation

Direct Water Billings as % of Gross Water Expenditures

Taxable Res. Assessment as a % of Total Taxable Assessment

SLC 02 0041 01 SLC 02 0040 01

SLC 40 9910 11 - SLC 12 9910 03 - SLC 12 9910 07

SLC 10 9910 01 - SLC 10 0699 01 - SLC 10 0899 01 - SLC 10 1098 01 - SLC 10 1099 01 - SLC 10 1811 01 - SLC 10 1812 01 - SLC 10 1813 01

- SLC 10 1814 01 - SLC 10 1830 01 - SLC 10 1831 01 - SLC 12 1850 04

Own Source Revenues / SLC 02 0040 01

Own Source Revenues / (SLC 10 9910 01 - SLC 10 1831 01)

SLC 10 9910 01

The annual repayment limit is calculated annually as per Ontario regulation 403/02. To view the full calculation of the annual repayment limit, please go to the FIR website.

https://efis.fma.csc.gov.on.ca/fir/ViewARL.htm

ARLs for all municipalities (except the City of Toronto) are posted here as they are made available.

SLC 10 0299 01

(SLC 12 0831 04 + SLC 12 0832 04) / (SLC 40 0831 11 + SLC 40 0832 11)

SLC 26 0010 17 / SLC 26 9199 17

#### DISCOUNTED WEIGHTED ASSESSMENT \*1 (Source: Financial Information Return)

 Taxable
 SLC 26 9199 17

 PIL
 SLC 26 9299 17

Total SLC 26 9199 17 + SLC 26 9299 17

#### RESIDENTIAL TAXES

# of Residential Households

Avg Municipal Property Taxes Per Avg Residential Household
Avg Total Property Taxes per Avg Residential Household

Avg Total Property Taxes per Avg Residential Household

as a % of Median Household Income (Tax Effort)

# of Residential Households Excluding Recreational Properties (Excl. RDUs)

 $\label{eq:continuous} \textbf{Avg Municipal Property Taxes Per Avg Residential Household (Excl. RDUs)}$ 

Avg Total Property Taxes per Avg Residential Household (Excl. RDUs)
Avg Total Property Taxes per Avg Residential Household (Excl. RDUs)

as a % of Median Household Income (Tax Effort)

Residential CVA and corresponding household counts are provided by OPTA (excludes the City of Toronto). Residential assessment includes:

Single Family, 2 - 6 Units, Farm Residential and Recreational (where included). Note: does not include vacant land.

If labeled (Excl. RDUs) Recreational units are excluded.

An average household assessment is calculated by taking the sum of the CVA for these residential groups divided by the corresponding households.

An estimated tax rate for each tier (i.e. lower tier, upper tier and school) is applied to the average household assessment to calculate the averages taxes per household by tier.

(the estimated tax rates are provided by OPTA).

(Based on 2022 Financial Information Return)

Morris-Turnberry M

Huron Co

Date Prepared: MSO Office: Prepared By: December 18, 2023 Western

S. Haley

2022 FIR Load Status: Last Updated:

Accepted Clean
October 24, 2023

 2022 Households:
 1,337

 2022 Population:
 3,590

 2023 MFCI Index:
 \*8

 3.5

Median Household Income (2016): \*470,2082023 Annual Repayment Limit:1,188,910Borrowing Capacity 7% over 10 yrs:8,350,405

#### RESIDENTIAL TAX RATES\*2 (Source: Financial Information Return)

Lower / Single-Tier General Rate
Upper-Tier General Rate
Education Rate

SLC 22 0010 12 / SLC 22 0010 16 SLC 22 0010 13 / SLC 22 0010 16 SLC 22 0010 14 / SLC 22 0010 16

#### TAXES RECEIVABLE

Total Taxes Receivable less Allowance for Uncollectibles

Total Taxes Rec. less Allowance for Uncollectibles as % of Total Taxes Levied

Current Year Taxes Receivable as % of Total Taxes Receivable
Working Fund Reserves & Contingency Funds as % of Current Yr Taxes Rec.

Previous and Prior Years Taxes Receivable as % of Total Taxes Receivable

SLC 70 0699 01 SLC 70 0699 01 / (SLC 26 9199 03 - SLC 72 2899 09)

SLC 70 0610 01 / (SLC 70 0690 01 + SLC 70 0699 01) (SLC 60 5010 02 + SLC 60 5020 03) / SLC 70 0610 01

(SLC 70 0620 01 + SLC 70 0630 01) / (SLC 70 0699 01 + SLC 70 0690 01)

#### GRANTS

**Total Unconditional Grants** 

Ontario Municipal Partnership Fund As % of Municipal Expenses

Other

Total Ontario Conditional Grants
As a % of Municipal Expenses

Total Ontario Conditional and Unconditional Grants

As a % of Municipal Expenses

SLC 10 0699 01 SLC 10 0620 02

SLC 10 0620 01 / (SLC 40 9910 11 - SLC 12 9910 03 - SLC 12 9910 07)

SLC 10 0699 01 - SLC 10 0620 01 SLC 10 0810 01 + SLC 10 0815 01

(SLC 10 0810 01 + SLC 10 0815 01) / (SLC 40 9910 11 - SLC 12 9910 03 - SLC 12 9910 07)

(SLC 10 0699 01 + SLC 10 0810 01 + SLC 10 0815 01) / (SLC 40 9910 11 - SLC 12 9910 03 - SLC 12 9910 07)

#### COVID - 19

#### COVID-19 Municipal Operating Funding Allocations - Actual

- Phase 1 Allocation

- Phase 2 Application Based Allocation

- Phase 2 2021 Allocation

2021 Provincial COVID-19 Recovery Funding for Municipalities

**Total COVID-19 Municipal Operating Funding** 

#### COVID-19 Municipal Funding - Amounts Recognized

Safe Restart Agreement - Municipal Operating Funding
Provincial COVID-19 Recovery Funding for Municipalities
TOTAL COVID-19 MUNICIPAL OPERATING FUNDING RECOGNIZED

TOTAL COVID-17 MONICH AL OF ENATING FORDING RECOGNIZ

Funding not recognized:

Printed: 18/12/2023

Safe Restart Agreement - Public Transit Funding Social Services Relief Fund (SSRF)

Total COVID-19 Expenses as reported on SLC 42 6009 01

Phase 1 Allocations - Actual

Phase 2 Application Based Allocations - Actual

Phase 2 2021 Allocations - Actual

2021 Provincial COVID-19 Recovery Funding for Municipalities Allocations - Actual

Phase 1 Allocations + Phase 2 Application Based Allocations + Phase 2 2021 Allocations

+ 2021 Provincial COVID-19 Recovery Funding for Municipalities Allocations

SLC 10 0626 01

SLC 10 0629 01

SLC 10 0626 01 (FY20) + SLC 10 0626 01 (FY21) + SLC 10 0629 01 (FY21)

Total COVID-19 Municipal Operating Funding - Total COVID-19 Municipal Operating Funding Recognized

SLC 10 0627 01 SLC 10 0628 01

SLC 42 6009 01

# TOTAL DEBT BURDEN

Total Debt Burden SLC 74 9910 01

Per Household SLC 74 9910 01 / SLC 02 0040 01

Ministry of Municipal Affairs and Housing

10 of 12

(Based on 2022 Financial Information Return)

# Morris-Turnberry M **Huron Co**

Date Prepared: MSO Office: Prepared By:

December 18, 2023 Western S. Haley

2022 FIR Load Status:

Accepted Clean Last Updated: October 24, 2023 2022 Households: 1,337 2022 Population: 3,590 2023 MFCI Index: \*8 3.5

70,208 Median Household Income (2016): \*4 1,188,910 2023 Annual Repayment Limit: 8,350,405 Borrowing Capacity 7% over 10 yrs:

**Debt Servicing Cost** 

Per Household

As a % of Municipal Expenses As a % of Own Purpose Taxation

As a % of Own Source Revenue

Printed: 18/12/2023

As a % of Total Revenues (Less Donated TCAs) Debt Service Coverage Ratio (Target: Ratio >= 2)

SLC 74 3099 01 + SLC 74 3099 02

(SLC 74 3099 01 + SLC 74 3099 02) / SLC 02 0040 01

(SLC 74 3099 01 + SLC 74 3099 02) / (SLC 40 9910 11 - SLC 12 9910 03 - SLC 12 9910 07)

(SLC 74 3099 01 + SLC 74 3099 02) / SLC 10 0299 01

(SLC 74 3099 01 + SLC 74 3099 02) / (SLC 10 9910 01 - SLC 10 0699 01 - SLC 10 0899 01 - SLC 10 1098 01 - SLC 10 1099 01 - SLC 10 1811 01 - SLC 10 1812 01 - SLC 10 1813 01

- SLC 10 1814 01 - SLC 10 1830 01 - SLC 10 1831 01 - SLC 12 1850 04) (SLC 74 3099 01 + SLC 74 3099 02) / (SLC 10 9910 01 - SLC 10 1831 01)

(SLC 10 9910 01 - SLC 40 9910 11 + SLC 40 9910 02 + SLC 40 9910 16) / (SLC 74 3099 01 + SLC 74 3099 02)

(Based on 2022 Financial Information Return) Morris-Turnberry M

**Huron Co** 

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70,208 Median Household Income (2016): \* 1,188,910 2023 Annual Repayment Limit: 8,350,405 Borrowing Capacity 7% over 10 yrs:

#### LIABILITIES (Including Post-Employment Benefits)

Temp. Loans for Current Purposes as % of Municipal Expenses SLC 70 2010 01 / (SLC 40 9910 11 - SLC 12 9910 03 - SLC 12 9910 07)

Post-Employment Benefits SLC 70 2899 01

SLC 60 5060 02 + SLC 60 5060 03 + SLC 60 5070 02 + SLC 60 5070 03 + SLC 60 5080 02 + SLC 60 5080 03 + SLC 60 5090 02 + SLC 60 5090 03 Total Reserves and Reserve Funds for Post-Employment Benefits

