



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH  
October 16, 2019 COUNCIL MEETING

**A G E N D A**

**DATE:** Wednesday, October 16, 2019

**REGULAR MEETING:** 7:00 P.M.

**≠ Denotes resolution prepared**

1. Call the Meeting to Order
2. Disclosure of Pecuniary Interest & the General Nature Thereof.

3. **CLOSED ITEMS**

None

4. **Adoption and Receipt of Minutes of the Previous Meeting.≠**

- (a) September 18, 2019 Closed Council Meeting
- (b) September 25, 2019 Capital Budget Council Meeting
- (c) October 2, 2019 Regular Council Meeting

5. Business Arising Out of the Minutes.

6. **PUBLIC MEETINGS**

1. **Notice of Complete Application and Public Meeting for the lands legally described as Part Lot 26, Concession 2, proposed amendments to the County of Wellington Official Plan (File No. OP 2016-10) and the Township of Puslinch Zoning By-law (File No. D14/FAR).**

**\*note this Public Information Meeting will be held on October 16, 2019 at 6:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

7. **COMMUNICATIONS**

- 1) St. Mary's Cement Inc. (Canada)/CBM Aggregates Ltd 2018 Monitoring Report for Mast-Snyder Pit Hydrogeological and Natural Environment Site Plan Technical Requirements prepared by AECOM Canada Ltd. Dated May 2019.



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- a. Harden Environment Services Hydrogeological Review of CBM Aggregates Ltd 2018 Monitoring Report for Mast-Snyder Pit: Hydrogeological and Natural Environment Site Plan Technical Requirements dated October 4, 2019.
  - b. GWS Ecological & Forestry Services Inc. review of Mast-Snyder Pit 2018 Monitoring Report Natural Environment review dates October 10, 2019.
- 2) Capital Paving Inc. Wellington Pit 2018 Groundwater Monitoring Report License No. 20085 dated March 26, 2019.
- a. Harden Environmental Inc. review of Capital Paving Inc. Wellington Pit 2018 Groundwater Monitoring Report License No. 20085 dated April 9, 2019.
- 3) Cox Construction Ltd. Puslinch Pit Northeast Extension - License No. 625710 prepared by Groundwater Science Corp. dated September 3, 2019.
- a. Harden Environmental Services Review of Cox Construction Ltd. Puslinch Pit Northeast Extension - License No. 625710 prepared by Groundwater Science Corp. dated October 4, 2019.

1. **Intergovernmental Affairs**

- (a) Various correspondence for review.

4) **DELEGATIONS / PRESENTATIONS**

None

5) **REPORTS**

1. **Finance Department**

- (a) FIN-2019-031 - 2020 User Fees and Charges By-law

2. **Administration Department**

- (a) Report ADM-2019-024 - Proposed Changes to the Aggregate Resources Act



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**3. Planning and Building**

- (a) County of Wellington Report – 2019 Provincial Policy Statement Review
- (b) County of Wellington Report – County Official Plan review – Process and Key Phases
- (c) PD-2019-014 - GRCA Wells Decommissioning
- (d) BLDG-2019-010 Building Monthly Update September 2019

**4. Recreation Department**

- (a) REC-2019-002 - Puslinch Community Centre - Audio System Update

**5. Mayor's Updates**

Meeting update with the Ministry of Natural Resources and Forestry with respect to proposed amendments to the Aggregates Resource Act.

**6) NOTICES OF MOTION**

None

**7) COMMITTEE MINUTES ≠**

- (a) September 10 2019 Committee of Adjustment Meeting Minutes
- (b) September 10 2019 Planning and Development Advisory Committee Meeting Minutes

**8) MUNICIPAL ANNOUNCEMENTS**

**9) UNFINISHED BUSINESS**

**10) BY-LAWS**

None

**11) CONFIRMING BY-LAW ≠**

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

**12) ADJOURNMENT ≠**



**MINUTES**

**DATE:** September 25, 2019

**REGULAR MEETING:** 9:00 A.M.

The September 25, 2019 Capital Budget Council Meeting was held on the above date and called to order at 9:04 a.m. in the Council Chambers, Aberfoyle.

Council recessed from 9:33 a.m. to 10:52 a.m.

1. **ATTENDANCE:**

Mayor James Seeley  
Councillor Jessica Goyda  
Councillor Ken Roth  
Councillor John Sepulis

**STAFF IN ATTENDANCE:**

1. Patrick Moyle, Acting CAO/Clerk
2. Mary Hasan, Director of Finance/Treasurer
3. Mike Fowler, Supervisor of Public Works and Parks
4. Courtenay Hoytfox, Development and Legislative Coordinator

2. **DISCLOSURE OF PECUNIARY INTEREST & THE GENERAL NATURE THEREOF:**

None

7. **DELEGATIONS/PRESENTATIONS**

(1) Luis Gomes, Fire Chief – Fire and Rescue Services Department

**Resolution No. 2019-344:** Moved by Councillor Sepulis and  
Seconded by Councillor Goyda

**That Council receives the presentation from Luis Gomes, Fire Chief – Fire and Rescue Services Department with respect to proposed 2020 Capital Budget Items; and**

**That Fire Chief Luis Gomes provide the following information and report back to Council during the 2020 Capital Budget process:**

- **Prepare comparator information between a custom cab chassis and a commercial cab chassis**
- **Provide more details regarding the additional safety features of a Rescue Truck with a Custom Cab vs. a Commercial Chassis**
- **Provide costing for replacing the Rescue 35 with a Rescue 35 and Pumper 31 combination truck**

**CARRIED**

(2) Mike Fowler, Supervisor Public Works, Parks, and Facilities

**Resolution No. 2019-345:** Moved by Councillor Goyda and  
Seconded by Councillor Sepulis



**That Council receives the presentation from Mike Fowler, Supervisor Public Works, Parks, and Facilities with respect to proposed 2020 Capital Budget Items; and**

**That Mike Fowler, Supervisor Public Works, Parks, and Facilities provide the following information and report back to Council during the 2020 Capital Budget process:**

- **Provide the estimated cost savings of buying all three tandem trucks in 2020 rather than one unit in 2020 and two units in 2021**
- **Determine whether there is an opportunity to lease an axle truck for this winter period instead of using the 2011 Single Axle and provide the cost of leasing**
- **Provide a realistic indication of when the Tandem Axle Truck could be delivered to the Township**
- **Provide a suggested gravel road for repaving including a cost estimate**
- **Provide a cost estimate and further details regarding potential washrooms at Old Morriston Park**
- **Provide costing and alternative options for ensuring the Horse Paddock Bleachers at the Puslinch Community Centre Grounds are in accordance with the Building Code rather than replacing them at the cost of \$30,000**

**CARRIED**

(3) Mary Hasan, Director of Finance/Treasurer – All other

**Resolution No. 2019-346:** Moved by Councillor Roth and  
Seconded by Councillor Sepulis

**That Council receives the presentation from Mary Hasan, Director Finance/Treasurer with respect to proposed 2020 Capital Budget Items.**

**CARRIED**

## **8. REPORTS:**

### **1. Finance Department**

1. Report FIN-2019-030 regarding the 2020 Proposed Capital Budget

**Resolution No. 2019-347:** Moved by Councillor Goyda and  
Seconded by Councillor Sepulis

**THAT Report FIN-2019-030 regarding the 2020 Proposed Capital Budget be received; and**

**That Council establish and define discretionary reserves in accordance with the By-law attached as Schedule E to Report FIN-2019-030; and**

**That Council allocate all budget surpluses to the Township's Asset Management Discretionary Reserve for the purpose of meeting future asset management obligations.**

**CARRIED**



9. **MUNICIPAL ANNOUNCEMENTS**

10. **UNFINISHED BUSINESS**

11. **BY-LAWS:**

12. **CONFIRMING BY-LAW**

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

**Resolution No. 2019-348:** Moved by Councillor Roth and  
Seconded by Councillor Goyda

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

By-Law BL-2019-057 being a by-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch at its meeting held on the 25 day of September 2019

**CARRIED**

13. **ADJOURNMENT:**

**Resolution No. 2019-349:** Moved by Councillor Roth and  
Seconded by Councillor Goyda

That Council hereby adjourns at 12:04 p.m.

**CARRIED**

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James Seeley, Mayor

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Patrick Moyle, Acting CAO/Clerk

**MINUTES**

**DATE:** October 2, 2019

**REGULAR MEETING:** 1:00 P.M.

The October 2, 2019 Regular Council Meeting was held on the above date and called to order at 1:00 p.m. in the Council Chambers, Aberfoyle.

1. **ATTENDANCE:**

Mayor James Seeley  
Councillor Matthew Bulmer  
Councillor Jessica Goyda  
Councillor Ken Roth  
Councillor John Sepulis

**STAFF IN ATTENDANCE:**

1. Patrick Moyle, Acting CAO/Clerk
2. Mary Hasan, Director of Finance/Treasurer
3. Mike Fowler, Supervisor of Public Works and Parks
4. Courtenay Hoytfox, Development and Legislative Coordinator

2. **DISCLOSURE OF PECUNIARY INTEREST & THE GENERAL NATURE THEREOF:**

Councillor Goyda declared a potential pecuniary interest with respect to Communication item 5, Ministry of Natural Resources and Forestry: Proposed Amendments to the Aggregate Resources Act as a family member operates an aggregate business in the Township.

3. **ADOPTION OF THE MINUTES:**

- (a) September 12, 2019 Public Meeting for Proposed 2020 User Fees and Charges By-law
- (b) September 18, 2019 Regular Council Meeting

**Resolution No. 2019-350:**

Moved by Councillor Goyda and  
Seconded by Councillor Sepulis

**That the minutes of the following meetings be adopted as written and distributed:**

- (a) **September 12, 2019 Public Meeting for Proposed 2020 User Fees and Charges By-law**
- (b) **September 18, 2019 Regular Council Meeting**

**CARRIED**

4. **BUSINESS ARISING OUT OF THE MINUTES:**

5. **PUBLIC MEETINGS:**

**1. Notice of Complete Application and Public Meeting for the lands legally described as Part Lot 26, Concession 2, proposed amendments to the County of Wellington Official Plan (File No. OP 2016-10) and the Township of Puslinch Zoning By-law (File No. D14/FAR).**

**\*note this Public Information Meeting will be held on October 16, 2019 at 6:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

6. **COMMUNICATIONS:**

- (1) Capital Paving Inc. 2018 Groundwater Monitoring Report, Wellington Pit Licence No. 20085 Part Lots 7 and 8, Concession 3 dated March 26, 2019

- a. Harden Environmental Monitoring Review of Capital Paving Inc. 2018 Groundwater Monitoring Report, Wellington Pit Licence No. 20085 Part Lots 7 and 8, Concession 3, dated April 9, 2019.
- (2) Correspondence from M.F. Property Management Ltd. with respect to the Wellington Common Elements Condominium Corporation #214 – Operations and Maintenance Quarterly Report for the Mini Lakes Waste Water Treatment System (April 2019- June 2019) dated August 19, 2019.
- (3) Various Compliance Assessment Reports
- a. Cox Licence ID 5710
  - b. Cox Licence ID 624889
  - c. Cox Licence ID 625710
  - d. Cox Licence ID 20212

**Resolution No. 2019-351:**

Moved by Councillor Sepulis and  
Seconded by Councillor Goyda

**That the Cox Compliance Assessment report for License ID 20212 be received; and**

**That Council direct staff to confirm the requirements for lifting the holding provision on the lands zoned EXI-11(h-4); and**

**That Council direct staff to send correspondence to Cox Construction with respect to this matter; and**

**That any costs associated with site inspections are to be paid by Cox Construction Limited.**

**CARRIED**

- e. Aberfoyle Pits 1 & 2 License # 5483 & 5609
  - f. Dufferin Aggregates Mill Creek Pit License # 5738
- (4) Monthly Monitoring report for August 2019, Mill Creek Pit License #5738 prepared by Dufferin Aggregates, dated September 11, 2019.

Councillor Goyda declared a potential pecuniary interest with respect to Communication item 5, Ministry of Natural Resources and Forestry: Proposed Amendments to the Aggregate Resources Act, as a family member operates an aggregate business in the Township and refrained from discussions and voting on that item.

- (5) Ministry of Natural Resources and Forestry: Proposed Amendments to the Aggregate Resources Act, dated September 20, 2019.

**Resolution No. 2019-352:**

Moved by Councillor Roth and  
Seconded by Councillor Sepulis

**That the Ministry of Natural Resources and Forestry: Proposed Amendments to the Aggregate Resources Act, dated September 20, 2019 be received; and**

**That Council direct staff to prepare a report for Council's consideration at the October 16, 2019 Council meeting with respect to the Proposed Amendments to the Aggregate Resources Act; and  
That Council direct staff to send correspondence to the Ministry of Natural Resources and Forestry with respect to this matter.**





**CARRIED**

**7. Intergovernmental Affairs**

**Resolution No. 2019-353:**

Moved by Councillor Sepulis and  
Seconded by Councillor Goyda

**That the Intergovernmental Affairs correspondence items listed on the Council Agenda for OCTOBER 2, 2019 Council meeting be received.**

**CARRIED**

**8. DELEGATIONS/PRESENTATIONS**

1:05 p.m. – Jennifer Passy, Manager of Planning, Upper Grand District School Board, with respect to the proposed sidewalk installation along the north/east side of Old Brock Road.

**Resolution No. 2019-354:**

Moved by Councillor Roth and  
Seconded by Councillor Bulmer

**That Council receives the presentation by Jennifer Passy, Manager of Planning, Upper Grand District School Board, with respect to the proposed sidewalk installation along the north/east side of Old Brock Road; and**

**That Council direct staff to complete a direct mail out to impact homes adjacent to the proposed new sidewalk; and**

**That Council refer this matter to the 2020 Capital Budget process.**

**CARRIED**

**9. REPORTS:**

None

**1. Mayor's Updates**

None

**10. NOTICE OF MOTION:**

(a) Councillor Sepulis and with respect to the reconstruction of Wellington Road 46 through Aberfoyle

**Resolution No. 2019-355:**

Moved by Councillor Bulmer and  
Seconded by Councillor Roth

**WHEREAS on Dec. 19, 2018 Council requested in a motion which included that the County consider reconfiguring the lane markings on Wellington Road 46 through Aberfoyle to provide 2 lanes of traffic, a centre lane and a parking instead of 4 lanes of traffic to encourage revitalization of Aberfoyle; and**

**WHEREAS on Jan. 8, 2019 the County Roads Committee received the request for information;**

**THEREFORE BE IT RESOLVED that the County Roads Committee be asked to hear a Council delegation to their meeting of Oct. 8 on this matter.**

**CARRIED**



**11. COMMITTEE MINUTES**

(a) June 25, 2019 Recreation Committee Minutes

**Resolution No. 2019-356:** Moved by Councillor Roth and  
Seconded by Councillor Bulmer

**That the minutes of the following meetings be adopted as written and distributed:**

(a) **June 25, 2019 Recreation Committee Minutes**

**CARRIED**

**12. MUNICIPAL ANNOUNCEMENTS**

(a) None

**13. UNFINISHED BUSINESS**

None

**14. BY-LAWS:**

(a) None

**15. CONFIRMING BY-LAW**

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

**Resolution No. 2019-357:** Moved by Councillor Bulmer and  
Seconded by Councillor Roth

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

**By-Law BL-2019-058 being a by-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch at its meeting held on the 2nd day of October 2019**

**CARRIED**

**16. ADJOURNMENT:**

**Resolution No. 2019-358:** Moved by Councillor Roth and  
Seconded by Councillor Bulmer

That Council hereby adjourns at 2:00 p.m.

**CARRIED**

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James Seeley, Mayor

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Patrick Moyle, Acting CAO/Clerk



## **PLANNING REPORT for the TOWNSHIP OF PUSLINCH**

Prepared by the County of Wellington Planning and Development Department

**DATE:** October 7<sup>th</sup>, 2019  
**TO:** Patrick Moyle, CAO/Clerk (Acting)  
Township of Puslinch  
**FROM:** Meagan Ferris, Senior Planner  
County of Wellington  
**SUBJECT:** **PUBLIC MEETING – Farhi Holding Corp.**  
**County Official Plan Amendment File OP-2016-10 and**  
**Township Zoning By-law Amendment File #D14/FAR**  
**Part of Lot 26, Concession 2 (No Municipal Address)**  
**Township of Puslinch**

### **SUMMARY**

The purpose of the subject Official Plan and Zoning By-law amendment applications is to include the subject lands within the Puslinch Economic Development Area special policy area (PA7-1) to permit industrial and commercial uses and to rezone the subject lands from 'Extractive Industrial (EXI)' and 'Natural Environment (NE-6)' to a site specific 'Industrial (IND)' Zone and 'Natural Environment (NE)' Zone. The 'NE' Zone will restrict development within the existing natural features on the subject lands.

A public meeting is scheduled for October 16<sup>th</sup>, 2019. This report provides a preliminary overview of the proposal, highlights some of the applicable planning policies to be considered, comments received to date, outstanding items to be addressed, and explains the next steps in the planning review process.

It is recommended that this Public Meeting Report regarding the proposed County Official Plan Amendment OP-2016-10 and Zoning By-law Amendment D14/FAR be received for information.

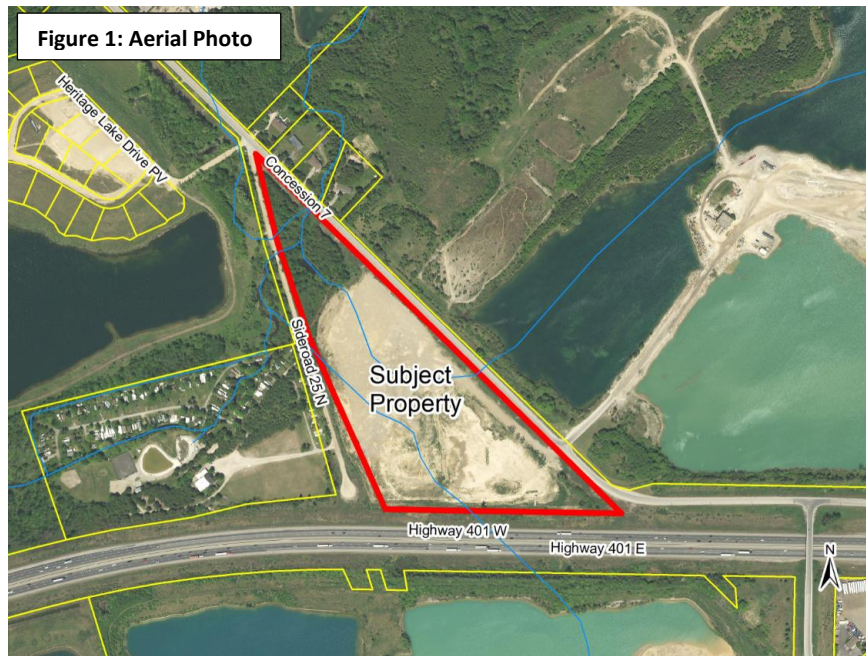
### **INTRODUCTION**

The subject lands are located between Concession 7 and Sideroad 25 N and are immediately west of the Puslinch Economic Development Area. The subject lands are approximately 9.53 hectares (23.5 acres) in size with direct frontage and access onto both Concession 7 and Sideroad 25 N. The site location can be seen in **Figure 1**.

The subject property is currently vacant of any structures and contains natural features to the north end of the property (including a portion of Mill Creek). Surrounding land uses consist of Reid's Heritage Lake community, and other residential uses to the north, the Highway 401 West corridor to the immediate south, extractive sites (in the Puslinch Economic Development Area) to the east and the Slovenski Park to the immediate west which is a seasonal trailer park/community.

The subject lands were formerly part of an aggregate pit known as the Coburn Pit. The property owner's consultant has confirmed that there is no longer an aggregate license on the property.

The subject applications were first submitted in early 2017 and since that time the proposal has been revised with additional supporting studies being provided. The submitted, supporting studies include the submission of a new Planning Justification Report (dated October 2018), a Servicing Feasibility Study (dated December 3, 2018) and an Environmental Impact Study (dated October, 2018) to support the revised development proposal and to justify the appropriateness of the proposed policy and zoning amendments and the future development.



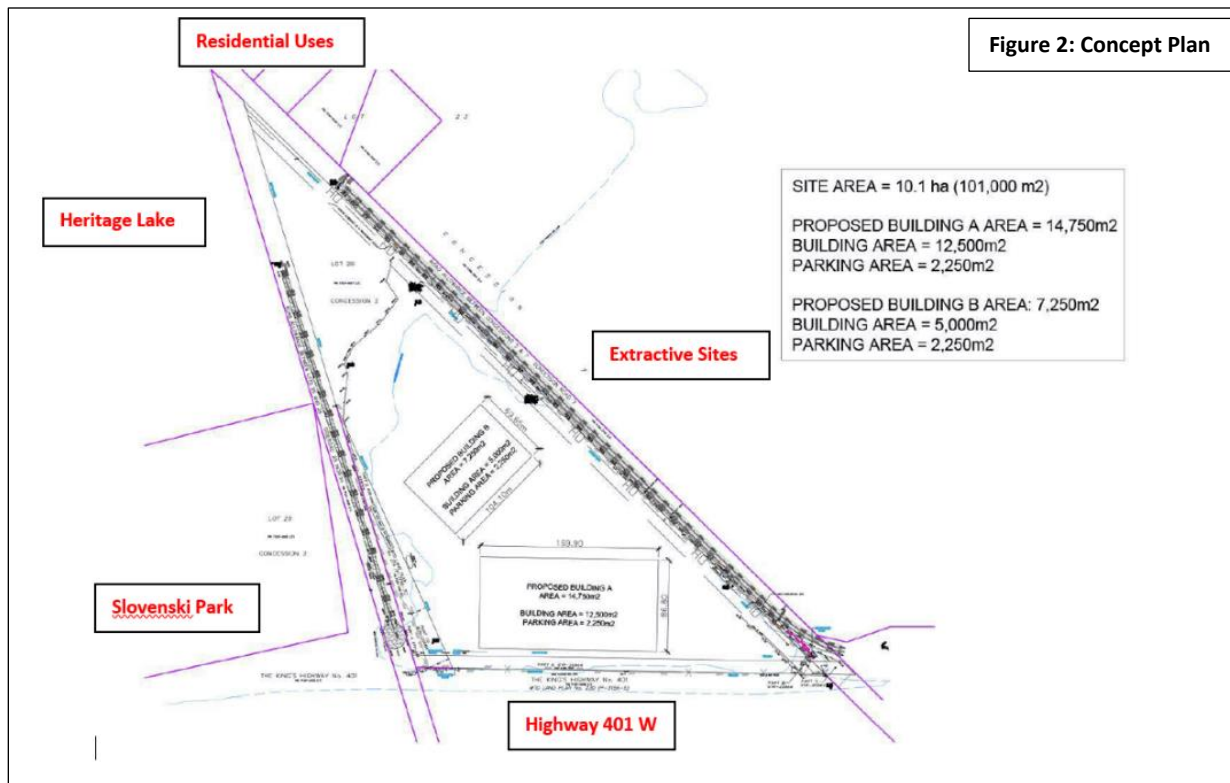
## PROPOSAL

The purpose of the subject applications is to amend both the County Official Plan and the Puslinch Zoning By-law in order to facilitate the future development of the site for industrial and commercial uses (such as offices and warehousing). At this time, the exact use(s), user(s) and site design is unknown; however, the application is seeking to put planning permissions in place to provide flexibility and future development potential. As such, the intent of the applications are twofold:

- (i) Amend the County Official Plan by including the subject lands into the special policy area of the Puslinch Economic Development Area (PA7-1); and
- (ii) Amend the Township of Puslinch Zoning By-laws by rezoning the subject lands from 'Extractive Zone (EXI)' and Natural Environment (NE-6) zone to a site specific/customized 'Industrial (IN)' Zone and also expand the 'Natural Environment (NE)' Zone to recognize and protect the existing natural features and flood prone area on the north end of the site.

The specific detailed design, layout and function of the site is not known at this time; however, as part of the subject applications, a conceptual plan has been submitted to show how the site may be built out and can be seen in **Figure 2**. More specifically, the conceptual plan identifies two (2), one storey buildings with one building approximately 5000 m<sup>2</sup> (53 819.5 ft<sup>2</sup>) in size and the second building being approximately 12 500 m<sup>2</sup> (134 548.8 ft<sup>2</sup>) in size. For each structure, an area of approximately 2 250 m<sup>2</sup> (24 218.7 ft<sup>2</sup>) is intended for parking, which equates to two-hundred and fifty (250) parking stalls.

The north end of the property (which contains wetlands, woodlands, Mill Creek, and other features) is proposed to be placed into the 'Natural Environment (NE)' Zone to protect these features from future development. As the intended uses are not known at this time, the supporting technical studies are not specific to a certain development proposal. From a servicing perspective, on-site private sewage systems are proposed to be utilized wells (one-two) are also proposed to be dug on-site, and cisterns may be utilized. Access is proposed to be limited to Concession 7.



**PROVINCIAL POLICY - PROVINCIAL POLICY STATEMENT (2014)**

The Provincial Policy Statement (2014) provides policy direction for all development within the Province of Ontario in part by building strong and healthy communities and managing and directing land uses and land uses patterns. Generally speaking, growth and development are to be focused in settlement areas. A review of applicable policies within the Provincial Policy Statement is provided below:

**Rural Areas and Lands**

The subject property is recognized as Rural Land within the Provincial Policy Statement (PPS). Section 1.1.4.1 of the PPS states that, “Healthy, integrated and viable rural areas should be supported by:

- a) Building upon rural character, and leveraging rural amenities and assets;
- f) Promoting diversification of the economic base and employment opportunities through goods and services, including value-added products and the sustainable management of resources;

Section 1.1.5 of the PPS provides direction for Rural Lands in Municipalities. Section 1.1.5.3 of the PPS states that, “recreational, tourism and other economic opportunities should be promoted”. Section 1.1.5.4, states that “development that is compatible with the rural landscape and can be sustained by rural service levels should be promoted.”

**Natural Heritage**

Section 2.1 of the PPS provides direction for Natural Heritage. Specifically, Section 2.1.1 states that, “natural features and areas shall be protected for the long term” and Section 2.1.2 states that, “the diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.” Development and site alteration within or adjacent to significant wetlands and woodlands is not permitted unless there are no negative impacts.