#### RESERVES AND RESERVE FUNDS

**Total Reserves** SLC 60 2099 03 **Total Discretionary Reserve Funds** SLC 60 2099 02

SLC 60 2099 02 + SLC 60 2099 03 Total Reserves and Discretionary Reserve Funds

Per Household (SLC 60 2099 02 + SLC 60 2099 03) / SLC 02 0040 01

As a % of Total Taxes Receivable (SLC 60 2099 02 + SLC 60 2099 03) / (SLC 70 0699 01 + SLC 70 0690 01)

As a % of Municipal Expenses (SLC 60 2099 02 + SLC 60 2099 03) / (SLC 40 9910 11 - SLC 12 9910 03 - SLC 12 9910 07) As a % of Own Purpose Taxation (SLC 60 2099 02 + SLC 60 2099 03) / SLC 20 0299 01

#### FINANCIAL ASSETS

Net Financial Assets or Net Debt as a % of Total Revenues (Less Donated TCAs) SLC 70 9945 01 / (SLC 10 9910 01 - SLC 10 1831 01)

SLC 70 9945 01 / (SLC 10 9910 01 - SLC 10 0699 01 - SLC 10 0899 01 - SLC 10 1098 01 - SLC 10 1098 01 - SLC 10 1099 01 - SLC 10 1811 01 - SLC 10 1812 01 - SLC 10 1813 01 - SLC 10 1814 01 - SLC 10 1830 01 -Net Financial Assets or Net Debt as % of Own Source Revenues

SLC 10 1831 01 - SLC 12 1850 04)

Net Working Capital as a % of Municipal Expenses (SLC 70 0299 02 + SLC 70 0499 01 + SLC 70 0699 01 + SLC 70 0830 01 + SLC 70 0835 01 + SLC 70 6250 01 + SLC 70 6260 01 + SLC 70 2010 01 + SLC 70 2299 01)

/ (SLC 40 9910 11 - SLC 12 9910 03 - SLC 12 9910 07)

Net Book Value of Capital Assets as a % of Cost of Capital Assets (SLC 70 6210 01 - SLC 51 2005 11 - SLC 51 2205 11) / (SLC 51 9910 06 - SLC 51 2005 11 - SLC 51 2205 11)

Asset Sustainability Ratio (Target: > 90%) SLC 51 9910 03 / SLC 51 9910 08 SLC 51 9910 10 / SLC 51 9910 06

Closing Amortization Balance as a % of Total Cost of Capital Assets (Asset Consumption Ratio)

Cash Ratio (Total Cash and Cash Equivalents as a % of Current Liabilities)

Operating Balance as a % of Total Revenues (Less Donated TCAs)\*5

Interest Payments as a % of Total Revenues (Less Donated TCAs)

Current Ratio (Target: >= 100%)

Cumulative Annual Growth Rate \*6

#### SURPLUS / DEFICIT

Annual Surplus / (Deficit) (Less Donated TCAs) SLC 10 2099 01 - SLC 10 1831 01

SLC 10 2099 01 - SLC 10 1831 01 + SLC 40 9910 16 + (SLC 70 2799 01 (CY) - SLC 70 2799 01 (PY)) + (SLC 70 2899 01 (CY) - SLC 70 2899 01 (PY)) - SLC 74 3099 01 Annual Surplus / (Deficit) (Less Donated TCAs) Adjusted for Ontario Budget Reg. 284/09)

(CY = CURRENT YEAR, PY - PREVIOUS YEAR)

(SLC 10 2099 01 - SLC 10 1831 01) / (SLC 10 9910 01 - SLC 10 0699 01 - SLC 10 0899 01 -Annual Surplus / (Deficit) (Less Donated TCAs) as a % of Own Source Revenues

SLC 10 1098 01 - SLC 10 1099 01 - SLC 10 1811 01 - SLC 10 1812 01 - SLC 10 1813 01- SLC 10 1814 01

- SLC 10 1830 01 - SLC 10 1831 01 - SLC 12 1850 04)

(SLC 70 9930 01 - SLC 70 0829 01 - SLC 70 0845 01 - SLC 70 0898 01) / (SLC 70 2099 01 + SLC 70 2299 01)

#### OTHER INDICATORS

Rates Coverage Ratio (Target: >=40%) (SLC 10 0299 01 + SLC 10 1299 01 + SLC 10 1880 01 + SLC 10 1885 01) / SLC 40 9910 01

SLC 70 0299 01 / (SLC 70 2099 01 + SLC 70 2299 01)

(SLC 10 9910 01 - SLC 40 9910 07) / (SLC 10 9910 01 - SLC 10 1831 01)

((SLC 10 9910 01 (CY) / SLC 10 9910 01 (CY - 3) ^ (1/3) - 1) - ((SLC 40 9910 07 (CY) / SLC 40 9910 07 (CY -3) ^ (1/3) - 1)

SLC 74 2099 02 / (SLC 10 9910 01 - SLC 10 1831 01)



1078 Bruce Road 12 | P.O. Box 150 | Formosa ON Canada | NOG 1W0 | 519-364-1255 www.saugeenconservation.ca publicinfo@svca.on.ca

January 2, 2024

Municipality of Morris-Turnberry RR#4 Brussels, ON NOG 1H0

Attn: CAO/Clerk

Re: Reporting of Remuneration & Expenses

Dear Sir/Madam:

As required by the *Municipal Act*, 2001 Section 284 (3), the following is a statement of remuneration and expenses paid during the year 2023 to the Authority Member appointed to the Saugeen Valley Conservation Authority by your municipality.

Director Name	Per Diem	Mileage	Total Paid
Niesen, Mike	\$ 825.00	\$ 66.56	\$ 891.56

Yours sincerely,

Laura Mosa

Laura Molson, Manager, Corporate Services

Cc: Municipal Treasurer, SVCA Director(s)



# HURON COUNTY COMMUNITY SAFETY AND WELL-BEING PLAN OVERSIGHT COMMITTEE

# MINUTES - November 28, 2023 (VIA ZOOM)

**IN ATTENDANCE**: Anita Snobelen, Marg Anderson, Michaela Johnston, Ric McBurney, Shannon de Vries, Kristin Crane, Catherine Hardman, Dana Bozzato, Rodney Philips, Katrina Clarke, Heather Mackenzie-Card, DC Jason Younan, Deb Logue, Brad McRoberts, Sharen Zinn, Stacey Jeffrey, Kaitie Westrbook, Rodney Phillips, Tara Boreham, Kaitie Westbrook, Lynn Higgs, Dr. Miriam Klassen, Barb Leavitt, Corey Allison, Laura Grant.

#### 1) Welcome to Guests

#### 2) Approval of Minutes of September 25, 2023

MOVED by: M. Anderson SECONDED by: B. McRoberts

That the Minutes of September 25, 2023 be adopted as presented

**CARRIED** 

#### 3) Re-Orientation

M. Johnston reviewed a powerpoint presentation (attached) with the Committee outlining the overall structure and roles of the Oversight Committee, Working Group and Municipal Implementation Teams or Coordinator.

MOVED by: S. Jeffery

SECONDED by: R. McBurney

That the Re-Orientation presentation be received.

**CARRIED** 

#### 4) OMSSA Update by M. Johnston re Other CSWB Plans and Status

M. Johnston noted that Huron County is already ahead of many other municipalities regarding the work being done with respect to the identified priority areas.

#### 5) Update re Proposed Community Safety and Well Being Plan Website

M. Johnston noted that the Working Group will be selecting a website creator and host at their next meeting on November 30, 2023. It is hoped that a stand-alone website will be operational at the end of January or early February 2024.

#### 6) Moving Forward – Action Plan for Oversight Committee

a. Identification of Campaigns for each Priority Area

The municipalities will be asked to participate in a minimum of 4 campaigns in 2024. One in each quarter that correspond to the 4 priority areas. Municipalities are also encouraged to participate in additional campaigns as the correspond to the priority areas and national or local campaigns (i.e. 16 Days of Activism in November and December, during the 'Housing and Homelessness' quarterly campaign).

It is noted that some municipalities may have differing capabilities and resources available to participate in every campaign, however, a commitment to at least 4 campaigns will be recommended to ensure County-wide messaging can be achieved at least quarterly.

After discussion, campaigns for each quarter of 2024 were identified and ad hoc committees were established for each campaign. The Ad hoc committees are tasked with identifying and gathering messaging and recommendations for the implementation teams at the lower-tier municipalities to use and share at a community level.

January - March 2024: Mental Health and Addictions

Ad Hoc Committee: C. Hardman

D. Bozzatto

R. Phillips

L. Higgs

K. Westbrook

April – June 2024: Domestic and Family Violence

Ad Hoc Committee: K. Clarke

D. Logue

C. Allison

July - September 2024: Community Security

Ad Hoc Committee: M. Johnston

J. Younan or delegate

H. Mackenzie-Card

D. Logue

October - December 2024: Housing and Homelessness

Ad Hoc Committee: K. Crane

C. Hardman

R. Phillips

L. Higgs

MOVED by: Brad McRoberts SECONDED by: Sharon Zinn

That the campaigns for 2024 be set as follows: 1<sup>st</sup> quarter, Mental Health and Addictions; 2<sup>nd</sup> quarter, Domestic and Family Violence; 3<sup>rd</sup> quarter, Community Security; 4<sup>th</sup> quarter, Housing and Homelessness.

**CARRIED** 

#### b. Public Education about the Community Safety and Well Being Plan

M. Johnston suggested that the public education piece regarding the Community Safety and Well Being Plan (where to find information, what it is, updates and reports) would be better held at the Working Group level. She will ask the Working Group to form an Ad Hoc Committee to establish this campaign at their next meeting.

#### c. Identification of Indicators for each Priority Area

Each Ad Hoc Committee is also asked to identify 3-5 indicators to use for their priority area and where that information can be obtained.

As a result, the selection of indicators for the Priority Areas will be made at the January 2024 meeting of the Oversight Committee.

#### Suggested Format:

Indicator	Baseline (most recent findings)	Year, source, level of geography, location	Responsibility

#### d. Identification of Gaps in the Priority Areas

Gaps will be identified at a later date once the campaigns and indicators have been established.

#### e. Social Media Calendar for Internal Use

M. Johnston requested that all members of the Oversight Committee ask their various organizations, action tables and committees to forward to her any social media content so that the Working Group may consolidate the information into a shared social media calendar. This allows all municipalities to share the same messaging throughout the County, and also to notify the public of the various events and important dates throughout the year.

#### 7) Education Sub-Committee – Notes from October 27<sup>th</sup> Meeting

To be reviewed at the January 2024 meeting.

#### 8) Budget Review for 2024

A proposed budget for 2024 campaign initiatives was presented by M. Johnston. A. Snobelen proposed that this proposed budget be provided to the Working Group in the form of a letter.

M. Anderson asked Councillors and municipal representatives to advise if they would like a delegation to speak to their respective Council regarding the CSWB Plan in the next couple of months to assist with the budget request.

#### 9) Next meeting

The next meeting of the Oversight Committee will be held the first week in January 2024 in order to finalize the first campaign and to select indicators for the 4 priority areas. M. Johnston is to send out a doodle poll to set the date and time.

# 10) Adjournment

MOVED by: B. McRoberts SECONDED by: C. Hardman

That the meeting be adjourned at 11:39 a.m.

**CARRIED** 



## **Coalition for Huron Injury Prevention: CHIP**

Wednesday, December 13, 2023 Meeting Minutes 9:30am – 12:00 noon

#### **In Person Meeting**

Minute Taker: MTO/ Sean Wraight

In Attendance: Wayne Forster, Greg Lamport, Ric McBurney, Sean Wraight, Imran Khalid, Laura Edgar,

Gloria Wilbee, Jodi Snell

Regrets: Craig Soldan

#### 1. Welcome and call to order by Chair

Ric McBurney acted as interim chair.

#### 2. Agenda

2.1 Additions to the Agenda – Winter Driving Preparedness

2.2 Adoption of the Agenda

Motion to adopt Agenda: Wayne Forster Seconded: Gloria Wilbee Disposition: Carried

- 3. Review of Minutes of April Meeting
- 3.1 Additions/Revisions
- 3.2 Approval of Minutes

Motion to approve Minutes: Sean Wraight Seconded: Jodie Snell Disposition: Carried

#### 4. Financial Reports and Updates (HPPH)

The balance is \$6,359.26 – Cost of Road Safety Audit Course forthcoming for Imran

Motion to approve: Wayne Forster Seconded: Gloria Wilbee Disposition: Carried

#### 5. **Business Arising**

#### 5.1 Terms of Reference (Currently being reviewed for concurrency.

- Laura Edgar (HPPH) shared she anticipated HPPH's capacity to organize/host meetings would be continue and be held quarterly. The group felt this frequency made sense in our current context. Laura assured the group HPPH would continue its commitment to Road Safety. This despite layoffs and reorg at public health. Layoffs have occurred with some managed through attrition and retirement options by some.
- We confirmed a tentative quarterly schedule of March, June, September and December.
- Terms of Reference will be reflective of new strategies to incorporate subcommittee work to make the most of any forthcoming initiatives or projects.



- Additional discussion around inviting EMS representation at the committee table.
- Imran suggested we consider others such as his Traffic Technologist. Consideration should also be given to having an Insurance Company be considered. He was also favourable to subcommittee efforts for priority topic work for CHIP and expanding membership.
- Laura cited TIRF's recent Impaired Driving and Road Safety resources could be helpful to our efforts.

#### 5.2 Road Safety Audit Course Update - Imran.

- For understanding, this type of audit would be similar to a Health and Safety Audit that some may have experience with.
- The Road Safety Audit a great tool developed in Australia. Now engrained into the culture there very successfully it would be a good thing to adopt a similar approach here. "Another tool in the toolbox

#### 5.3 Goderich Community Safety Day – McKay Centre – November 8, 2023 Sean

Sean was involved to organize this day with Senior Centre Leaders and the local Alzheimers Organization to hold an event for Community Safety Awareness. Representatives from the area were there to promote awareness and understanding on topics of Fire Safety, EMS, Approved Driving School, Community Programming, OPP, Lake Huron Search and Rescue and others. The even attracted a large number and the day was well received by those who attended.

#### 5.4 Mark Wilson – Temiskaming Highway 11 Road Improvements - Laura

- Laura and Greg met with representatives from Temiskaming Road Safety Coalition. Mark to discuss his advocacy for 2+1 roads in North Bay; however, Mark was unable to make it (last minute conflict). Good discussion with two other Temiskaming Coalition members occurred (public health and school transportation planning).
- Local school travel promoter attended with Laura for learning.
- How can safer systems approach solve road safety issues? Having access to accurate and current collision data. Effectiveness of countermeasures like lawn signs and common issues that emerge for rural road safety.

#### 6. Organizational Round Table Updates

- 6.1 ACW Straightening Westmount Road to better and improve sightlines for road users.
- 6.2 **Bluewater** has lowered speed limits to 30 km/hr within the Village of Bayfield. Bluewater has heard interest from other communities in this action as well. Changes have led to negligible differences so far. Environment is a calm area so differences have not been huge.

Also progress made on changing limits in transition zones into settlement regions to 80/60/50 (local municipal road) or 90/70/50 (County roads).



- 6.3 Huron East High profile item has been the removal of the tractor that had impacted in a collision with the oldest building in Seaforth. Has been of great interest to the community but conditions are returning back to normal for businesses where the costs of this collision were large for them. Concerns arose about spray patching asphalt were not effective; CHIPs Constable Wes Coast (cutout) was deployed. Imran indicated further repairs are being proposed. Cut-out Wes Coast is best suited for lower speed roads.
- 6.4 **Huron Perth Public Health** —Laura Edgar stated that changes in staffing are active but would remain the representative for Road Safety on CHIP. Some updates and activities captured in business arising and new business. Rural road safety initiative a possibility. Will look for other learnings from other rural municipalities. Perth County too for outreach and additional insight. OGRA Conference in 2024 might be an effective way of connecting.

#### **6.5 Huron County Public Works**

- Noted some speed limit changes in the County. Particularly in transition areas in various locations per Ontario Traffic Manual.
- Exeter area paved shoulder for immigrant workers on bicycles for work access. Rumble strips a safety feature to exit.
- Traffic lights in Blyth main intersection were also noted.
- Next year County Road 3 is to be paved. Paved shoulders for cyclists in this area are unlikely.
   Dashwood has also requested paved shoulders for immigrant workers.
- Imran also showed reflective sign posts that were installed in Wroxeter. Higher visibility for oncoming traffic. A possible option for other areas too.

#### 6.6 Huron OPP - deferred

#### 6.7 Ministry of Transportation Ontario

More information on each item found at end of document in Attachments to the Minutes including Road Safety Event Calendar for Ontario and Canada.

- Community Partnership Grants have been awarded for 2023-2024 funding cycle. Sean will notify when the grant program opens in the next fiscal year. Post April 2024.
- Follow on Twitter/X @ONTransport for announcements on Virtual Presentations on Transport and Safety topics; Members are encouraged to amplify and share messaging on their own platforms.
- Public Outreach Webinars on hold and a new format to fill this need is in the works
- Arrive Alive Drive Sober Fall Conference were successfully held in Guelph October 30, 2023
- Road Safety Achievement Awards were held in October Please consider this opportunity for any road safety initiatives, projects ahead and provincial leaders for next years iteration of the RSAAs.

The following categories were awarded:

- Collaboration
- Corporate Initiative



- Initiative of the Year
- Professional
- Volunteer
- Watch for updated versions of e-toolkits and shareables. Currently a comprehensive Micromobility e-toolkit and placemats are under construction with valuable information relevant to members of the public.
- A new Road Safety Bill with new legislation and regulation will be released in the spring. The priority topic has not yet been announced.

#### 6.8 Morris-Turnberry

Residents concerned about traffic speed have said they are more positive about feeling better
after speed studies were conducted in the area. Appropriate responses would continue. OPP
have been in the area enforcing transition limits can be used is CHIP's Constable Wes Coast,
which can be borrowed from the County Shed located in Auburn also used for implied
enforcement.

#### 6.9 North Huron

- Various road improvements have been made, but awaiting finish in North Huron – Hwy. 4. intersections improving.

#### 7 New Business

#### 7.1 Traffic Calming Policy

Edgar gave an explanation about what traffic calming is and what a traffic calming policy sets out to achieve (an agreement of expectations between residents, elected officials and public works on when / how traffic calming complaints are responded to)

Edgar highlighted Goderich's recent adoption of a Traffic Calming Policy and will follow-up to learn more and provide CHIP with further information.

#### 7.2 MTO Road Safety Community Partnership Updated Above

- See Attachment to the Minutes for full Background on the provincial government grant stream
- Grant stream for non- profits will be available in new fiscal year sometime after April 2024. Sean will notify the group when available.

#### 7.3 Winter Driving Preparedness

Questions also emerged surrounding the topic of blizzard notification after the 2023 Christmas winter storm last year. Imran indicated this was under review and solutions were forthcoming.

#### 8 Correspondence – none.

#### 9 Meeting Summary:

- a) Terms of Reference Currently a work in progress
- b) Speed Limits/ Transitions and traffic calming in Huron
- c) Winter Roads Discussion moving into the season



# 8 Parking Lot

8.1 2023-2024 Terms of Reference and Governance Model

8.2 ATV Map

Discussed whether to remove; decided to defer to new year we would want to include Craig Soldan in the decision making.