**Mineral Aggregate Resources**

It is understood that this site was a former extraction site and that the license has been surrendered.

Section 2.5.3.1 identifies that "...rehabilitation shall be required to accommodate subsequent land uses, to promote land use compatibility, to recognize the interim nature of extraction, and to mitigate negative impacts to the extent possible."

### **Natural Hazards**

Section 3.0 of the PPS also speaks to protecting public health and safety by directing development "away from areas of natural or human-made hazards where there is an unacceptable risk to public health or safety or property damage...".

### **PROVINCIAL POLICY - PROVINCIAL GROWTH PLAN (2019)**

The subject proposal was reviewed by the proponent's consultant in relation to the 2017 Provincial Growth Plan, which was applicable at the time. However, the Growth Plan was updated and the 2019 version of the Plan is now applicable.

Similar to the PPS, the Growth Plan directs growth to settlement areas, unless where otherwise permitted. It should be noted that the special policy area of PA7-1 is not an employment area as defined by the Provincial Growth Plan. Rather, the special policy area provides policy clarification for additional uses, primary focusing on aggregate operations once they've ceased to operate.

Within Section 2.2.5 of the Growth Plan, it speaks to employment, and directs major offices to urban growth centres, major transit station areas, or other strategic growth areas with existing or planned frequent transit services. It should be noted that the subject lands are not identified as an urban growth area, major transit station area or strategic growth areas as defined by the Growth Plan. Major Office are defined as "freestanding office buildings of approximately 4000 m<sup>2</sup> of floor space or greater, or with approximately 200 jobs or more". To ensure consistency, the scale of any future office uses will need to be limited within the future amending by-laws.

Section 2.2.9 establishes policies for Rural Areas. Within Rural Areas, there are Rural Lands, which are defined as "lands which are located outside of settlement areas and which are outside prime agricultural areas". Development of the subject lands are to comply with these policies. Section 2.2.9.3 outlines permitted uses on Rural Lands, which includes management or use of resources; resource-based recreational uses; and other rural land uses that are not appropriate in settlement areas provided they are "compatible with the rural landscape and surrounding land uses; will be sustained by rural service levels; and will not adversely affect the protection of agricultural uses and other resource-based uses..."

In regards to the natural features on-site, which includes key hydrological features (i.e. wetlands and streams) Section 4.2.4 identifies policies for development and site alteration adjacent to and within 120 metres (393.7 feet) of a key hydrological feature. At a minimum, a 30 metres (98.4 feet) vegetative protection zone is required. An Environmental Impact Study (EIS) was prepared by Golder Associates in 2018, as such the EIS did not take into consider the Growth Plan policies of 2019.

### **COUNTY OFFICIAL PLAN**

The subject lands are currently designated as 'Core Greenland System', 'Greenland System', and 'Secondary Agriculture'. The subject lands are also identified as being within the Mineral Aggregate Resource Overlay as it is within an area where there is significant sand and gravel resources. The identified natural features include Provincially Significant Wetlands, wetlands and floodplain area.

As part of the subject Official Plan Amendment, a refining of the 'Greenland System' has been requested to establish a development area outside of the Greenlands. As part of the Grand River Conservation Authority's review, it's been identified that they do not object to the proposed mapping refinement.

Within the 'Secondary Agriculture' designation small-scale commercial, industrial and institutional uses are permitted. The applicant proposes to amend the County Official Plan to allow more flexibility in uses to be considered on the subject lands by incorporating the subject lands within the Puslinch Economic Development Area policy (PA7-1). This would allow the site to be utilized for "economic activity and employment opportunities" and be "considered for industrial, commercial, institutional and/or recreational activities...as after-uses when the extractive or aggregate-related activities have either ceased or are incorporated into an after-use". Overall, the existing PA7-1 policy area generally provides policy permissions and direction for 'after-uses' in relation to former aggregate operations.

In assessing the proposed development, consideration should be provided to the following policies within the County's Official Plan:

- **General County Policies:**
  - Wellington County Growth Strategy (Section 3)– majority of growth will be directed to urban centre that offer municipal services and growth will also be directed to the secondary agricultural areas;
  - Economic Development (Section 4.2) – the Rural System will provide opportunities for employment with the main employment generator being resource based industries such as agriculture, aggregate and forestry. The Rural System can also contribute sites for employment based on the larger lots, larger buffer abilities, and proximity to rural resources and major roads;
  - Protection of water resources (Section 4.9) and protection of the Mill Creek Watershed (Section 4.10);
  - Planning Impact Assessment (Section 4.6.2) may be required to evaluate: the need of the use and taking into consideration available lands or buildings in the area; appropriateness and intensity of the use; adequacy of servicing; compatibility; impact on natural resources, biodiversity and natural features and areas; exterior design etc.
  
- **Greenland System Policies**
  - Section 5.4, 5.5 & 5.6 speak to core and non-core greenlands and identify that development and site alteration is not permitted in all wetlands types and that significant woodlands will be protected from negative impacts as will streams and valleylands;
  - The 'Development Controls' identify permitted uses and allows "other uses permitted in the applicable adjacent or underlying designations..." and development proposed in the 'Greenland System' or on adjacent lands is not permitted unless it has been demonstrated there will be no negative impacts.
  
- **Rural System Policies**
  - Within the 'Secondary Agriculture' designation, permitted uses include: all uses permitted in the prime agricultural area; small scale commercial, industrial, and institutional uses; and public service facilities. All sizes, types and intensities of agriculture are promoted and protected;
  - These policies identify that small scale uses are permitted provided it has been demonstrated that appropriate sewage and water systems can be established; the use is compatible with surrounding land uses; the use requires a non-urban area; the use will not hinder agriculture or mineral aggregate; and the use is small scale.

- **Servicing**
  - The 'Rural System Servicing' identified that development is anticipated on individual, on-site services where soil conditions are suitable over the long term.

### **Land Use Compatibility**

Due to the subject lands being located within the Rural System and in close proximity to various sensitive land uses/sensitive receptors, a development must demonstrate that it is appropriate for the area and surrounding land uses. This would include applying appropriate mitigation measures, such as setbacks, vegetative buffering's, berms, limitation or prohibition of certain obnoxious uses, etc.; and the implementation of building and site design controls (i.e. architectural features, building orientation, landscaping, etc.).

The proponent will need to demonstrate how land use compatibility will be addressed. This includes the concerns identified within the 'Other Comments' section of this report, which includes the comments submitted by the Slovenski Park.

It is also noted that the Ministry of Environment has guidelines that categorizes industrial uses into three (3) classes based on the obnoxiousness and intensity of use and potential off-site impacts. Each class has a suggested, minimum setback (i.e. Class 1 – 20 metres; Class 2 – 70 metres; and Class 3 – 300 metres) from sensitive receptors.

Land use compatibility can be engrained in site specific zoning by-law provisions and demonstrated through the site plan process.

### **PROPOSED OFFICIAL PLAN AMENDMENT**

The proposed Official Plan Amendment is to include the subject lands within the special policy area (PA7-1) of the Puslinch Economic Development Area.

The policy area is "intended to service the Township by providing locations for economic activity and employment opportunities... and is the predominant location for business and industry in the Township." Further, this special policy area identifies that "areas of existing or future extractive uses...should be considered for industrial, commercial, institutional and/or recreational activities or natural areas as after-uses...". Although the after uses are permitted without an amendment to the Official Plan, they are subject to the applicable policies of the Official Plan.

### **PROPOSED REZONING**

The intent of the rezoning of the subject lands is to remove the 'Extractive Industrial (EXI)' Zone and replace it with a site specific 'Industrial (IND)' Zone, along with extending the 'Natural Environment (NE)' Zone on the property to recognize the natural features identified on the subject lands (i.e. the far north end). The current Zoning By-law (By-law # 19/85) the 'IND' Zone permits the following uses:

- body shop;
- building or construction contractor's yard;
- business office;
- concrete plant;
- factory outlet;
- feed mill;
- grain storing, weighing and drying operation;
- fuel depot;
- home occupation accessory to a permitted existing single dwelling;



- an industrial use;
- public use, including a Municipal Airport and related activities;
- retail lumber and building supply yard;
- restaurant;
- sawmill;
- service trade;
- transport terminal; and
- warehouse

Within the new by-law (by-law # 023/18), the 'IND' Zone also permits the following uses, as noted below, which are not listed in the current Zoning By-law:

- agricultural service and supply establishment;
- professional office;
- caterer's establishment;
- commercial fitness centre;
- commercial self-storage facility;
- dry cleaning plant;
- industrial equipment rental establishment;
- medical marihuana production facility;
- outdoor storage;
- postal or courier outlet;
- recycling facility;
- equipment rental facility; and
- transport terminal;

In *addition* to the uses permitted within the 'IND' Zone, the proponent is seeking to also include the following uses:

- A farmer's market;
- Garden centre;
- Outdoor display and sales centre;
- A public indoor storage facility; and
- Retail uses or a showroom ancillary to the above listed permitted uses.

Based on the comments from the various commenting bodies, there is merit in considering placing the subject lands into a holding (h) provision to ensure some of the outstanding items, as noted within 'Agency Comments and Issues to be Addressed by the Proponent' section, are addressed to Council's satisfaction prior to any development taking place.

#### **TECHNICAL STUDIES AND SUMMARY**

- In support of the subject applications, the proponent has filed a series of studies as part of the subject *Planning Act* applications as noted below. It should also be noted that various studies were submitted with the original proposal prior to the revised proposal now being considered.
- *Traffic Impact Study prepared by Paradigm Transportation Solutions dated October, 2015*
  - \*Note – study completed as part of original proposal which was for commercial uses only
  - Traffic control signals should be considered for the intersection of Wellington County Road #34 and Concession 7 to accommodate future traffic;
  - Addition of a westbound turning lane on WCR #34 to Con. 7;

- Driveway entrances onto Con. 7 should have a northbound turning lane;
  - Future traffic conditions at the intersection of Brock Road and McLean Road are to be monitored.
- *Preliminary Geotechnical and Groundwater Investigation prepared by Golder Associates dated August, 2015*
    - Test wells not completed as there is enough water to service dry industrial and commercial uses;
    - Due to soil make up a typical foundation cannot be accommodated so will need to utilize other options available (i.e. deep foundation and/or improvements via engineered fill);
    - Stormwater management to be designed to match infiltration rates.
- *Stage 1 Archaeological Assessment prepared by Golder Associates dated July, 2015;*
    - No additional assessments required as lands have been through extensive disturbances;
    - Stage 2 Assessment may be required for woodlot to the north; however, no development is proposed. Stage 2 note required if put into a restrictive zone.
- *Planning Justification Report prepared by Harrington McAvan Ltd. dated October 2018;*
    - Proposal is consistent with the Provincial Policy Statement (2014) & Provincial Growth Plan (2017)
- *Servicing Feasibility Study prepared by Strik, Baldinelli, Moniz Ltd. dated September 17, 2018*
    - Water supply is not an issue, but water demand and peak flows unknown due to details of development being unknown as are firefighting demand. Cisterns are proposed;
    - Detailed water need calculation, well size and location, and number etc will be determined at site plan;
    - Septic designs & maximum flow conceptual and based on assumptions – max flow of 27 400 L/day;
    - Proposing raised septic beds - total of 80 850 L septic tanks required;
    - Based on property size all sanitary system components can meet required setbacks from wells and structures;
    - Existing storm water overland flow goes to the wetlands;
    - Details regarding storm water are to be determined at site plan stage, including quality and quantity controls (i.e 'treatment train' for pavement runoff quality control);
    - Will utilize three bioswales/infiltration/ponding cells to provide quantity control;
    - Feasible for quantity controls of post-development to match pre-development.
- *Environmental Impact Study prepared by Golder Associates dated September, 2018*
    - It is expected that there will be no residual negative impacts to significant natural features and their function if:
      - All development, including temporary equipment and material storage are a minimum of 15 metre from the boundaries of adjacent natural features;
      - Best practices and mitigation, as proposed, are implemented;
      - Various items are addressed at site plan stage (i.e. sediment controls etc.)
      - No storm water will be directed or indirectly discharged to Mill Creek without additional studies to determine impacts on the cold fishery habitat;
      - Grand River Conservation Authority (GRCA) permits required as the entire site is regulated

#### **AGENCY COMMENTS & ISSUES TO BE ADDRESSED BY THE APPLICANT**

A review of the above-noted reports and studies was conducted by the applicable public agencies, the Township's consultants, and others. The applications have been through several rounds of review with the most recent comments being summarized below:

<b>Commenting Agency</b>	<b>Comment Summary</b>	<b>Outstanding Items</b>	<b>When to Address</b>
<b>Planning</b>	<ul style="list-style-type: none"> <li>• Demonstration consistency with the Provincial Growth Plan (2019);</li> <li>• Address concerns of land use compatibility (from the public)</li> </ul>	<ul style="list-style-type: none"> <li>• Updated the Planning Justification Report or provided an addendum in regards to the 2019 Provincial Growth Plan and comments from the public.</li> </ul>	<ul style="list-style-type: none"> <li>• To be addressed prior to zoning recommendation.</li> </ul>
<b>Ministry of Tourism, Culture and Sport</b>	<ul style="list-style-type: none"> <li>• No additional archaeological assessment needed for lands intended to be developed;</li> <li>• Stage 2 Assessment required if the woodlot on the lands is being rezoned.</li> </ul>	<ul style="list-style-type: none"> <li>• Archaeological assessment (Stage 2) for lands being rezoned to 'Natural Environment (NE)' Zone.</li> </ul>	<ul style="list-style-type: none"> <li>• Requirement of holding provision.</li> </ul>
<b>Ministry of Environment, Climate Change and Parks</b>	<ul style="list-style-type: none"> <li>• The full development potential of the lands may be limited until such time as further technical assessment has been completed (i.e. Hydrogeological Study to support permit to take water &amp; Hydrogeological Assessment for Large Subsurface Sewage Disposal System);</li> <li>• Suitability of site (from a sanitary servicing perspective) has not been confirmed;</li> <li>• Ministry unable to confirm that the site would meet the Guideline B-7 requirements unless a formal groundwater impact assessment conforming to the Guideline B-7 and Chapter 22 of the Sewage Manual requirements has been completed</li> </ul>	<ul style="list-style-type: none"> <li>• It has not been demonstrated to the Ministry that the sewage system is suitable for the site due to the use and development details being unknown.</li> </ul>	<ul style="list-style-type: none"> <li>• Requirement of holding provision.</li> </ul>
<b>Ministry of Transportation (MTO)</b>	<ul style="list-style-type: none"> <li>• Requires all supporting documents to be updated to reference the expropriation of southern portion of the lands next to the Highway 401;</li> <li>• Setback requirements from highway (i.e. 14 m for buildings, septics, parking and storm water management facilities; 30 m for wells);</li> <li>• Permit requirements prior to grading or construction.</li> </ul>	<ul style="list-style-type: none"> <li>• A letter from the planning consultant was provided to the MTO confirming that the applications are not proposing to amend the lands impacted by future road expropriation and that required setbacks will be addressed in zoning;</li> <li>• MTO has not confirmed if the letter is acceptable to address their requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• Permits can be a requirement of holding provision and setbacks can be engrained in zoning by-laws.</li> </ul>
<b>Grand River Conservation Authority (GRCA)</b>	<ul style="list-style-type: none"> <li>• No objection to include the subject lands in the special policy area of PA7-1 &amp; to refine the Greenland System mapping;</li> </ul>	<ul style="list-style-type: none"> <li>• GRCA comments regarding setback from the natural features to be addressed prior to</li> </ul>	<ul style="list-style-type: none"> <li>• To be addressed prior to zoning recommendation.</li> </ul>

	<ul style="list-style-type: none"> <li>• Prior to consideration of the Zoning By-law Amendment, the applicant must provide rational for a 15 metres setback from the natural features;</li> <li>• Advisory comments for site plan stage also provided.</li> </ul>	rezoning approval.	
<b>Township's Engineer (GM Blue Plan)</b>	<ul style="list-style-type: none"> <li>• Final design for water system and well location can be addressed at site plan stage;</li> <li>• Proposed sanitary treatment system requires approval from the Ministry of Environment;</li> <li>• Final occupancy to be restricted to not exceed max. sanitary flow of 27 400 L/day;</li> <li>• Traffic Impact Study (TIS) should be updated; however, can be updated at site plan stage when use is known;</li> <li>• Storm Water Management report should be updated at zoning stage;</li> <li>• Additional comments regarding detailed design, site grading, fire protection, landscaping, lighting, and sediment control can be addressed at site plan stage</li> </ul>	<ul style="list-style-type: none"> <li>• Address outstanding storm water management comments from Township Engineer.</li> <li>• *Note: The submitted EIS identifies that any storm water is not to be directed to Mill Creek without additional studies.</li> </ul>	<ul style="list-style-type: none"> <li>• Storm water management items to be addressed prior to zoning approval.</li> <li>• TIS can be addressed through holding provision.</li> </ul>
<b>Township's Hydrogeologist (Harden Environmental Services Ltd.)</b>	<ul style="list-style-type: none"> <li>• Characteristics of soil on site will impact infiltration required for septic systems and storm water management;</li> <li>• There is adequate water available and water taking will unlikely have an impact on neighbouring wells or the natural environment;</li> <li>• If water use exceeds 50 000 L/day a full environmental impact and interference assessment will be required;</li> <li>• The maximum sewage volume of 27 500 L/day is high as the whole site should not be considered for dilution of effluent;</li> <li>• The bioswales may not be effective due to high water table and low infiltration.</li> </ul>	<ul style="list-style-type: none"> <li>• More detailed designs will be required when a specific development/use is known.</li> </ul>	<ul style="list-style-type: none"> <li>• Requirement of holding provision or site plan approval.</li> </ul>
<b>Township Ecologist (GSW Ecological &amp; Forestry Services Inc.)</b>	<ul style="list-style-type: none"> <li>• Various survey counts inadequate; setbacks to significant woodland required; tree driplines need to be identified on site plan; 30 metre minimum setback required from wetland; uncertainty of uses</li> </ul>	<ul style="list-style-type: none"> <li>• Comments from November 1, 2018 have not been addressed. Further discussion is required.</li> </ul>	<ul style="list-style-type: none"> <li>• To be addressed prior to zoning recommendation.</li> </ul>

	<p>makes challenging to determine impacts;</p> <ul style="list-style-type: none"> <li>• Uses should be scoped to determine range of sewage and storm water outputs;</li> <li>• 15 metre setback proposed for development footprint to Provincially Significant Wetland is not accepted.</li> </ul>		
<b>Puslinch Fire &amp; Rescue Services</b>	<ul style="list-style-type: none"> <li>• No comments or concerns</li> </ul>	N/A	N/A
<b>Triton Engineering Services Limited (Peer Review of Traffic Impact Study as requested by the County)</b>	<ul style="list-style-type: none"> <li>• Review of 2016 Traffic Impact Study (TIS);</li> <li>• Concur with TIS conclusions that improvements required at Concession 7 and Wellington County Road 34;</li> <li>• Changes to Highway 6/Hanlon Parkway proposed and would affect distribution of traffic at the Con. 7 and WCR 34 intersection;</li> <li>• Improvements to be coordinated with MTO and roundabout should be investigated instead of traffic signals.</li> </ul>	<ul style="list-style-type: none"> <li>• Discussions with MTO regarding upgrades to WCR 34 and Con. 7 required.</li> </ul>	<ul style="list-style-type: none"> <li>• Requirement of holding provision.</li> </ul>

**OTHER COMMENTS**

In addition to the comments above, the following comments have also been received:

- **The public** - In response to the Notice of Complete application for the subject proposal, Tony Harvat of STRK Services Inc. (on behalf of the Slovenski Park located at 4408 Sideroad 25) provided comments in a letter (dated April 12, 2017) surrounding concerns in relation to: traffic, visual impacts, noise, storm water management (outletting, quality, overland flow), impacts on the natural environment, and general concern of potential negative impact to the existing recreation park. These comments should be adequately addressed prior to approval of the zoning. This letter is included with this report as **Appendix A**.
- **Planning Development Advisory Committee (PDAC)**– The Committee met on October 8<sup>th</sup>, 2019 regarding this application and provided the following comment: “That the Committee supports the application and development and find that it is good use of the property.”

**NEXT STEPS**

The public meeting for these applications is scheduled for October 16<sup>th</sup>, 2019. Planning staff will be in attendance at the public meeting to hear the applicant’s presentation, public input, and Council comments. We trust that these initial comments, including the outline of issues to be addressed, are of assistance to the Township. Our planning recommendations will be provided to Council following the public meeting, resolution of the outstanding planning and technical issues and any concerns identified by Council and the public.

If the proposed planning amendments are approved, the development of this property would be subject to the Township’s site plan approval process. Further, the extent of development will need to be reviewed

in more detail at the time of a detailed development proposal and the appropriateness of development will further be dependent on the submission and acceptance of additional technical studies for the specific intended use.

Respectfully submitted,  
COUNTY OF WELLINGTON PLANNING AND DEVELOPMENT DEPARTMENT



---

Meagan Ferris, RPP MCIP  
Senior Planner

**Appendix A:** Letter from Slovenski Park (4408 Sideroad 25)

**STRK**  
Services Inc.

**RECEIVED**

APR 18 2017

Township of Puslinch

April 12, 2017

County of Wellington  
Planning & Development Department  
Administration Centre  
74 Woolwich Street  
Guelph, Ontario  
N1H 6H9

Attention: Gary Cousins, MCIP, RPP

CLERK'S DEPARTMENT	
TO	Kelly
Copy	
Please Handle	
For Your Information	
Council Agenda	
File	

Dear Sir:

Re: **File No. OP-2016-10**  
**Proposed Official Plan Amendment**  
**Part of Lot 26, Concession 2, Township of Puslinch**

I am acting as the agent for Slovenski Park, which is located at

4408 Sideroad 25 N, Cambridge N3C 2V4

Slovenski Park members have reviewed the available information regarding this proposed official plan amendment and have several concerns. These concerns are outlined in the attached document,

If you have any questions, please contact me using the information at the bottom of this letter.

Yours Sincerely,

  
Tony Horvat

CC: Township of Puslinch, Clerk  
7404 Wellington Road 34 (Aberfoyle)  
Guelph, Ontario N1H 6H9

Michelle Doorbbosch, Zelinka Priamo Ltd. (via email)

John Krpan, Odan-Detech (via email)



April 12, 2017

Comments on FARHI Property Proposed Official Plan Amendment/Rezoning File #OP-216-10

To: County of Wellington (via mail)  
Township of Puslinch (via mail)  
Michelle Doorbbosch, Zelinka Priamo Ltd. (via email)  
John Krpan, Odan-Detech (via email)

From: Slovenski Park  
4408 Sideroad 25N  
Puslinch, Ontario

Prepared by: Tony Horvat  
STRK Services Inc.



Based on the information available at this time, Slovenski Park has the following comments and concerns regarding this development:

### **1. Introduction**

Slovenski Park is a Slovenian “Not -for Profit” cultural center incorporated to promote the educational, social, religious and recreational welfare of the Slovenian community, where Slovenian traditions and customs are celebrated and kept alive by members of the Park. It consists of a community hall, 90 unserviced seasonal trailer sites, and a 2 bedroom dwelling on about 22 acres of land just west of the proposed development covered by this application for an official plan amendment.

### **2. Traffic Impact**

We note that all traffic entrance is proposed from Concession Road 7 – we would like the appropriate agreements and controls in place to ensure that this will be the case in perpetuity. The existing road is unsuited to high traffic volumes and its use will increase dust and noise pollution negatively impacting Slovenski Park

### **3. Visual Impact**

We understand the buildings proposed may be as high as 10 metres and that the rear of one building and its loading area will face westerly toward Slovenski Park. We would request the installation of a landscaped berm along the property line to minimize the visual impact on Slovenski Park. Where this berm may impact the flood plain and not be feasible, additional dense landscape plantings are requested.



#### **4. Noise Impacts**

We understand that one of the proposed buildings will be a restaurant. We are concerned about the additional level of noise that the proposed facility may generate which may impact the users of Slovenski Park that camping overnight.

#### **5. Storm Water Pond Culvert Outlet**

The proposed plan indicates that the storm water management pond is to drain via a culvert westerly toward Sideroad 25 N. It is assumed that this culvert will be about 1.2 metres below grade to prevent frost heave. We note that

- there are no ditches on this road
- the existing road is gravel with poor drainage
- the culvert will concentrate flow from storms and cause erosion
- flows from storms will be of longer duration than the pre-development
- high flows will easily cross the road and impact Slovenski Park and camp sites
- while post development flows are controlled, pre-development flows were sheet flow and not concentrated by a culvert.

We request that this culvert be directed easterly from the storm water management pond to Concession Road 7 where a ditch existing, a well designed road exists that is unlikely to be impacted by flows and the municipality can more easily undertake maintenance.

#### **6. Stormsewer System - Quality**

The creek which flows through the proposed development and Slovenski Park is a cool/coldwater creek which supports trout and other sensitive aquatic life. There is a concern that pollutants, oil, sediment etc. from the large parking area will enter the water course despite the presence of a storm water management pond. We would request that the final maintenance hole upstream of the storm water management pond be equipped with an oil-grit chamber such as "Stormceptor"

#### **7. Major Overland Flow Route**

As Slovenski Park is on lower, flat terrain than the proposed development, there is a concern about impacts when the proposed storm water system capacity is exceeded by a storm greater than the specified return period storm. (There are trailer/camp sites immediately adjacent to the Sideroad 25N.) We would request that the grading be designed to create a major overland flow route in a northerly direction and not westerly toward Slovenski Park.

## **8. Impact on Natural Environment/Habitat**

Slovenians have a great affinity for the natural environment. (Slovenia, a country in central Europe has over 60% of its land mass covered by forests which are crossed by almost 10,000 kilometres of hiking trails.) The members of Slovenski Park have continued to try and protect and enhance the environment on their lands. A selection of photographs showing activities, nature and wildlife are appended to these comments. Slovenski Park are also developing an inventory of the wildlife which they have observed on their property and will forward it when it is complete.

We are concerned that the proposed development will remove habitat that is used by wildlife present on the Slovenski Park property. We would request that the amount of green space/habitat on the proposed development be increased.

## **9. Potential for Green Roofs**

As partial compensation for lost habitat and to soften visual impacts, would the development consider the installation of green roof technology on the proposed buildings? Green roofs would reduce storm water quantities, improve storm water quality and provide some habitat for birds and insects.