9 Next meeting: March 13, 2024; 9:30 – 11:30, in-person at the Health Unit, Clinton

Minutes Taker: Sean Wraight

Motion to Adjourn: Wayne Forster Seconded: Ric McBurney Disposition: Carried

## Future meeting dates:

Municipality / Organization - Minutes Taker	Date	Notes
Ministry of Transportation	December 13, 2023	
Huron East		
ACW		
Bluewater		
Huron County Public Works		
HPPH Coordinator		
Morris-Turnberry		
North Huron		
OPP		



#### Attachment to the Minutes

MTO Update

Sean Wraight MTO | Public Outreach and Education Office – September 2023 Update sean.wraight@ontario.ca

#### 1. Community Partnership Grants (RSCPP 2023–24)

The annual Road Safety Community Partnership Grant Program (**RSCPP**) has now been evaluated for all grants submitted for funds allocated for this fiscal year 2023 – April 2024. The grant opportunity launched in late May and closed on June 29<sup>th</sup>. Once again, using an online Transfer Payment Ontario Grants Portal (TPON). The grant recipients will be formally announced pending approval from the Minister of Transportation's Office.

Here is a link to RSCPP Guide for a better understanding in the event that non-profit community group would like to participate in future years.

Road Safety Community Partnership Program Guide - Forms - Central Forms Repository (CFR) (gov.on.ca)

\*As always, <u>all</u> non-profit road safe organizations and groups are invited to participate to fund road safety related initiatives in their area should they elect to pursue this opportunity. Formal notification of this opening will be made soon for this matched

For reference and more information, or to apply for other grant funding, please visit: <a href="https://www.ontario.ca/page/available-funding-opportunities-ontario-government">https://www.ontario.ca/page/available-funding-opportunities-ontario-government</a> - click on 'Road Safety Community Partnership Program'

If you have any questions, please contact POEO@ontario.ca.

#### **Grant Description**

The Road Safety Community Partnership Program demonstrates government commitment to road safety by providing funding to a network of provincial non-profit organizations with road safety mandates.

The program supports public awareness initiatives, campaigns or events that address road safety and priority issues such as aggressive driving, pedestrian safety, distracted driving, impaired driving and cycling safety.



The program reinforces measures aimed at positively influencing transportation user behaviour and raising awareness of MTO policies and legislation to keep Ontario's roads safe at a grassroots local level. This funding can be used to promote road safety awareness by:

- increasing knowledge of road safety issues
- influencing transportation user behaviour
- supporting legislative and regulatory compliance

#### **Public Outreach and Education Office**

<u>POEO@ontario.ca</u> Phone: <u>437-243-8514</u>

Follow us (MTO) on Social Media. Twitter and Facebook
 ONtransport - for Road Safety Messaging, MTO Announcements and Virtual Webinar Information is posted frequently.

\*Important for all partners and stakeholders to follow us in these virtual locations for related MTO announcements. I will follow up directly for sharing of relevant shareable content when it is available.

- **3.** Public Outreach Provincial Webinars on various road safety topics are currently now on hold. However, it is anticipated that these will return with a new format open to all residents of the province of Ontario. Additional information on these sessions will be forthcoming.
- 4. Arrive Alive Drive Sober Fall Conference Guelph October 30, 2023

<u>Conference – arrive alive DRIVE SOBER</u> https://www.arrivealive.org/programs/conference/

Speakers have now been arranged. Program and registration is coming very soon.

# 5. MTO Road Safety Achievement Awards – The 2022 Road Safety Achievement Awards

It's that time of the year again for the Ministry of Transportation to recognize the achievements of our road safety partners for the past year, 2022. The ceremony will be held in person on October 11<sup>th</sup> in Toronto.

The following categories will be awarded:

- Collaboration
- Corporate Initiative
- Initiative of the Year
- Professional
- Volunteer

Winners will be announced soon.



Please consider this opportunity for your road safety initiatives and projects ahead for next years iteration of the RSAAs.

- 6. Watch for updated versions of e-toolkits and shareables. Currently a comprehensive Micromobility e-toolkit and placemats are under construction with valuable information relevant to members of the public.
- 7. The Public Outreach Office will be attending a number of public events such as the International Plowing Match, Babytime Show, Truckworld and Powersports show in the coming month.



#### Road Safety Audits, Good Roads

Retrieved from: <a href="https://goodroads.ca/courses/road-safety-audit-course/">https://goodroads.ca/courses/road-safety-audit-course/</a>

This is the first offering of a Road Safety Audit Course.

It will be offered again next spring (1st week of May), both the beginner course and an advance level course.

Item	Cost
Registration	\$1,500 (Good Roads Members)
	\$1,850 (Non-Members)
Travel, Accommodation (approx.)	Hotel: \$905.58 (3 nights)
	Mileage: \$215
	Incidentals/per diem: ~ \$150
Where	Delta Hotel Guelph, 50 Stone Road West,
	Guelph ON N1G 0A9
When	October 2 – 4, 2023

Guide Book: 2023 Good Roads Road Safety Audit Guidelines

# Beginner Course Description:

A road safety audit is a formal examination of a future road or traffic project, or an existing road or road-related area, in which a team of appropriately qualified persons identifies deficiencies with the potential to cause crashes in the project. A road safety audit is not simply a compliance check against design standards or other technical guidance. Strict adherence to design standards does not guarantee safety since standards are not always written with safety as a primary objective. A Road Safety Audit considers the safety of all users to proactively identify issues that may cause harm to users and makes recommendations to remove or mitigate these issues.

This three-day training program will teach practitioners how to conduct a Road Safety Audit in accordance with the **2023 Good Roads Road Safety Audit Guidelines.** 



This course is relevant to individuals who wish to become a Road Safety Auditor or those required to manage the Road Safety Audit process and its outcomes. Upon successful completion of this training, participants will be eligible to register as a Road Safety Auditor in Ontario.

#### **Course Content**

- What are Road Safety Audits and why we do them?
- Stages of a Road Safety Audit
- Design stage Road Safety Audits
- Auditing for Pedestrians, Cyclists & Motorcyclists
- Road Safety Auditor Accreditation and Registration
- Preparation and presentation of Road Safety Audit report
- Road Safety Audits within the Safe System

The interactive Workshop is a combination of theory, practical exercises, and fieldwork.

# Who Should Attend

- Provincial and local government personnel
- Engineers, planners, designers, traffic managers
- Consultants wishing to undertake road safety audits
- Road safety practitioners

Listen to instructor Kenn Beer as he discusses Road Safety Audits with Thomas and Jared of the Good Roads Podcast: <a href="https://youtu.be/Q06U4m56zig">https://youtu.be/Q06U4m56zig</a>

#### **Accommodations**

Delta Hotel and Conference Guelph.

To book a room, call 1-844-496-8549 and use group code "Good Roads" to qualify for a group rate.

The cut-off date is Tue, September 5th, 2023.

#### Meals

A light breakfast, lunch, and refreshments are included in the registration fee.

# **JANUARY**

**Snowmobile Safety Week** 

Jan 13-21 Ontario Federation of Snowmobile Clubs

**Rural Ontario Municipal Association Conference** 

Jan 21-23 | Rural Ontario Municipalities Association

# **FEBRUARY**

Winter Walk Day

Feb 7 | Ontario Active School Travel

### MARCH

**National Impaired Driving Prevention Week** 

Mar 17-23 | Public Safety Canada

**OTC Vision Zero Symposium** 

Mar 20 | Ontario Traffic Council

# APRIL

**Ontario Good Roads Association Conference** 

April 21-24

Truck World

April 18-20

#### MAY

Motorcycle Safety Month Canada Safe Driving Week

May 14-20 | Canadian Association of Chiefs of Police

**Slow Down Move Over Day** 

May 14 | CAA

Students Against Impaired Driving (SAID) Day

May 16 | Ontario Students Against Impaired Driving

Victoria Day Long Weekend Campaign

May 17-21 | OPP

**Safe Boating Week** 

May 18-24 | Canadian Safe Boating Council

**OTC Annual Conference** 

May1-3 | Ontario Traffic Council

**Bike to School Week** 

May 27-31 | Ontario Active School Travel

# JUNE

**Bike Month** 

**Seniors Month** 

**School Crossing Guard Appreciation Week** 

June 3-7 | Ontario Traffic Council

**ATV Safety Week** 

June 3-9 | Ontario Federation of ATV Clubs

**Canadian Road Safety Professionals Conference** 

June 16-19

**Canada Day Long Weekend Campaign** 

June 28-July 2 | OPP

Contact: POEO@ontario.ca

# JULY

**National Injury Prevention Day** 

July 5 | Parachute Canada

Operation Safe Driver (CMV)

July 7-13 | Commercial Vehicle Safety Alliance

# AUGUST

**Civic Holiday Long Weekend Campaign** 

Aug 2-6 | OPP

**Labour Day Long Weekend Campaign** 

Aug. 30-Sept 3 | OPP

# SEPTEMBER

**National Trucking Week** 

Sept 1-7 | Canadian Trucking Alliance

**Child Passenger Safety Week** 

Sept 16-24 | Child Passenger Safety Association of Canada

**Rail Safety Week** 

Sept 16-22 (TBC) | Operation Lifesaver

# **OCTOBER**

**Pedestrian Safety Month** 

International Walk to School Month

**International Plowing Match & Rural Expo** 

Oct 1-5 | Kawartha Lakes

**Operation Impact** 

Oct 11-14 | Canadian Association of Chiefs of Police

**National Teen Driver Safety Week** 

Oct 20-26 | Parachute Canada

**School Bus Safety Week** 

Oct 21-25 | School Bus Ontario

**Arrive Alive Conference** 

TBD | arrive alive DRIVE SOBER

# NOVEMBER

**Project Red Ribbon Day** 

Nov 1 | MADD Canada

Festive R.I.D.E. Campaign

Nov 14-Jan 2 | Ontario Association of Chiefs of Police

National Day of Remembrance for Road Crash Victims

Nov 20 | Transport Canada

# DECEMBER

**National Safe Driving Week** 

Dec 1-7 | Canada Safety Council

# AGENDA of Bluevale Community Committee Meeting date: December 6, 2023

<u>Call to order:</u> A general meeting of the Bluevale Community Committee was held in Bluevale Hall on December 6, 2023. The meeting convened at Bluevale Hall. Chairman: Randy Greenaway, with Katie Clark acting as secretary.