# Slovenski Park

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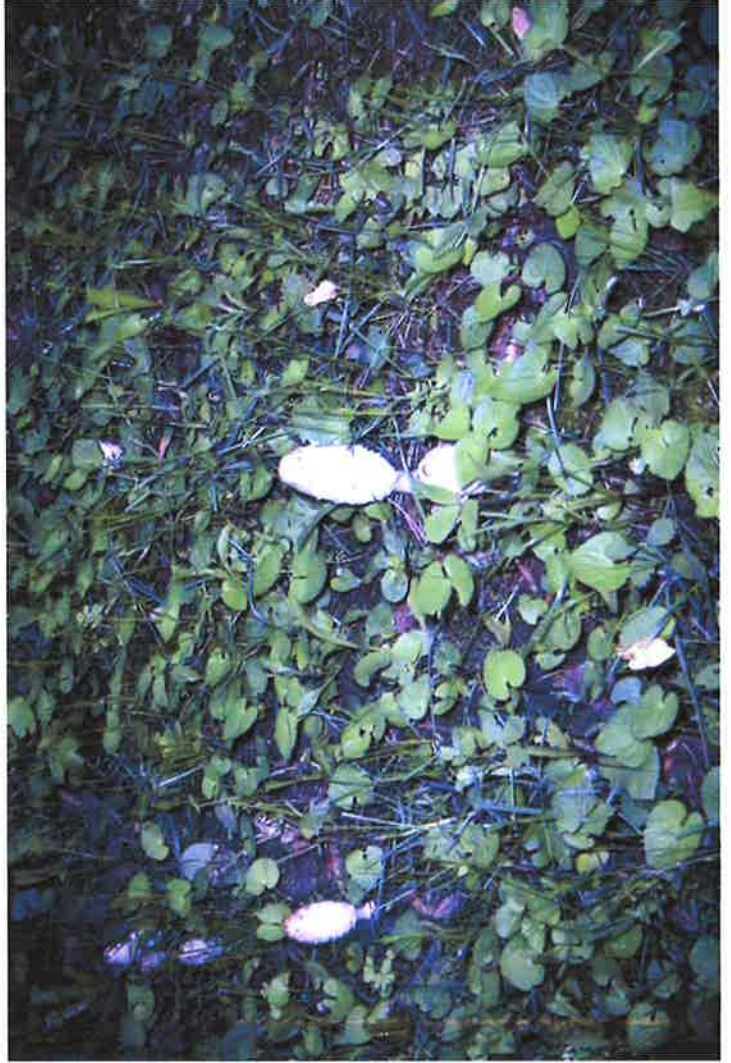
## Slovenski Park Activities - Youth - Culture - Sport - Nature & Wildlife

1965 - 1980



## Nature & Wildlife at Slovenski Park







University of Guelph –Study of Creek on Slovenski Park Property, 2005

University of Guelph –Study of Creek on Slovenski Park Property, 2005

St. Marys Cement Inc. (Canada)/CBM Aggregates Ltd.

# Hydrogeological and Natural Environment Site Plan Technical Requirements

*2018 Monitoring Report for Mast-Snyder Pit, Township of  
Puslinch, County of Wellington*

**Prepared by:**

AECOM Canada Ltd.  
105 Commerce Valley Drive West, 7<sup>th</sup> Floor  
Markham, ON L3T 7W3  
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F: 905.886.9494  
[www.aecom.com](http://www.aecom.com)

**Prepared for:**

Votorantim Cimentos/ CBM Aggregates Ltd.  
55 Industrial Street  
Toronto, ON M4G 3W9

**Date:** May, 2019

**Project #:** 60568651

## Distribution List

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	✓	St. Marys Cement Inc. (Canada)/CBM Aggregates Ltd.
	✓	AECOM Canada Ltd.



Mr. Colin Evans  
Director, Lands and Environment  
Votorantim Cimentos/ CBM Aggregates Ltd.  
55 Industrial Street  
Toronto, ON M4G 3W9

May 29, 2019

**Project #**  
60568651-8

Dear Mr. Evans:

**Subject: Hydrogeological and Natural Environment Site Plan Technical Requirements  
2018 Monitoring Report for Mast-Snyder Pit, Township of Puslinch, County of Wellington**

We are pleased to provide you with the Hydrogeological and Natural Environment Report prepared prior to the below-water development of the Mast-Snyder Pit, in Township of Puslinch, Wellington County, Ontario. Conditions may have changed since the environmental studies that took place more than 10 years ago, consequently the monitoring that AECOM completed in 2018 will form a good environmental baseline which will be compared with future monitoring as the Mast-Snyder Pit is developed

If you have any questions or concerns, please do not hesitate to call me at 905.747-7593 or via email at [Patty.Wong@aecom.com](mailto:Patty.Wong@aecom.com).

Sincerely,  
**AECOM Canada Ltd.**

Patty Wong, B.Sc., P.Geo.  
Senior Geologist  
*Patty.Wong@aecom.com*

PW:mm  
Encl.

# Statement of Qualifications and Limitations

The attached Report (the "Report") has been prepared by AECOM Canada Ltd. ("AECOM") for the benefit of the Client ("Client") in accordance with the agreement between AECOM and Client, including the scope of work detailed therein (the "Agreement").

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- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the "Limitations");
- represents AECOM's professional judgement in light of the Limitations and industry standards for the preparation of similar reports;
- may be based on information provided to AECOM which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
- in the case of subsurface, environmental or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time.

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AECOM: 2015-04-13  
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**Report Reviewed By:**

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# 1. Introduction

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St Marys Cement Inc. (Canada)/CBM Aggregates Ltd. (St Marys) holds a lease agreement for a 32 ha property (Snyder) and owns a 42.4 ha property (Mast) located at the northwest corner of Forestall Road and County Road 35 (Downey Road), south of the City of Guelph in Lot 14 and 15, Concession 4, Township of Puslinch, Wellington County (**Figure 1**). The property has been licensed under the *Aggregate Resources Act* as a Category 1 – Class “A” Pit Below Water. A Hydrogeological Assessment and a Natural Environment Level 1- Level 2 reports were completed by Gartner Lee Limited (GLL, 2006a, 2006b) in support of the license and *Planning Act* applications (OMNR, 1996). AECOM Canada Inc. (AECOM, formerly Gartner Lee Ltd.) was retained by St Marys to complete the Site Plan technical requirements pertaining to hydrogeology and natural environment monitoring to be completed prior to commencement of extraction activities of the Mast-Snyder Pit. Site preparation (berms, stripping) commenced in late spring/early summer 2018. Above-water extraction activities commenced in November 2018<sup>1</sup>. Below-water extraction is expected to begin during the summer of 2019.

Several significant environmental features were identified within the site boundary and immediately adjacent to the limit of extraction based on field investigations conducted between 1999 and 2006 (GLL, 2006). These features included:

- a) Two units of the provincially significant Speed River Wetland Complex;
- b) Fish habitat along Tributary A and Pond A;
- c) Significant Wildlife Habitat in the form of amphibian breeding habitat.

To comply with the Provincial Policy Statement (MMAH, 2014) development and site alteration shall not be allowed in Provincially Significant Wetlands (PSW) or fish habitat. Development and site alteration shall not be allowed in Significant Wildlife Habitat of the site unless it has been demonstrated that there are no negative impacts on the feature or its ecological function.

Two on-site units of provincially significant Speed River Wetland Complex as well as the woodlot that surrounds the northern unit will be retained with pit development. However, because the pit will be excavated below the water table, there is the potential for groundwater levels to shift resulting in changes to the wetland or its function. Monitoring of fish, wetland vegetation and amphibian breeding were assessed in 2018 as indicators of the wetland functions. The first monitoring event was conducted in the spring of 2018 prior to extraction operations. It is important to collect baseline data prior to pit development since previous ecological field investigations took place over ten (10) years ago and some changes may have occurred since that time. Consequently, the 2018 monitoring provides a baseline that can be compared with upcoming years when pit excavation occurs below the water table.

The pit was licensed to be operated in accordance to the approved Site Plans (Harrington and Hoyle Ltd., 2007). Several conditions related to tasks to be completed in terms of hydrogeology and natural environment are required and are discussed further in Section 2. This report presents the results of the 2018 monitoring completed to satisfy Site Plan conditions.

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1. 76,016 tonnes of aggregate were extracted in November 2018. 58,625 tonnes of aggregate were extracted in December 2018.

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## 2. Scope and Methodology

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### 2.1 Hydrogeology

The requirements related to hydrogeology as presented on the Site Plans are reproduced below followed by a discussion of the tasks completed to address the condition.

#### Operations Plan – Operations Notes:

24. *Water level data will be interpreted annually from a fisheries perspective to ensure that there are no negative impacts.*

Below-water extraction is expected to commence during the summer of 2019. A fisheries biologist will review the collected water level data as below-water extraction progresses, specifically as it applies to Pond A and Tributary A. Their interpretation will be presented in future annual reports for the site.

25. *Below-water extraction will cease immediately if there are any early warning signs of impact to surrounding groundwater users, wetlands or streams that is attributed to below water operations.*

Acknowledged.

26. *Observed or measured stream impacts will be reviewed by a surface water specialist.*

A surface water specialist will review the measured MP water levels as below-water extraction progresses to examine impacts to Tributary A.

27. *Should a wash plant be required with a predicted water usage of 50,000 L/day or more, St Marys will apply to the MOE for a Permit-to-Take-Water. This permit application will be accompanied by the appropriate supporting documentation.*

If necessary, St Marys will apply for a Permit-to-Take-Water under the above conditions, as required.

28. *Copy the County, Township and City on any information on the site that is supplied to the MOE and MNR.*

Any information provided to the MOE (now the Ministry of the Environment, Conservation and Parks, MECP) and MNR (now the Ministry of Natural Resources and Forestry, MNRF) will also be provided to the County, Township and City.

29. *A staff gauge shall be installed in Pond A so that water depths can be monitored during site visits.*

MP1 is located in the man-made dug pond, Pond A (**Figure 2**). It has been monitored for water levels seasonally since 2003 and has been surveyed and tied into the site such that the water elevations can be monitored.

30. *Mini-piezometers MP2 and MP3, located in Tributary A shall be tested to ensure that they are hydraulically connected to the water table.*

Water levels collected from MP2 and MP3 appear to reflect the water table when compared to the closest water table monitors. MP2 and MP3 have been monitored for water levels seasonally since 2003.

31. *Two sets of mini-piezometer pairs shall be installed to ensure that groundwater gradients are maintained towards Tributary A when water is flowing in the tributary. If groundwater gradients are reversed or re-directed away from Tributary A as a result of below-water extraction or pumping of groundwater at the site then these undertakings will cease.*

MP2 and MP3 are nested pairs of mini-piezometers located in Tributary A.

32. *Groundwater gradient will be monitored so that below-water extraction rates and groundwater withdrawals can be proactively managed to avoid gradient reversals from the fish habitat to the pit area.*

The 2018 aquatic assessment of Pond A and Tributary A concluded that both provide fish habitat suitable for reproduction, refuge, feeding and rearing. Examining the monitor locations and the groundwater flow directions, MP6 will be immediately adjacent to the extraction pond and in an upgradient direction from MP2, located within Tributary A. Currently, water levels at MP6 are between 0.02 m to 0.89 m higher than those collected at MP2-I, based on the quarterly water level measurements collected since 2006. The seasonal water levels between MP6 and MP2-I will be compared to ensure that groundwater levels at MP6 are higher than MP2-I. Should there be a reversal of water levels, the daily level logger data will be examined to confirm the validity of the measurements and determine if the gradient reversal persists.

#### Technical Recommendations (Hydrogeological) Monitoring Program

1. *A groundwater monitor between the below-water extraction limit and the Hanlon Creek Swamp (BH9) and a nest of two monitors at the edge of the isolated wetland (BH10) will be installed. Monitoring nest 10 will consist of a shallow monitor into the groundwater table and a deeper piezometer into the underlying silt. The monitors will be incorporated into the groundwater monitoring program for the site.*

BH9 and BH10 were installed in June 2010 (AECOM, 2011). BH9 is a water table monitor completed to 5.2 m below ground and screened in the underlying sand/sandy silt till. BH10 consists of a water table monitor completed to 4.6 m below ground and screened in the underlying sand and gravel/sand (BH10-II) and a piezometer completed to 9.8 m below ground and screened in the underlying sandy silt unit (BH10-I). These monitors were incorporated into the seasonal water level monitoring program upon completion.

2. *An additional mini-piezometer will be installed and maintained within the Downey West Wetland (MAM2-2 wetland unit on the west side of Downey Road) and incorporated into the established monitoring program. The new-mini-piezometer will be included in any review under the triggering mechanism but will not necessarily be used as a trigger well. The mini-piezometer and vegetation monitoring plot (discussed under natural environment, point 2) will be in the same general vicinity. The mini-piezometer will be monitored as described in point 4 and point 5 below.*

In place of a mini-piezometer, BH11 was installed in June 2010 in the Downey West Wetland (AECOM, 2011). BH11 is a water table monitor completed to 2.3 m below ground and screened in the underlying sand and gravel unit. It was incorporated into the seasonal water level monitoring program upon completion and was also outfitted with a baro and level logger to collect daily water levels. A vegetation transect will be established in the late spring-early summer of 2019 to further examine this area.