<u>Members in attendance:</u> Randy Greenaway, Kevin Frieburger, Spencer Shaw, Katie Clark, Ken Thompson, Bee Caskanette, Greg Caskanette, Wayne Whalen

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# Minutes Review:

# Financial Update

Accounts

\$39,384.84 (December 6, 2023)

Available Funds: \$\*32,349.16

(\$36,502.70-\$7005.68(playground fund))

(\$10,000.00 deposited from Township, Also monies from previous fundraising events for homecoming - not yet taken out of this amount)

Homecoming Ledger Form (tentative)

(- money set aside for playground/town improvements- totaling \$10,949.12) \$7005.68 Available for playground/ball park improvements) Playground Funds Information

Note:Going forward the funds will be separated into two reports BCC Funds available and Homecoming Funds\*

	Unfinished Business	Action/person in charge
1	Roof Approx. cost Looking for quotes Inquired with township re: funding this Nothing to report	Randy Kevin messaged Trevor about this
2	Countertop for bar upstairs –plan to replace this in the winter, no date set Nothing to report	Randy
3	Inspection Report -nothing to report	
4	Stove: Picked up and installed! Thank you! Cost we owe Dave - Spencer will ask Dave	Spencer
5	Lights at BallPark Jason Breckenridge purchased the lights but has returned them as the company he purchased from was switching companies that they purchased from and he was worried about the warranty. He will repurchase from the new company and let us know.  The cheque given to him for the past purchase was not cashed and is void.	Jason
6.	Ball Park 4 foot extension to the fence at the ballpark diamondNo date set  (Nothing to Report)	Wayne Ken
7.	Playground equipment	

	Waiting to be inspected (Mike Alcock)	
	Possibly a grand opening - Date: not until the spring Inspection happened on? A few things to be completed - Swings change the spacing to maybe 2 swings -hood was loose on the double slide -some things need to be sanded and repainted Can happen in the spring The surface needs to be expanded around the playground Recommended that we rotate it twice a year so that it does not get packed down Take swings down for the winter - need bearings again - adjust the length of the chains Sign for closer to the playground listing what to do in an emergency - Randy will forward the signage requirements to Katie *Proper address -check with other communities and what their signs say - Trevor will let us know what to put on it and where to order from.	Randy/Trevor
8.	Christmas House Decorating Contest	
	Posted on Facebook sites Contest will run from Dec, 1-17th Voting will run from the 18-22- prize awarded on the 22 or 23rd	
	*If there are no entries put forth then we will post pictures of places around town (no address visible) and attempt the vote or else we will just award a prize	
	What should the prize be - swag from homecoming or a gift card	
9.	Ugly Christmas Sweater Pub Night December 16th 9-1 To be held upstairs - whole Hall rented	Sell calendars at the dance - selling \$20, fill out a name and number ticket/draw
	Decorations - Dennise/Wayne	monthly

	Food- pizza, no charge for food <i>(we will have 2 members present with their safe food handling course)</i> - order from Noah's - call ahead/they deliver	
	Music - Dan's sound system-Randy to run the music	
	2 Prizes for sweaters- Swag - gift certificate with sizes on it or gift cards -Katie	
	Alcohol- Randy/Kenny	
	Float - Katie Permit - Randy	
	Admission:Donations to the food drive*Need to advertise this on the site Spencer will do the closing shift - sell tickets at the bar	
	*Note the hall must be cleaned and all alcohol removed the same evening as there is a rental the next day	
10.	Terms of reference - Trevor reviewed with the committee at the last meeting Time to review given. If passed then Trevor will give a report at a meeting and then a by-law at a following meeting, on our behalf.	
	Motion to adopt in principal the new terms of reference - Kevin Frieburger Second - Ken Thompson	

New Business		Action/Person in charge
1	Hall Rentals *Note-please speak to anyone who still has a key for the hall, someone who has access to a keyfob and also a key- the	Katie -will clean before and after events

	deadbolt has been locked after a few rentals lately and if the key is used then the electronic door is no good for the next person who rents as it only unlocks the door but not the deadbolt (key) December 2 - 11am-7pm December 3 - 11am-8pm December 6 - 7pm-9pm December 6 - 7pm-9pm December 9 - 12pm-4pm, 1pm-8pm December 10 - 7am-6pm December 15 - 1pm-4pm December 15 - 5pm-1am December 17 - 11:30am-4:30pm December 26 - all day	Put a sign on the door - do not use key, automatically will lock on its own
2.	Family Day Meal in February - tied in to Family Day? -Hopefully tobogganing/hot chocolate, etc Weather depending	
3	Superbowl Party Sunday February 11, 2024 Time: 3pm - ? Permits: Randy (2pm-1pm) Advertising: FB, Sign Alcohol: Food: not advertising What do you need to show the game?: ask matt about wifi, then call kincardine cable (rogers) Upstairs	
4.	Central Vac - not working -no suction from the wall and no power to the head of the vacuum.	
5.	Flowers/Donation for Carolyn Greenaway -will purchase and have delivered to their home	Katie
6.	Snow Removal/Garbage and Recycling - Randy will do the snow removal this year	

7.	Smart Serve Courses Completed by:  Dave/Susan Heffer (emailed for address/no reply) - Will give them a cheque to cover the cost of the course.  -	Spencer to ask Dave about repayment
	Brooklyn Thompson - Cheque given	Randy to give Brooklyn her cheque
8.	Market - everything all organized!	Bee

# Adjournment:

Moved by: Spencer Shaw

Second by: Wayne Whalen
The meeting was adjourned at 7:46pm

Next Meeting Date/Time & Goal: Wednesday February 7, 2-24 @ 7pm

# Outstanding Action Items Open Session

Meeting Date	Action Item	Action By	Current Status	Last Action Date	Next Step
October 17, 2023	Tender for Site Plan Conformity Work	CAO	Tender documents being drafted by engineer	January 2, followed up with engineer	Tender results will be presented to Council for award when available.
November 7, 2023	Asset Retirement Obligations	CAO	Reports presetned to Council Jan 16		None.
January 9, 2024	Grant and Donation Policy Review	CAO	Policy under review by staff		Report to Council with reccomended updates to Policy



#### CORPORATIONOF THE MUNICIPALITY OF MORRIS-TURNBERRY

#### **BY-LAW NO. 2-2024**

Being a by-law to amend by-law 48-2020 of the Municipality of Morris-Turnberry based on actual costs incurred for improving the Thomson Lamont Deyell Municipal Drain 2020.

**WHEREAS** By-law No. 48-2020, enacted the 15<sup>th</sup> day of December 2020 provided for the improvement of the Thompson Lamont Deyell Municipal Drain based on the estimates contained in a drainage report dated August 2020 as submitted by Dietrich Engineering Limited;

**AND WHEREAS** the Drainage Works were completed as per the Engineer's report and the total actual costs incurred were 15% greater than the Engineers estimate of \$39,800.00, being \$45,960.57;

**NOW THEREFORE,** the Council of the Municipality of Morris-Turnberry pursuant to the Drainage Act, 1990 and amendments thereto, ENACTS as follows:

- 1. That the assessment attached here to as Schedule 'A' and forming part of this by-law be the final assessment schedule for the Thompson Lamont Deyelle Municipal Drain;
- 2. That the assessment listed in the net column shall be levied and assessed against the appropriate lands;
- 3. This by-law shall come into force on the day it is passed.