3. *The additional boreholes and mini-piezometer (discussed above) will be installed prior to any extraction on the site.*

The required boreholes/mini-piezometers have been installed.

4. *Monthly water level measurements and groundwater temperatures will be collected during periods of below-water extraction at the monitoring points (monitoring wells and mini-piezometers) on-site for the first*



*two years of below-water extraction. If trends are consistent over the first two years of below water extraction, the monitoring program will be reduced from monthly to quarterly.*

There are currently 14 groundwater monitors and nine mini-piezometers on the site. These groundwater monitoring locations were instrumented with level loggers on May 8, 2018 to collect daily measurements (12:00 pm). A barologger is on-site for logger compensation.

5. *Seasonal (Quarterly) groundwater level measurements shall be taken from existing monitors and the mini-piezometers beginning one year prior to the commencement of below-water extraction.*

Baseline water levels have been collected on-site since 1999 and are presented in Table A1, **Appendix A**. The water level monitoring program has expanded as new monitors/mini-piezometers have been installed. As discussed above, all monitoring locations have been instrumented with level loggers. In addition, seasonal manual water level measurements of the established monitoring network were collected with an electronic water level tape during site visits conducted on February 12, May 7, August 20 and November 19, 2018. During these site visits, each logger was also checked and downloaded, if possible<sup>2</sup>.

6. *A qualified geoscientist shall investigate all complaints of water well interference brought to the attention of the licensee from any property owner located within 500 m from the limits of extraction. A report on the findings shall be prepared and submitted to the licensee, with copies to the district offices of the Ministry of Natural Resources, the Ministry of the Environment, the Township, the County and the City.*

No complaints were received by St Marys in 2018.

7. *A qualified geoscientist shall review site conditions annually.*

Monitoring data was examined and this report was prepared and reviewed by licensed Professional Geoscientists.

8. *A water well survey of the residences within 500 m of the property boundary shall be completed prior to the commencement of pit operations to provide baseline data and ensure that there are no off-site shallow dug wells in the vicinity. Should any shallow accessible dug wells be identified, they should be added to the quarterly monitoring program of the site provided that permission is granted by the well owner.*

A water well survey was completed in 2010 to 2012 with the results presented in the associated annual reports (AECOM, 2011, 2012, 2013). Of the 17 well owners within 500 m of the property boundary: four well owners did not respond to our well survey package and two well owners reported that they had dug wells – 6848 Forestall Road (which was owned by Mast and rented to a tenant) and 4767 Pioneer Trail (owned by Fitton, located at the northwest edge of the 500 m mark of the property boundaries). The well at 6848 Forestall Road was later inspected and determined to be a drilled well that was decommissioned by St Marys in 2011. Mrs. Fitton, the owner of the well at 4767 Pioneer Trail was contacted by phone on January 29, 2018 to ask if their well was accessible and if they would like to participate in the water level monitoring program. Mrs. Fitton confirmed that they have a dug well that supplies their house but the well has a pump affixed to the lid and is inaccessible.

## 2.2 Natural Environment

The requirements related to natural environment as presented on the Site Plans are reproduced below followed by a discussion of the tasks completed to address the condition.

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2. Some MP loggers were unable to be downloaded during the November 2018 site visit due to frozen conditions.

### Technical Recommendations Natural Environment

1. *The wetland boundary and woodlot dripline on the north part of the property will be surveyed. Durable marker posts will be placed 5 m from the dripline of the woodlot or 15 m from the wetland boundary, whichever is greater. There shall be no intrusion by equipment or other disturbance, to the ground or vegetation beyond the marker posts. The temporary berm should be placed outside of this buffer.*

The Isolated Wetland and northern wetland/woodlot dripline were staked by a Gartner Lee terrestrial ecologist, the Township ecologist and the conservation authority in 2007. These stakes were then surveyed by Van Harten Surveying Inc. In preparation of site operations in 2011, Van Harten was contacted to retrieve their historic survey information from their files and set stakes at 5 m from the Isolated Wetland limits and at 5 m from the dripline of the north woodlot or 15 m from the wetland in the north woodlot, whichever is greater. The surveying took place in November 2011. Metal T-bars were installed at regular intervals by the surveyors to demarcate the setbacks from these features. As many of these T-bars had been destroyed, Van Harten re-surveyed the wetland limits and dripline on March 19, 2018. Upon completion of the staking, St Marys installed permanent markers (fence posts) such that the setback is clearly marked and the markers are not accidentally destroyed during pit development.

2. *A qualified ecologist should inspect the site annually, once excavation occurs along the edge of the natural heritage feature or at least until the water level in the post-extraction lake stabilizes. This would include documenting general conditions on water depth and vegetation health to determine if there is any adverse impact of the pit operation on Tributary A, Pond A or the isolated wetland unit that may be related to the operation of the pit. The monitoring will include:*
  - *Amphibian surveys conducted twice in the spring during suitable weather conditions (approximately mid-April and late May) at all wetlands on site. Amphibian monitoring will begin prior to below-water extraction in Area 3 and will continue annually thereafter for as long as below-water extraction occurs.*
  - *Establishing three permanent vegetation monitoring plots to document percentage cover of plant species as a measure of change in the wetlands. They will be sampled in mid-growing season (between June 15 and August 15), once prior to below water extraction in Area 3 then annually thereafter. Soil cores will be taken and inspected visually for soil type and depth to mottles and gley, and colour at each location. The vegetation plots will be established:*
    - a) *Along Tributary A west of Pond A'*
    - b) *In the isolated wetland*
    - c) *In the Downey West Wetland (MAM2-2 wetland unit on the west side of Downey Road)*

*Monitoring will continue for as long as below water extraction occurs.*

The last natural environment surveys took place between 2003 and 2005. Since at least 13 years have passed since the last surveys were completed, site conditions were re-visited to establish updated baseline conditions prior to extraction. The following tasks were completed:

#### **Background Review and General Site Inspection**

The original Natural Environment report (GLL, 2006a) and mapping was reviewed and compared to recent air photo mapping. A general inspection was conducted in the spring of 2018 and compared with the original natural heritage mapping to document any changes to vegetation patterns, wetland boundaries or condition of the wetland features.

#### **Amphibian Surveys**

Nocturnal calling count surveys were conducted on evenings of April 24 and May 16, 2018 during suitable weather conditions to document the presence and numbers of calling amphibians at all wetland locations on site. These surveys were conducted in mid-April and mid-May to document both the early and late

calling species. A minimum 5 minute listening period was conducted at each of three stations: Isolated Wetland, Tributary A and Pond A (**Figure 2**). The number and species of calling frogs heard was recorded. The April 24 survey was conducted between 20:30 and 21:30. Sky was overcast with some drizzle, wind was Beaufort Scale 1 and air temperature was 10°C. The May 16 survey was conducted between 19:00 and 20:30. Cloud cover was 10%, wind was Beaufort Scale 1 and air temperature was 18 to 20°C. Amphibians were also searched for during the vegetation survey on July 12, 2018.

### Vegetation Sampling

To be able to measure possible changes to vegetation in the provincially significant wetland (PSW) units at Tributary A and the Isolated Wetland, a quantitative means of documenting coverage by the various plant species is required. Permanent transects were established at three locations:

- a) Across the Isolated Wetland Unit;
- b) Tributary A just downstream of Pond A;
- c) Unit of Hanlon Creek PSW on the northwest corner of Laird and Downey Roads.

The vegetation was surveyed on July 12, 2018 on a clear and calm day with the temperature about 30°C. Vegetation transects were established consisting of a line and 1 x 1 m quadrants that were sampled at 5 m intervals along the transect. Each transect was 55 m long with 12 quadrants sampled along each. Metal bars were installed at either ends of each transect so that they can be easily found and replicated in subsequent years. A hand held GPS was used to locate the ends of each vegetation transect. The transect locations are shown on **Figure 3** and coordinates shown on **Table 1**. Four one-meter length metre sticks were laid down to temporarily mark off the boundaries of each quadrant while it was being sampled. All plant species were recorded along with their respective percent cover within each quadrant. Generally, each cattail stalk was considered to be 1% of the quadrant.

A representative soil sample was taken at the approximate middle of each transect using a Dutch auger. Each sample went to a depth of approximately 1 m below grade. Soil type, colour, depth of mottles and gley, and depth to the water table were noted.

**Table 1: Location of Vegetation Transects**

Transect Number	Ends of Transect	Latitude	Longitude	Provincially Significant Wetland	Within Site Boundary
TR 1	North	43.48294°	-80.23772°	Speed River	yes
	South	43.48250°	-80.23802°		
TR 2	East	43.48474°	-80.23329°	Speed River	yes
	West	43.48487°	-80.23386°		
TR 3	East	43.48813°	-80.23098°	Hanlon Creek	no
	West	43.48791°	-80.23159°		

### Aquatic Survey

AECOM fisheries biologists undertook aquatic habitat and fish community surveys on May 7, 2018 within Pond A and Tributary A located on the Mast-Snyder property (**Figure 2**).

Aquatic habitat data collection during field investigations included:

- Documentation of surrounding natural features and land uses (i.e., wetland, agriculture, etc.);
- Channel dimensions, substrate composition, channel morphology and bank stability;
- Stream morphology dimensions:
  - Runs - typically deep, fast moving water with little to no turbulence of water;

- Riffles - shallow, fast moving water typically running over rocks; riffles providing areas of high oxygenation;
- Flats - low flowing water with a smooth un-agitated surface;
- Pools - are described as deep pockets of slow moving water that provide ideal habitat for fish;
- Substrate composition (i.e. clay, silt, sand, gravel, cobble, rock, boulder, muck and detritus);
- Indicators of water quality; water clarity, water colour, presence and type of macrophytes and algal growth, evidence of runoff;
- Basic field parameters such as pollution sources (i.e. tile drain discharges, other piped discharges and road runoff).

Fish community surveys were conducted using a Smith-root LR24 Backpack Electrofisher within the defined tributary and minnow traps (4) baited with dog food within the pond. All fish captured in the field were enumerated and identified in the field. Field notes recorded during the fish habitat and fish community surveys are provided in **Appendix B**.

3. *A qualified ecologist shall annually review the monitoring and site inspection results and prepare a report on the following:*
  - a. A summary of the monitoring data from the current year and previous years;
  - b. An assessment of whether or not the operation of the pit below the water table is adversely affecting the on-site woodlot and stream in the northern portion of the site, the Speed River PSW on the Hanlon Creek Business Park site and adjacent natural environment features;
  - c. A recommendation regarding the adequacy of the monitoring program and any amendments that may be required; and
  - d. The need to implement the Contingency Plan (as described in the Hydrogeological Recommendations), if necessary and warranted.
  
4. *The annual report shall be prepared by both the qualified ecologist and geoscientist, The report should be submitted to the MOE, MNR, Township, County, the City and the GRCA annually and not just if the mechanism is invoked.*

A fisheries biologist, aquatic ecologist and senior ecologist completed the field work described above. The natural environment portion of the report was prepared by a senior ecologist and the hydrogeology component of the report was prepared by a licensed geoscientist to fulfill the above condition.

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## 3. Results

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### 3.1 Hydrogeology

#### 3.1.1 Water Levels

Water levels have been collected from the existing on-site monitors and mini-piezometers since 1999 with seasonal water levels collected since 2002. Several off-site staff gauges in privately owned ponds north of the site were historically monitored. The staff gauges at 4767 Pioneer Trail (SG2) and 4803 Pioneer Trail (SG3) were originally installed at the request of Mr. Raymond Reid (4803 Pioneer Trail). However, monitoring of SG3 was discontinued in 2009 at Mr. Reid's request and SG2 was destroyed sometime after May 2013 and was not replaced. The water levels in the SG2 pond are regulated by an outlet and therefore, do not reflect natural pond levels. No impacts due to site operations are expected at either of these private pond locations.

The water levels measured on November 19, 2018 were plotted on **Figure 2**. Regionally, groundwater is expected to flow to the northwest towards the Speed River. This is confirmed through the on-site monitoring. The direction of groundwater flow (shown on **Figure 2**) is to the north-north-west, consistent with historic interpretations presented in the Hydrogeological Assessment (GLL, 2006b) for the site.

Water levels show natural seasonal fluctuations. The range in 2018 seasonal water level fluctuations in the on-site monitors is from 0.01m (BH2-I and BH2-II between August and November) and 1.43 m (BH4 between May and August), which was similar to previous years. The 2018 water levels in the monitors are within the range of levels historically observed at the site, except for BH9. The BH9 August 20, 2018 groundwater elevation of 323.35 mASL was 0.04 m lower than the previous lowest groundwater elevation of 323.39 mASL measured in November 2016. The hydrographs for the seasonal manual water level measurements from groundwater monitors BH1 to BH11 are presented on **Figure 4**.