Read a FIRST and SECOND time this 16th day of January 2024

Read a THIRD time and FINALLY PASSED this  $16^{\text{th}}$  day of January 2024

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				ACTUAL A	SSESSMENT				
Lot or Part	Con. or Plan	Landowner	Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
<b>Municipality</b>	of Morri	s-Turnberry (Turnberry Ward	)						
* Pt. 10	В	W. Wideman	(20-086-35)	1.6	\$22.00	\$25.41			\$25.41
Pt. 11	В	C. Burke	(15-018)	2.4	\$33.00	\$38.11	\$12.70		\$25.41
* Pt. 11	В	D. & K. Kleist	(15-019)	0.1	\$5.00	\$5.77			\$5.77
Pt. 12	В	C. Burke	(15-018)	5.3	\$71.00	\$81.99	\$27.33		\$54.66
Pt. 13	В	K. & L. Winger	(15-020)	5.3	\$48.00	\$55.43	\$18.48		\$36.95
Pt. 14	В	K. & L. Winger	(15-020)	6.5	\$52.00	\$60.05	\$20.02		\$40.03
Pt. 15	В	P. & D. Kraayenbrink	(15-021)	7.7	\$96.00	\$110.86	\$36.95		\$73.91
Pt. 16	В	P. & D. Kraayenbrink	(15-021)	7.7	\$62.00	\$71.60	\$23.87		\$47.73
Pt. 17	В	P. & D. Kraayenbrink	(15-021)	5.7	\$46.00	\$53.12	\$17.71		\$35.41
Pt. 15	В	P. McNally	(15-022)	8.0	\$11.00	\$12.70	\$4.23		\$8.47
Pt. 16	В	P. McNally	(15-022)	1.6	\$22.00	\$25.41	\$8.47		\$16.94
Pt. 17	В	P. McNally	(15-022)	2.4	\$33.00	\$38.11	\$12.70		\$25.41
18	В	B. & M. Gibbons	(15-006)	14.2	\$128.00	\$147.81	\$49.27		\$98.54
19	В	E. Czerniawski	(15-007)	28.5	\$18,251.00	\$21,076.04	\$7,025.35	\$500.00	\$13,550.69
20	В	E. Czerniawski	(15-007)	36.5	\$439.00	\$506.95	\$168.98		\$337.97
21	В	Great Lakes Poultry Farms	(15-009)	40.3	\$444.00	\$512.73	\$170.91		\$341.82
22	В	Great Lakes Poultry Farms	(15-009)	40.3	\$481.00	\$555.45	\$185.15		\$370.30
23	В	Great Lakes Poultry Farms	(15-010)	40.3	\$504.00	\$582.01	\$194.00		\$388.01
24	В	A. & G. Laidlaw	(15-011)	40.3	\$397.00	\$458.45	\$152.82		\$305.63
25	В	N. & C. Edgar	(15-012)	40.3	\$444.00	\$512.73	\$170.91		\$341.82
26	В	W. & S. Pewtress	(15-013)	40.3	\$459.00	\$530.05	\$176.68		\$353.37
27	В	W. & S. Pewtress	(15-013)	40.3	\$437.00	\$504.64	\$168.21		\$336.43
28	В	J. & B. Benninger	(15-014)	40.4	\$442.00	\$510.42	\$170.14		\$340.28
Pt. 29	В	J. & B. Benninger	(15-014)	2.0	\$23.00	\$26.56	\$8.85		\$17.71
S.Pt. 29	В	D. & P. Moore	(15-015)	19.1	\$177.00	\$204.40	\$68.13		\$136.27
N.Pt. 29	В	D. Bannerman	(15-016)	19.2	\$155.00	\$178.99	\$59.66		\$119.33
S.Pt. 30	В	D. & P. Moore	(15-015)	20.1	\$184.00	\$212.48	\$70.83		\$141.65
N.Pt. 30	В	D. Wesley & M. Ducan	(15-017)	20.2	\$163.00	\$188.23	\$62.74		\$125.49
23	10	M. McKague	(10-030)	4.0	\$54.00	\$62.36	\$20.79		\$41.57
24	10	R. & G. Johnston	(10-031)	32.4	\$373.00	\$430.74	\$143.58		\$287.16



				ACTUAL A	SSESSMENT				
Lot or Part	Con. or Plan	Landowner	Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
25	10	R. & G. Johnston	(10-031)	40.5	\$436.00	\$503.49	\$167.83		\$335.66
N.Pt. 26	10	J. King	(10-032)	20.2	\$241.00	\$278.30	\$92.77		\$185.54
S.Pt. 26	10	M. Foxton	(10-032-05)	20.2	\$242.00	\$279.46	\$93.15		\$186.31
Pt. 27	10	M. Skinn	(10-033-30)	10.1	\$90.00	\$103.93	\$34.64		\$69.29
Pt. 27	10	R. Bushell	(10-033-40)	15.8	\$127.00	\$146.66	\$48.89		\$97.77
Pt. 27	10	R. & S. Haanstra	(10-034)	19.8	\$255.00	\$294.47	\$98.16		\$196.31
Pt. 28	10	R. & S. Haanstra	(10-034)	14.9	\$174.00	\$200.93	\$66.98		\$133.96
W.Pt. 28	10	B. Lees & D. Galbraith	(10-035)	20.2	\$229.00	\$264.45	\$88.15		\$176.30
Pt. 28	10	B. & R. Bushell	(10-036)	8.2	\$106.00	\$122.41	\$40.80		\$81.61
29	10	M. & N. Brouillette	(10-037)	28.3	\$327.00	\$377.62	\$125.87		\$251.74
30	10	M. & N. Brouillette	(10-037)	14.6	\$138.00	\$159.36	\$53.12		\$106.24
23	11	M. & S. McKague	(11-025)	14.2	\$190.00	\$219.41	\$73.14		\$146.27
* Pt. 24	11	J. Good	(11-025-15)	0.4	\$8.00	\$9.24			\$9.24
24	11	KTM Family Farm Ltd.	(11-026)	32.0	\$422.00	\$487.32	\$162.44		\$324.88
25	11	W. & M. Fenton	(11-027)	38.4	\$361.00	\$416.88	\$138.96		\$277.92
* Pt. 25	11	G. Watson	(11-028)	0.2	\$5.00	\$5.77			\$5.77
* Pt. 26	11	J. Matthews	(11-029)	1.3	\$10.00	\$11.55			\$11.55
* Pt. 26	11	M. Flowers	(11-030)	25.9	\$209.00	\$241.35			\$241.35
* Pt. 26	11	T. Huffman	(11-031)	7.3	\$59.00	\$68.13			\$68.13
* Pt. 27	11	T. Huffman	(11-031)	17.0	\$137.00	\$158.21			\$158.21
Pt. 27	11	R. & S. Haanstra	(11-032)	23.5	\$304.00	\$351.06	\$117.02		\$234.04
28	11	R. & S. Haanstra	(11-032)	40.5	\$474.00	\$547.37	\$182.46		\$364.91
29	11	M. Hehn	(11-033)	28.3	\$278.00	\$321.03	\$107.01		\$214.02
* W.Pt. 30	11	R. & K. Glasgow	(11-034)	20.2	\$179.00	\$206.71			\$206.71
E.Pt. 30	11	K. & L. Lewis	(11-035)	11.3	\$141.00	\$162.83	\$54.28		\$108.55
25	12	G. & C. Gerber	(12-034)	1.2	\$13.00	\$15.01	\$5.00		\$10.01
* 26	12	D. & S. Field	(12-035)	0.4	\$5.00	\$5.77			\$5.77
27	12	D. & D. Morrison	(12-036)	3.6	\$43.00	\$49.66	\$16.55		\$33.10
28	12	D. & B. Morrison	(12-037)	3.6	\$41.00	\$47.35	\$15.78		\$31.56
W.Pt. 30	12	D. Becker & T. Farrell-Becker	(12-039)	1.2	\$10.00	\$11.55	\$3.85		\$7.70
* S.Pt. 31	12	E. Kitchen	(12-040)	19.8	\$160.00	\$184.77			\$184.77



ACTUAL ASSESSMENT										
Con. or Plan	Landowner	Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment		
12	R. & K. Glasgow	(12-041)	10.9	\$88.00	\$101.62			\$101.62		
12	M.V.C.A.	(12-042)	6.1	\$49.00	\$56.58			\$56.58		
12	M.V.C.A.	(12-042)	51.4	\$414.00	\$478.08			\$478.08		
12	M.V.C.A.	(12-042)	36.4	\$293.00	\$338.35			\$338.35		
12	E. Moore & M. Duncan	(12-043)	19.0	\$153.00	\$176.68			\$176.68		
		<b>N</b>		\$30.467.00	\$35 182 93	\$11 036 31	\$500.00	\$23,646.62		
	or Plan 12 12 12 12 12 12 12	or Plan Landowner  12 R. & K. Glasgow  12 M.V.C.A.  12 M.V.C.A.  12 M.V.C.A.  12 E. Moore & M. Duncan  ment on Lands	or         Plan         Landowner         Roll No.           12         R. & K. Glasgow         (12-041)           12         M.V.C.A.         (12-042)           12         M.V.C.A.         (12-042)           12         M.V.C.A.         (12-042)           12         M.V.C.A.         (12-042)           12         E. Moore & M. Duncan         (12-043)	Con. or Plan Landowner       Approx. Hectares Hectares         Plan Landowner       Roll No.       Affected         12 R. & K. Glasgow       (12-041)       10.9         12 M.V.C.A.       (12-042)       6.1         12 M.V.C.A.       (12-042)       51.4         12 M.V.C.A.       (12-042)       36.4         12 E. Moore & M. Duncan       (12-043)       19.0         sent on Lands	Con. or Plan Landowner         Roll No. Affected Plan Landowner         Roll No. Affected Assessment           12 R. & K. Glasgow         (12-041)         10.9         \$88.00           12 M.V.C.A.         (12-042)         6.1         \$49.00           12 M.V.C.A.         (12-042)         51.4         \$414.00           12 M.V.C.A.         (12-042)         36.4         \$293.00           12 E. Moore & M. Duncan         (12-043)         19.0         \$153.00	Con. or Plan Landowner         Roll No. Roll No. Affected Plan Landowner         Roll No. Affected Assessment         Estimated Assessment Assessment         Total Actual Assessment Assessment           12 R. & K. Glasgow         (12-041)         10.9         \$88.00         \$101.62           12 M.V.C.A.         (12-042)         6.1         \$49.00         \$56.58           12 M.V.C.A.         (12-042)         51.4         \$414.00         \$478.08           12 M.V.C.A.         (12-042)         36.4         \$293.00         \$338.35           12 E. Moore & M. Duncan         (12-043)         19.0         \$153.00         \$176.68	Con. or Plan Landowner         Roll No. Affected Plan Landowner         Approx. Hectares Estimated Assessment         Total Actual Total Actual Assessment         1/3 Gov't Grant           12 R. & K. Glasgow         (12-041)         10.9         \$88.00         \$101.62           12 M.V.C.A.         (12-042)         6.1         \$49.00         \$56.58           12 M.V.C.A.         (12-042)         51.4         \$414.00         \$478.08           12 M.V.C.A.         (12-042)         36.4         \$293.00         \$338.35           12 E. Moore & M. Duncan         (12-043)         19.0         \$153.00         \$176.68	Con. or Plan Landowner         Approx. Hectares Plan Landowner         Roll No. Affected Assessment         Assessment Assessment Assessment         Less Grant Allowances           12 R. & K. Glasgow         (12-041)         10.9         \$88.00         \$101.62           12 M.V.C.A.         (12-042)         6.1         \$49.00         \$56.58           12 M.V.C.A.         (12-042)         51.4         \$414.00         \$478.08           12 M.V.C.A.         (12-042)         36.4         \$293.00         \$338.35           12 E. Moore & M. Duncan         (12-043)         19.0         \$153.00         \$176.68		