A level logger and barologger (for compensation) were installed at BH11 on June 14, 2010 to measure water levels at regular intervals. Loggers were installed at the remaining on-site groundwater monitors and mini-piezometers on May 8, 2018 and programmed to collect daily (12:00 noon) water level and groundwater temperature measurements. The logger hydrographs are presented in **Figures 5 to 10**. The water levels typically show seasonal variations with the highest water levels in the spring, declining throughout the summer, then increasing again in the fall in response to fall rainfall and declining into the winter. In 2018, the measured manual water levels appeared to generally show this typical pattern of water levels with the 2018 peak water levels during the spring monitoring event, declining through the summer and further decline or recovery in the latter part of the year (**Figure 4**). The 2010 to 2018 water level information for BH11 is presented on **Figure 6** along with the daily precipitation from the Grand River Conservation Authority Guelph Dam monitoring station, located about 12 km north of the site<sup>3</sup>. Review of the BH11 logger data from the May 2018 download showed irregular reading from late November 2017 to May 2018. The logger was replaced during the August 2018 monitoring event. BH11 water levels as recorded by the logger for the August to December 2018 period show declining water levels from August to the end of October and then recovery until early December and stabilization to the end of the year (**Figure 6**). The total 2018 precipitation for the Guelph Dam station was 937.8 mm compared to 1,120 mm in 2017.

May 8 to December 31, 2018 water levels and groundwater temperature from the monitors located in the northern portion of the site (BH3, BH4, BH8, BH9), central portion of the site (BH2, BH10, BH11) and southern portion of the

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3. Originally, precipitation data from the Environment Canada Region of Waterloo International Airport was used for comparison purposes but this station has been inactive since mid-2011.

site (BH1, BH5, BH6, BH7) are presented on **Figures 5, 7 and 8**, respectively. All BH monitors across the site show similar water level trends with high water levels in May, declining through the summer and into late October and then recovery till the end of the year.

Groundwater temperatures across the site also generally show a similar pattern to each other but with slight variations likely related to the formations the monitors are screened within and depth. At most monitors, temperatures are lowest in May (5.1 degrees C at BH8 to 7.7 degrees C at BH5) then rise throughout the summer to peak in late September to mid-November (11 degrees C at BH7 to 12.2 degrees C at BH3) followed by declining temperatures to the end of the year. BH6 shows low water temperatures in May (6.2 degrees C) and then increasing temperatures to the end of the year (11.4 degrees) (**Figure 8**). It is noted that due to its location along the berm alignment, the monitor pipe at BH6 was extended in August-September 2018 in order to retain this location. Temperatures at BH6 are measured to one significant where other loggers on the site measure temperature to three significant digits. This may have resulted in a stepped plot of temperatures for BH6. We will examine the logger in 2019 to determine if it can be programmed to read to three significant digits for consistency across the site.

May 8 to December 31, 2018 groundwater levels and temperature from the mini-piezometer (MP) locations located in the southern swale (MP6, MP7), the Isolated Wetland (MP4) and Tributary A (MP1, MP2, MP3) are presented on **Figures 9 and 10**. The water levels in the MPs showed a similar trend as the BH groundwater monitors, except for MP7. MP7, located in the southern swale, started showing erratic readings after November 10, 2018. Up to this time, water levels between MP6 and MP7 showed a similar pattern. The cause of the MP7 water level fluctuations is unknown however, it appears as though surface water might be entering the MP. The MP and the logger will be further investigated during the summer 2019 site visit to examine if the cause of the erratic readings can be determined. Groundwater temperature at MP7 has also been quite variable and is not consistent with other monitors on the site. MP7 groundwater temperatures peak in September at 18.4 degrees C and then decline to the end of the year to about 2.5 degrees C in December 2018. As MP7 water levels are high, generally at or near ground surface and often higher than ground surface, groundwater temperatures may be affected by warming/cooling of the iron riser pipe. We will examine further data as it becomes available.

At MP3-2, the logger was not installed to the bottom of the MP after it was downloaded in August 2018 therefore, it was above the water table until the November 2018 site visit and no readings were collected during this period. The joint fittings at MP4 were interfering with the logger so a larger diameter mini-piezometer pipe was installed at MP4 in November 2018.

### 3.1.2 Groundwater Gradients to Tributary A

Item 32 of the Operations Plan – Operations Notes addresses gradient reversals from the fish habitat (Tributary A, Pond A) to the pit. As discussed in Section 2,1, shallow groundwater flow is currently from the south to the north-northwest (i.e. from the pit area to Tributary A). The MP6 water levels in the southern swale, adjacent to the extraction limits, are compared to MP2-I, located within Tributary A. The seasonal groundwater elevations collected in 2018 are presented below in **Table 2**.

**Table 2: 2018 MP6 and MP2-I Groundwater Elevations**

Date	MP6 Groundwater Elevation (mASL)	MP2-I Groundwater Elevation (mASL)	Difference in Groundwater Elevation between MP6 and MP2-I	Direction of Groundwater Flow
12-Feb-2018	325.30	Frozen	-	-
7-May-2018	325.48	324.92	0.56	NW towards Trib A
20-Aug-2018	325.01	324.26	0.75	NW towards Trib A
19-Nov-2018	325.01	324.51	0.50	NW towards Trib A

Seasonal groundwater elevations from MP6 and MP2-I indicate that groundwater flow is to the northwest towards Tributary A. The groundwater elevations will continue to be monitored for gradient reversal.

## 3.2 Natural Environment

### 3.2.1 Amphibian Assessment

During the original natural environment investigations, five species of amphibians were recorded breeding on the subject property with three locations in the Isolated Wetland and all five locations in around Tributary A and Pond A. Surveys were completed in 2018 to determine if all of the species were still present in the same locations prior to extraction.

Conditions were ideal during the April 24, 2018 survey and a relatively large number of frogs were calling from both the Isolated Wetland and Tributary A. No frogs were actually calling from Pond A. During the May 16, 2018 survey, no frogs called from the Isolated Wetland or Tributary A. No Northern Leopard Frogs were calling during nocturnal surveys but three adults were observed on the fringe of the Isolated Wetland on July 12, 2018. Northern Leopard Frogs do not call in robust choruses like Spring Peepers and Wood Frogs but call more sporadically and in small numbers, and therefore can escape detection. **Table 3** shows the results of the 2018 surveys and compares them with the earlier results presented in the 2006 Natural Environment report (GLL, 2006a).

**Table 3: Amphibian Survey Results**

Species Dates	Isolated Wetland			Tributary A			Pond A		
	April 2005	April 24, 2018	May 16, 2018	April 2005	April 24, 2018	May 16, 2018	2005	April 24, 2018	May 16, 2018
<b>Spring Peeper</b>	12	12		50	25	10			
<b>Gray Treefrog</b>				present					
<b>Wood Frog</b>	5	12		30	15				
<b>N. Leopard Frog</b>	1			present					
<b>Green Frog</b>							present		1

No frogs were recorded at Pond A in April 2018 and only a single Green Frog called there in May 2018. Nevertheless, at least five adults were observed along the shoreline of the pond on July 12, 2018 therefore, a Green Frog population is present and it can be assumed that they were successfully breeding there. The spring of 2018 was delayed by cool weather and therefore although weather conditions were warm on the evening of the May 16 calling count, it appears that some species were not yet in peak calling mode. For example, it is expected that Gray Treefrog is still present even though none were heard calling during the survey.

There was no standing water in the Isolated Wetland on July 12, 2018 even though there was standing water with significant numbers of calling Wood Frogs and Spring Peepers on April 24. If surface water was already unavailable by some time before July 12, then it is unlikely that the wetland held water for a sufficient period that would allow amphibian eggs to hatch and develop into frogs since a wetland should hold water for at least three months. Surface water levels are monitored at MP4 (in the middle of Isolated Wetland) but only once on a quarterly basis (every three month). The water was 34 cm deep on May 7, 2018 and dry on August 20. The spring and early summer of 2018 were drier than normal. In a wetter year, the Isolated Wetland likely has a sufficiently long hydro-period for amphibian larvae to successfully transform.

### 3.2.2 Wetland Vegetation

Tributary A and the Isolated Wetland occur within the site boundary while the Hanlon Creek PSW unit is located further away and therefore less likely to be affected by any changes in the groundwater table. Hanlon Creek PSW therefore, can act as a control.

As previously mentioned, permanent transects were established at three locations:

- a) Across the Isolated Wetland Unit
- b) Tributary A just downstream of Pond A
- c) Unit of Hanlon Creek PSW on the northwest corner of Laird and Downey Roads.

#### 3.2.2.1 Comparison of Vegetation from 2006 to 2018

More than a decade has lapsed since the Natural Environment report was completed (GLL 2006a) and therefore a general site inspection was conducted on July 12, 2018 to identify any apparent changes to the natural environment. A recent aerial photograph from Google Earth Pro shows that the configuration of the woodlot and wetlands on the Mast-Snyder property are essentially the same as shown on Figure 2 of the 2006 Natural Environment report (GLL, 2006a). The Isolated Wetland covered the same area in 2018 as it did in 2003, and there were no discernible changes to Pond A or Tributary A other than some encroachment on the fringes through vegetation succession. Hedgerows too had changed little over the time period. Most of the property continues to be farmed for cash crops, notably corn.

One noted difference is that the Emerald Ash Borer (*Agrilus planipennis*) which was first reported in Ontario in 2002 and reached Toronto by 2007 (Natural Resources Canada, 2018) has now invaded the Guelph area. Emerald Ash Borer is non-native insect forest pest that has decimated forests in southern Ontario, killing more than 99% of mid aged and mature ash (*Fraxinus* spp.) within six years of the start of the infestation (Natural Resources Canada, 2018). At the Mast-Snyder site, green ash (*F. pennsylvanica*) dominated the canopy in the grove on the west side of Tributary A within the west side of the woodlot. These trees are virtually all dead but still standing. This is a widespread trend that is unrelated to any agricultural or other activities that were conducted on the site.

#### 3.2.2.2 Results of Vegetation Transects

The plant species and percent cover of each that was recorded within the respective transects are indicated in **Table 4**. A complete list of plant species recorded from all of the wetland units is provided in **Appendix C**. Representative photos of the transect locations are shown in **Appendix D**.

**Table 4: Percent Cover of Plants in Vegetation Transects**

	Transects # of plots	TR 1 - edge 2 plots	TR 1 - interior 10 plots	TR 2 12 plots	TR 3 12 plots
<b>GRAMINOIDS</b>					
Reed Canary Grass	<i>Phalaris arundinacea</i>	1.5	30.3	40.2	6.6
Narrow-leaved Cattail	<i>Typha angustifolia</i>				2.2
Broad-leaved Cattail	<i>Typha latifolia</i>		14.6		
Hybrid Cattail	<i>Typha X glauca</i>			0.8	2.6
Bebb's Sedge	<i>Carex bebbii</i>				0.1
Porcupine Sedge	<i>Carex hystericina</i>				0.7
Beaked Sedge	<i>Carex utriculata</i>		1.7		
Fox Sedge	<i>Carex vulpinoidea</i>	3.0			1.1
fescue grass	<i>Festuca sp</i>				4.3
Articulated Rush	<i>Juncus articulatusus</i>				27.7



**Table 4: Percent Cover of Plants in Vegetation Transects**

	Transects # of plots	TR 1 - edge 2 plots	TR 1 - interior 10 plots	TR 2 12 plots	TR 3 12 plots
Toad Rush	<i>Juncus bufonius</i>	10.0			
Path Rush	<i>Juncus tenuis</i>	0.5			2.0
Timothy	<i>Phleum ptatense</i>				0.2
bluegrass sp.	<i>Poa sp.</i>			0.4	1.6
Black Bulrush	<i>Scirpus atrovirens</i>				1.5
<b>FORBS</b>					
Common Ragweed	<i>Ambrosia artemissifolia</i>	2.0			
Common Milkweed	<i>Asclepias syriaca</i>	7.5			
Enchanter's Nightshade	<i>Circaea lutetiana</i>			0.1	
Canada Thistle	<i>Cirsium arvense</i>			0.1	
Horseweed	<i>Conyza canadensis</i>	0.5			
Wild Carrot	<i>Daucus carota</i>	5.0			
Hairy Willow-herb	<i>Epilobium hirsutum</i>			1.4	
Small-flowered Willow-herb	<i>Epilobium parviflorum</i>	2.5			0.3
Field Horsetail	<i>Equisetum arvense</i>	20.0	0.3	1.2	2.5
Water Horsetail	<i>Equisetum fluviatile</i>		3.7		
Daisy Fleabane	<i>Erigeron annuus</i>	0.5			
Philadelphia Fleabane	<i>Erigeron philadelphicum</i>	0.5			
Boneset	<i>Eupatorium perfoliatum</i>				0.3
Grass-leaved Goldenrod	<i>Euthamia graminifolia</i>				1.8
Marsh Bedstraw	<i>Galium palustre</i>			0.1	0.4
Spotted Jewelweed	<i>Impatiens capensis</i>			4.1	
Lesser Duckweed	<i>Lemna minor</i>			0.6	
Bird'sfoot Trefoil	<i>Lotus corniculatus</i>				0.1
Cut-leaved Bugleweed	<i>Lycopus americanus</i>				0.1
Northern Bugleweed	<i>Lycopus uniflorus</i>			0.5	0.1
Tufted Loosestrife	<i>Lysimachia thrysiflora</i>		0.6		
Wild Mint	<i>Mentha arvensis</i>			0.1	0.2
Sensitive Fern	<i>Onoclea sensibilis</i>			2.8	
Wood Sorrel	<i>Oxalis stricta</i>	1.0			
Common Plantain	<i>Plantago major</i>	2.5			
Lady's Thumb	<i>Persicaria maculosa</i>	1.0			
Rough Cinquefoil	<i>Potentilla norvegica</i>	7.5			
Common Buttercup	<i>Ranunculus acris</i>				0.6
Bittersweet Nightshade	<i>Solanum dulcamara</i>			24.7	
Tall Goldenrod	<i>Solidago altissima</i>	2.5		0.4	0.2
Rough Goldenrod	<i>Solidago rugosa</i>			1.2	0.1
Common Sow-thistle	<i>Sonchus arvensis</i>	4.0			
Panicled Aster	<i>Symphotrichum lanceolatum</i>	1.5	0.1		1.6
Swamp Aster	<i>Symphotrichum puniceum</i>			3.7	
Dandelion	<i>Taraxacum officinalis</i>				0.8
Marsh Fern	<i>Thelypteris palustris</i>			0.2	
Alsike Clover	<i>Trifolium hybridum</i>	0.5			0.3
Blue Vervain	<i>Verbena hastata</i>	1.0			
Cow Vetch	<i>Vicia cracca</i>	2.0			
<b>WOODY PLANTS</b>					
Red-osier Dogwood	<i>Cornus sericeus</i>			0.2	
Glossy Buckthorn	<i>Frangula alnus</i>				0.1
Black Currant	<i>Ribes americana</i>			0.4	
Red Raspberry	<i>Rubus idaeus</i>			0.7	
Missouri Willow	<i>Salix eriocephala</i>			5.0	
Purple Willow	<i>Salix purpurea</i>				0.8
Riverbank Grape	<i>Vitis riparia</i>			0.5	
<b>NUMBER of SPECIES</b>		22	7	23	29