				ACTUAL A	SSESSMENT				
Lot or Part	Con. or Plan		Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
West Street		Municipality of Morris-Turnk	perry	0.2	\$8.00	\$9.24			\$9.24
Gibbons Line		Municipality of Morris-Turnb	•	0.8	\$43.00	\$49.66			\$49.66
Sideroad 20-2	1	Municipality of Morris-Turnk	•	4.0	\$53.00	\$61.20			\$61.20
Holmes Line		Municipality of Morris-Turnk	•	4.2	\$226.00	\$260.98			\$260.98
Sideroad 30-3	1	Municipality of Morris-Turnk	perry	2.3	\$41.00	\$47.35			\$47.35
Glenannon Ro	ad	Municipality of Morris-Turnk	perry	6.1	\$244.00	\$281.77			\$281.77
North Street V	V	Municipality of Morris-Turnk	perry	8.7	\$200.00	\$230.96			\$230.96
Turnberry Kinl	loss Rd.	Municipality of Morris-Turnk	perry	2.5	\$44.00	\$50.81			\$50.81
Turnberry Culi	ross W.	Municipality of Morris-Turnk	perry	1.0	\$39.00	\$45.04			\$45.04
Amberley Roa	d	County of Huron		3.6	\$195.00	\$225.18			\$225.18
Total Assessm	ent on I	Roads							
(Municipality	of Morri	is-Turnberry, Turnberry Ward			\$1,093.00	\$1,262.18			\$1,262.18
Total Assessm	nent on	Lands and Roads,							
Municipality of	of Morri	is-Turnberry (Turnberry Ward	)		\$31,560.00	\$36,445.12	\$11,036.31	\$500.00	\$24,908.80
Township of N	North Hu	uron (East Wawanosh Ward)							
Pt. 30	14	Ross Family Farms Ltd.	(14-009)	3.9	\$36.00	\$41.57	\$13.86		\$27.71
' Pt.30	14	M. McCormick	(14-010)	0.4	\$8.00	\$9.24			\$9.24
Pt. 30	14	K. & C. Galbraith	(14-011)	19.9	\$160.00	\$184.77			\$184.77
Pt.30	14	J. Bank	(14-013)	0.2	\$5.00	\$5.77			\$5.77
Pt.30	14	J. Franken	(14-014)	0.2	\$5.00	\$5.77			\$5.77
N.Pt. 31	14	J. & E. Green	(14-015)	38.4	\$385.00	\$444.59	\$148.20		\$296.40
S.Pt. 31	14	Ontario Peninsula Farms	(14-016)	10.1	\$94.00	\$108.55	\$36.18		\$72.37
' Pt. 32	14	R. Foxton	(14-018)	6.9	\$70.00	\$80.84			\$80.84
Pt. 32	14	C. & A. Dejong	(14-019)	6.9	\$69.00	\$79.68			\$79.68
Pt. 32	14	D. & S. Davidson	(14-020)	13.0	\$135.00	\$155.90	\$51.97		\$103.93
N.Pt. 33	14	N. & C. Edgar	(14-022)	18.2	\$244.00	\$281.77	\$93.92		\$187.85
S.Pt. 34	14	A. Edgar	(14-023)	1.2	\$16.00	\$18.48	\$6.16		\$12.32
' Pt. 34	14	M. & D. Ryan	(14-024)	0.4	\$8.00	\$9.24			\$9.24
N.Pt. 34	14	T. Schlegel	(14-027)	29.1	\$363.00	\$419.19	\$139.73		\$279.46
35	14	T. Schlegel	(14-027)	3.6	\$49.00	\$56.58	\$18.86		\$37.72



	ACTUAL ASSESSMENT											
Lot or Part	Con. or Plan	Landowner	Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment			
Total Assessr	ment on I	Lands										
(Township of	North H	uron, East Wawanosh Ward)			\$1,647.00	\$1,901.94	\$508.88		\$1,393.06			
Beecroft Line Norman Line Amberley Ro	ad	Township of North Huron Township of North Huron County of Huron		1.7 1.2 5.3	\$70.00 \$47.00 \$287.00	\$80.84 \$54.28 \$331.42			\$80.84 \$54.28 \$331.42			
Total Assessr (Township of		Roads uron, East Wawanosh Ward)			\$404.00	\$466.53			\$466.53			
		Lands and Roads, uron (East Wawanosh Ward)			\$2,051.00	\$2,368.47	\$508.88		\$1,859.59			
Municipality	of South	n Bruce (Culross Ward)										
* Pt. 33 * 34 * 35	1 1 1	County of Bruce County of Bruce County of Bruce	(1-039) (1-039) (1-039)	16.2 20.2 7.3	\$130.00 \$163.00 \$59.00	\$150.12 \$188.23 \$68.13			\$150.12 \$188.23 \$68.13			



				ACTUAL A	SSESSMENT				
	Con			Approx.	Total		Less		
Lakar Bark	Or	Landowner	Dell Me	Hectares	Estimated	Total Actual	1/3 Gov't	Less	Net
Lot or Part			Roll No.	Affected	\$27.00	Assessment \$31.18	Grant	Allowances	Assessment
Pt.33 Total Assessn	1	J. Walton	(1-079)	2.0	\$27.00	\$31.18	\$10.39		\$20.79
					¢270.00	¢427.66	¢40.20		ć 427.27
		h Bruce, Culross Ward)		•	\$379.00	\$437.66	\$10.39		\$427.27
Boundary Kin		Municipality of South Bruce		0.4	\$5.00	\$5.77			\$5.77
•		Municipality of South Bruce		1.0	\$39.00	\$45.04			\$45.04
Total Assessn									
(Municipality	of Soutl	h Bruce, Culross Ward)			\$44.00	\$50.81			\$50.81
Total Assessr	nent on	Lands and Roads,							
		n Bruce (Culross Ward)			\$423.00	\$488.48	\$10.39		\$478.08
					γ :====	7 100110	*		7
		<u> (Kinloss Ward)</u>							
S.Pt. 1	1	J. Younglao	(2-001)	3.7	\$50.00	\$57.74			\$57.74
S.Pt. 1	1	G. McIntosh	(2-001-10)		\$152.00	\$175.53	\$58.51		\$117.02
S.Pt. 2	1	J. Younglao	(2-001)	3.7	\$50.00	\$57.74			\$57.74
S.Pt. 2	1	G. McIntosh	(2-001-10)		\$195.00	\$225.18	\$75.06		\$150.12
S.Pt. 3	1	J. Deboer	(2-002)	3.2	\$37.00	\$42.73			\$42.73
S.Pt. 3	1	Open Valley Farms	(2-004)	16.9	\$179.00	\$206.71	\$68.90		\$137.80
S.Pt. 4	1	J. Deboer	(2-002-05)	3.6	\$44.00	\$50.81	\$16.94		\$33.87
S.Pt. 4	1	Open Valley Farms	(2-004)	16.5	\$185.00	\$213.64	\$71.21		\$142.42
S.Pt. 5	1	Open Valley Farms	(2-004)	20.1	\$248.00	\$286.39	\$95.46		\$190.92
S.Pt. 6	1	Open Valley Farms	(2-004)	20.1	\$253.00	\$292.16	\$97.39		\$194.77
S.Pt. 7	1	M. Simpson	(2-005)	20.1	\$253.00	\$292.16	\$97.39		\$194.77
S.Pt. 8	1	M. Simpson	(2-005)	18.9	\$186.00	\$214.79	\$71.60		\$143.19
S.Pt. 9	1	K. Simpson	(2-040)	15.9	\$174.00	\$200.93	\$66.98		\$133.96
S.Pt. 10	1	K. Simpson	(2-040)	11.3	\$135.00	\$155.90	\$51.97		\$103.93
S.Pt. 11	1	J. Kikkert	(2-041)	2.0	\$27.00	\$31.18			\$31.18
S.Pt. 11	1	E. Miller	(2-065)	4.5	\$55.00	\$63.51	\$21.17		\$42.34
S.Pt. 12	1	E. Miller	(2-065)	1.6	\$20.00	\$23.10	\$7.70		\$15.40
N.Pt. 1	1	M. Duncan	(2-084)	20.2	\$224.00	\$258.67	\$86.22		\$172.45
N.Pt. 2	1	M. Duncan	(2-084)	20.2	\$173.00	\$199.78	\$66.59		\$133.19
N.Pt. 3	1	C. Whytock	(2-085)	20.2	\$229.00	\$264.45	\$88.15		\$176.30



					ACTUAL A	SSESSMENT				
	Lot or Part	Con. or Plan	Landowner	Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
	N.Pt. 4	1	C. Whytock	(2-085)	20.2	\$229.00	\$264.45	\$88.15	Allowalices	\$176.30
	N.Pt. 5	1	D. Wall	(2-083)	20.2	\$207.00	\$239.04	\$79.68		\$159.36
	N.Pt. 6	1	D. Wall	(2-086)	20.2	\$207.00	\$239.04	\$75.68 \$79.68		\$159.36
	N.Pt. 7	1	M. Simpson	(2-087)	16.6	\$217.00	\$250.59	\$83.53		\$167.06
*	N.Pt. 7	1	S. Anderson	(2-087-01)		\$46.00	\$53.12	ψ <b>0</b> 3.33		\$53.12
	N.Pt. 8	1	M. Simpson	(2-087)	12.1	\$152.00	\$175.53	\$58.51		\$117.02
*	N.Pt. 8	1	S. Anderson	(2-087-01)		\$33.00	\$38.11	7		\$38.11
	N.Pt. 9	1	K. Simpson	(2-088)	8.1	\$109.00	\$125.87	\$41.96		\$83.91
	N.Pt. 10	1	K. Simpson	(2-088)	2.0	\$23.00	\$26.56	\$8.85		\$17.71
	35	2	D. Ross	(2-123)	12.1	\$163.00	\$188.23	\$62.74		\$125.49
	Pt. 36	2	M. Simpson	(2-124)	9.9	\$132.00	\$152.43	\$50.81		\$101.62
*	Pt. 36	2	J. Albrecht	(2-124-10)	1.5	\$20.00	\$23.10			\$23.10
	37	2	D. Ross	(2-125)	11.3	\$130.00	\$150.12	\$50.04		\$100.08
*	38	2	Whitechurch Farms Ltd.	(2-126)	13.0	\$169.00	\$195.16			\$195.16
*	Pt. 39	2	Whitechurch Farms Ltd.	(2-127)	6.5	\$87.00	\$100.47			\$100.47
	Pt. 39	2	R. Christy	(2-128)	8.0	\$7.00	\$8.08	\$2.69		\$5.39
	40	2	R. Christy	(2-128)	20.2	\$211.00	\$243.66	\$81.22		\$162.44
			inloss (Whitechurch Ward)							
	32	293	M. Joseph	(2-006)	0.07	\$5.00	\$5.77			\$5.77
	31	293	M. Joseph	(2-007)	0.07	\$5.00	\$5.77			\$5.77
	Pt. 9	293	Township of Huron-Kinloss	(2-008)	1.12	\$22.00	\$25.41			\$25.41
	30	293	T. Falconer	(2-009)	0.07	\$5.00	\$5.77			\$5.77
	29	293	C. Dale	(2-010)	0.07	\$5.00	\$5.77			\$5.77
	28	293	D. Ross	(2-011)	0.04	\$5.00	\$5.77			\$5.77
	26 & 27	293	D. Preiss	(2-013)	0.07	\$5.00	\$5.77			\$5.77
	25	293	M. Lyons	(2-014)	0.04	\$5.00	\$5.77			\$5.77
	Pt. 10	1	M. Thomson	(2-015)	0.05	\$5.00 \$5.00	\$5.77 \$5.77			\$5.77
	Pt. 10	1	J. Hogg	(2-016)	0.05	\$5.00 \$5.00	\$5.77			\$5.77
	Pt. 10	1	L. Smits	(2-017)	0.08	\$5.00 \$33.00	\$5.77			\$5.77
	Pt. 10	1	M. Carriere	(2-018)	2.26	\$32.00	\$36.95			\$36.95
<b>ተ</b>	4	153	D. Metcalfe	(2-023)	0.04	\$5.00	\$5.77			\$5.77



				ACTUAL A	SSESSMENT				
Lot or Part	Con. or Plan	Landowner	Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
* 5	153	J. Franken	(2-024)	0.08	\$5.00	\$5.77			\$5.77
* 6	153	J. Dickie	(2-025)	0.08	\$5.00	\$5.77			\$5.77
* 7	153	I. Walker	(2-026)	0.06	\$5.00	\$5.77			\$5.77
* 8	153	C. Humphrey	(2-027)	0.08	\$5.00	\$5.77			\$5.77
* Pt. 10	1	A. Pennington	(2-028)	0.57	\$9.00	\$10.39			\$10.39
* 11	225	R. Ward	(2-031)	0.10	\$5.00	\$5.77			\$5.77
* 12	225	A. Furness	(2-032)	0.10	\$5.00	\$5.77			\$5.77
* 13	225	L. Graumans	(2-033)	0.10	\$5.00	\$5.77			\$5.77
* 14	225	K. Moore	(2-034)	0.10	\$5.00	\$5.77			\$5.77
* 15	225	H. Turner	(2-035)	0.10	\$5.00	\$5.77			\$5.77
* 16, 17, 18	225	J. Hughes	(2-036)	0.30	\$5.00	\$5.77			\$5.77
* Pt. 10	1	W. Simpson	(2-036-10)	0.13	\$5.00	\$5.77			\$5.77
* Pt. 10	1	J. Lettau	(2-039)	0.21	\$5.00	\$5.77			\$5.77
* Pt. 10	1	M. Simpson	(2-039-01)	0.16	\$5.00	\$5.77			\$5.77
* Pt. 10	1	R. Harris	(2-039-02)	0.16	\$5.00	\$5.77			\$5.77
* 18	226	S. Sutherland	(2-045)	0.23	\$5.00	\$5.77			\$5.77
* Pt. 11	1	G. Potter	(2-045-20)	0.73	\$10.00	\$11.55			\$11.55
* Pt. 11	1	J. Sheperd	(2-046)	0.21	\$5.00	\$5.77			\$5.77
* 17	226	D. Thompson	(2-047)	0.08	\$5.00	\$5.77			\$5.77
* Pt. 16	226	M. Shaik	(2-048)	0.08	\$5.00	\$5.77			\$5.77
* 15, 16	226	J. Franken	(2-049)	0.08	\$5.00	\$5.77			\$5.77
* 14, 15	226	G. Hoggarth	(2-050)	0.10	\$5.00	\$5.77			\$5.77
* 13	226	A. Gregory	(2-051)	0.08	\$5.00	\$5.77			\$5.77
* 12	226	A. Gregory	(2-051)	0.08	\$5.00	\$5.77			\$5.77
* 11	226	K. Hildenbrandt	(2-054)	0.08	\$5.00	\$5.77			\$5.77
* 10	226	T. Wright	(2-053)	0.08	\$5.00	\$5.77			\$5.77
* 9	226	M. Taylor	(2-055)	0.08	\$5.00	\$5.77			\$5.77
* 8	226	J. Little	(2-056)	0.08	\$5.00	\$5.77			\$5.77
* 7	226	B. Benninger	(2-057)	0.08	\$5.00	\$5.77			\$5.77
* 6	226	J. Coulter	(2-058)	0.08	\$5.00	\$5.77			\$5.77
* 5	226	P. Brink	(2-059)	0.08	\$5.00	\$5.77			\$5.77



ACTUAL ASSESSMENT								
Lot or Part	Con. or Plan Landowner	Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
* 4	226 J. Gibson	(2-060)	0.08	\$5.00	\$5.77			\$5.77
* 3	226 Township of Huron-Kinloss	(2-061)	0.06	\$5.00	\$5.77			\$5.77
Total Assessn	nents on Lands (Township of Huron-Kir	\$5,294.00	\$6,113.45	\$1,729.10		\$4,384.35		



ACTUAL A					ASSESSMENT					
Lot or Part	Con. or Plan	Landowner	Roll No.	Approx. Hectares Affected	Total Estimated Assessment	Total Actual Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment	
Whitechurch S	Street	Township of Huron-Kinloss		2.3	\$126.00	\$145.50			\$145.50	
S Kinloss Ave		Township of Huron-Kinloss		4.2	\$169.00	\$195.16			\$195.16	
Boundary Culr	oss	Township of Huron-Kinloss		0.4	\$5.00	\$5.77			\$5.77	
Turnberry Kinl	oss Rd.	Township of Huron-Kinloss		2.5	\$33.00	\$38.11			\$38.11	
Amberley Roa	d	County of Bruce		2.6	\$139.00	\$160.52			\$160.52	
Total Assessment on Roads (Township of Huron-Kinloss)				\$472.00	\$545.06			\$545.06		
Total Assessment on Lands and Roads, Township of Huron-Kinloss				\$5,766.00	\$6,658.51	\$1,729.10		\$4,929.41		
Total Assessment on Lands and Roads Thompson Lamont Deyell Municipal Drain 2020				\$39,800.00	\$45,960.57	\$13,284.68	\$500.00	\$32,175.89		

#### NOTES:

- 1. \* Denotes lands not eligible for ADIP grants.
- 2. The NET ASSESSMENT is the total actual assessment less a one-third (1/3) Provincial grant, and allowances, if applicable.
- ${\bf 3. \ \, The \ NET \ ASSESSMENT \ is \ provided \ for \ information \ purposes \ only.}$



#### CORPORATION OF THE MUNICIPALITY OF MORRIS-TURNBERRY

#### **BY-LAW NO. 4-2024**

Being a by-law to confirm the proceedings of the Council of the Corporation of the Municipality of Morris-Turnberry, for its meeting held on January 16, 2024.

**WHEREAS** Section 9 of the *Municipal Act 2001, S.O. 2001, c. 25* provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

**AND WHEREAS** Section 5 (3) of the *Municipal Act 2001, S.O. 2001, c. 25* provides that a municipal power, including a municipality's capacity, rights, powers and privileges under Section 9, 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 Municipality of Morris-Turnberry for the January 16<sup>th</sup>, 2024, meeting be confirmed and adopted by By-law;

**NOW THEREFORE,** the Council of the Corporation of the Municipality of Morris-Turnberry enacts as follows:

- 1. The action of the Council of the Corporation of the Municipality of Morris-Turnberry at its meeting held the 16<sup>th</sup> day of January 2024, in respect of each recommendation contained in the Minutes and each motion and resolution passed and other action taken by the Council of the Corporation of the Municipality of Morris-Turnberry at the meeting, is hereby adopted and confirmed as if all such proceedings were expressly embodied in this By-Law; and
- 2. The Mayor and proper officials of the Corporation of the Municipality of Morris-Turnberry hereby authorize and direct all things necessary to give effect to the action of the Council to the Corporation of the Municipality of Morris-Turnberry referred to in the preceding section thereof;
- 3. The Mayor and CAO/Clerk are authorized and directed to execute all documents necessary in that behalf and to affix thereto the Seal of the Corporation.

Read a FIRST and SECOND time this  $16^{th}$  day of January 2024

Read a THIRD time and FINALLY PASSED this 16th day of January 2024

Mayor	Iami	e Heffer	
1v1ay01	, Jann	c Herrer	
Clerk,	Trevo	r Hallan	1