### 3.2.2.3 Isolated Wetland Unit

The Isolated Wetland was entirely surrounded by an actively cultivated cornfield which encroaches almost to the wetland boundary. As such, the boundary of the wetland was quite disturbed with a wide variety of weedy species represented such as common ragweed, horseweed and cow vetch, but some wetland species were also represented. The interior of the wetland was more homogeneous with a smaller number of species present. In particular it was co-dominated by reed canary grass and broad-leaved cattail, with water horsetail also being widespread. Since the edge and interior of the wetland were so different, they appear as separate columns in **Table 4**, with the edge consisting only of the first and last quadrants along the transect. Representative photographs of the Isolated Wetland are shown in **Appendix D**, photos 1 to 4.

The vegetation was mapped and described as reed canary grass mineral meadow marsh (MAM2-2) in the 2006 Natural Environment report (GLL, 2006a). It was described as being dominated almost solely by reed canary grass with some broad-leaved cattail in the northwest corner (GLL, 2006a). In 2018, the unit was found to be co-dominated by the two species with the cattail more abundant on the west end and reed canary grass on the east end. It appears that cattail has become more abundant since the early 2000s. There was virtually no standing water present. The rim of the wetland was fairly open but there was a patch of sandbar willow (*Salix exigua*) at the west end and a thicket containing a mix of sandbar, Missouri (*S. eriocephala*), peach-leaved (*S. amygdaloides*) and white willows (*S. alba*) at the east end. A single peach-leaved willow stood on the south side of the wetland. The vegetation in Tributary A was mapped as “reed canary grass mineral meadow marsh (MAM2-2)” in the 2006 Natural Environment report (GLL, 2006a) but at least in area of transect is the organic layer was thicker and therefore “reed canary grass organic meadow marsh (MAM3-2)” according to Ecological Land Classification since the organic substrate was found to be greater than 40 cm deep (Lee *et al.* 1998).

Characteristics of the soil sample taken mid-way along transect TR 1 are shown in **Table 5**. No mottles or gley were present because of the deep organic soil layer and the shallow water table.

**Table 5: Soil Sample at Transect TR 1**

Soil Characteristics	Depth
Depth to Water Table	7 cm
Depth to Mottles	Not present
Depth to Gley	Not present
Fibric Organic	0 – 30 cm
Humic Organic	30 - 85 cm
Dark Grey Silt	85 – 95 cm
Light Grey Silt	95 – 115 cm

### 3.2.2.4 Tributary A

Nearly the whole length of Tributary A consists of reed canary grass meadow marsh, but the portion along the transect was co-dominated by reed canary grass and bittersweet nightshade (*Solanum dulcamara*). Hairy willow-herb was also abundant in randomly scattered patches. The meadow marsh was largely bordered by moist white cedar coniferous forest and some willow thicket swamp. A defined channel is present but it did not contain flowing water during the vegetation sampling on July 13, 2018. Occasional pockets of very shallow standing water were present along the channel. Lesser duckweed covered standing water, where present. Representative photographs of the Tributary A and Pond A are shown in **Appendix D**, photos 5 to 8.

The water level in Pond A was nearly up to the rim with a slight trickle flowing outward. This seemed high given the lack of rain in recent weeks<sup>4</sup>, and suggest that there may be groundwater contributions. Based on the water level

4. 16 mm of precipitation was recorded on July 6 (six days before the site visit) at the Guelph Dam station, located about 12 km north of the site. No precipitation was recorded in the five days prior to the July 12 site visit. Total precipitation recorded at Guelph Dam for July 1 to July 12 was 16 mm.

measurements collected from MP1, located within Pond A, Pond A does not show a consistent seasonal pattern of recharge/discharge<sup>5</sup>. Water was clear in the pond and the depth was over 1 m. The bottom was densely covered with stoneworts (*Chara* sp.) and some sago pondweed (*Stuckenia pectinata*).

The vegetation in Tributary A was mapped as “reed canary grass mineral meadow marsh (MAM2-2)” in the 2006 Natural Environment report (GLL, 2006a) but at least in the area of transect TR 2 it is considered to be “reed canary grass organic meadow marsh (MAM3-2)” according to Ecological Land Classification since the organic substrate was found to be greater than 40 cm deep (Lee *et al.* 1998). A complete list of plant species recorded from the Tributary A Wetland Unit is provided in **Appendix C**.

Characteristics of the soil sample taken mid-way along the transect are shown in **Table 6**. No mottles or gley were present because of the deep organic soil layer and the shallow water table. The soil sample is depicted in **Appendix D**, photo 9.

**Table 6: Soil Sample at Transect TR 2**

Soil Characteristics	Depth
Depth to Water Table	5 cm
Depth to Mottles	Not present
Depth to Gley	Not present
Organic Soil, mainly Humic	0 – 95 cm
Light Grey Clayey Silt	95 – 110 cm

#### 3.2.2.5 Hanlon Creek Wetland

This area of the vegetation transect consisted of forb mineral meadow marsh with a diverse mix of plant species and a variable composition between quadrants. Overall, the low articulated rush provided the greatest percentage of ground cover but it was patchily distributed. The site appears to have been a livestock pasture in the past but has been regenerating for several years. The meadow marsh is on the edge of a more extensive thicket swamp to the north. Representative photographs of transect TR 3 is shown in **Appendix D**, photos 10 and 11.

The vegetation in this area was mapped as “reed canary grass mineral meadow marsh (MAM2-2)” in the 2006 Natural Environment report (GLL, 2006a) but is now considered more mixed with variable patches that include reed canary grass and cattails but other graminoid species and a variety of forb species as well. A complete list of plants recorded from Hanlon Creek Wetland in the vicinity of transect TR 3 provided in **Appendix C**.

Characteristics of the soil sample taken mid-way along the transect appears in **Table 7**. This site consisted of mineral soils to the surface with mottles present. The ground was dry and the water table was well below the surface at the time of the field investigations. The soil sample is depicted in **Appendix D**, photo 12.

**Table 7: Soil Sample at Transect TR 3**

Soil Characteristics	Depth
Depth to Water Table	65 cm
Depth to Mottles	20 cm
Depth to Gley	Not apparent
Clay Loam	0 – 20 cm
Sandy Silt	20 – 85 cm

5. Historic MP1 groundwater and pond levels generally show upward gradients (groundwater inputs) into Pond A during the spring and winter, downward gradient during the fall and both upward and downward gradients during the summer.

### 3.2.3 Aquatic Features and Fish Habitat Assessment

Aquatic features within the site boundary consist of a dug pond (Pond A) and an unnamed intermittent tributary of the Speed River (Tributary A) that were originally described by Gartner Lee Limited over several field investigations between 1999 and 2006 (GLL 2006)(**Figure 2**). Tributary A was dredged and straightened by the landowner in the 1980s (GLL 2006a). Two swales that carry surface water for short periods across agricultural fields occur upstream from Pond A. Tributary A was described as intermittent since it was found to lack any standing water during site investigations in November 1999 and September 15, 2003. In June 2000 it was found to be mostly dry with scattered pools of standing water while on June 5, 2004 the entire tributary held approximately 40 cm deep water.

Four species of tolerant warm water fish were captured in the Tributary on June 26, 2006, while two fish species were captured in Pond A on September 15, 2003.

#### 3.2.3.1 Tributary A

Tributary A appears to be an intermittent watercourse that conveys flows under Laird Road. The tributary was assessed from the Laird Road crossing to the narrow channel connecting the tributary to Pond A. At the time of assessment, the morphology was composed entirely of flats (100%) with a mean wetted depth of approximately 0.5 m and a mean wetted width of approximately 2.0 m. The bankfull depths and widths were undefined due to flooding into the adjacent deciduous forest. Substrate was composed of silt and detritus. Instream cover was abundant and largely provided by grasses, aquatic vegetation including milfoil sp., lesser duckweed (*Lemna minor*) and watercress (*Nasturtium officinale*) and woody debris. Riparian cover was provided by deciduous trees, shrubs, herbaceous vegetation and grasses. A smaller tributary joins Tributary A approximately 20 m downstream of the connecting channel.

A single brook stickleback (*Culaea inconstans*) was captured during fish community surveys. The tributary within the study area provides fish habitat suitable for refuge, feeding and rearing; however, conditions are non-limiting throughout with no specialized habitat (i.e. critically limiting spawning habitat) identified.

During the fish survey in 2006 by Gartner Lee Ltd. (2006), four species were identified in shallow pools along Tributary A: creek chub (*Semotilus atromaculatus*), black-nosed dace (*Rhynchithys atratulus*), and northern redbelly dace (*Phoxinus eos*) as well as brook stickleback.

#### 3.2.3.2 Pond A

Pond A is a man-made, warmwater pond mainly fed by overland agricultural flow and two (2) tile drains entering at the north-west shore. At the time of assessment, the mean wetted width was at bankfull levels, approximately 30 m. Depth was not assessed due to health and safety restrictions; however, it appeared to be over 1.0 m. Substrate was composed of silt, muck and detritus. Instream cover was abundant and largely provided by aquatic vegetation with marginal woody debris. The riparian vegetation was dense herbaceous vegetation and several small trees.

Thirty brook stickleback were captured during the fish community survey, including one visibly gravid female. The pond provides fish habitat suitable for reproduction, refuge, feeding and rearing; however, conditions are non-limiting throughout with no specialized (critically limiting spawning habitat) identified.

During the 2006 fish survey (GLL, 2006a), northern redbelly dace was found to be present in Pond A as well as brook stickleback.

### 3.2.3.3 *Summary*

The 2018 aquatic survey only identified brook stickleback in Tributary A and Pond A whereas more warmwater species were observed at both locations as presented in the 2006 Natural Environment report. As there had been no site activities related to extraction, this loss of species diversity is natural to these features. The fish community survey is not a Site Plan requirement and no further surveys are recommended. Photographs 13 to 23, **Appendix D** show site conditions on May 7, 2018, the date of the aquatic survey.

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## 4. Triggering Mechanisms and Contingency Plan

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### 4.1 Triggering Mechanisms

The triggering mechanisms and Contingency Plan will not be established until after the Area 2 below-water extraction is complete however, for completeness, the Site Plan conditions are reproduced below.

*Trigger levels for BH3, BH8 and proposed BH9 and BH10 will be established when the below-water extraction in Area 2 of the Operations Plan is complete. Trigger levels at these locations will act as a warning to unexpected groundwater impact to the Speed River wetland both on and off-site (BH3, BH8), the Hanlon Creek Swamp (BH9) and the isolated wetland (BH10).*

*The trigger levels will be based on worst-case conditions (hot, dry, mid-summer week with no precipitation, plus a high rate of aggregate extraction of 2,100 tonnes per day) and baseline water level data. The trigger levels will be established in consultation with the City, the County and Township, except for BH8 which shall be based on predicted groundwater levels in May or June. Should the water level at the trigger monitors decrease to below the trigger levels, water levels will be measured again the following month. If water levels are below the trigger levels for these two consecutive monitoring events and are attributed to the below-water extraction activities, the Contingency Plan (discussed below) will be implemented.*

1. *The Contingency Plan will be implemented if any of the following conditions are established:*
  - a) *Groundwater levels in the monitors are reduced below the triggers (as established above), as determined by the monitoring review; or*
  - b) *The ecological inspection identifies unusual stress response in the PSW directly adjacent to the pit area that is not present elsewhere in the woodlot surrounding Tributary A or ecological monitoring in the Speed River PSW on or off-site identifies unusual stress response which is attributable to the operation of the pit; or*
  - c) *A water well complaint is substantiated by the investigation to have resulted from the operation of the pit.*

Note that BH9 and BH10 were installed in 2010.

### 4.2 Contingency Plan

1. *In the event that the Contingency Plan is triggered, the following actions shall be implemented:*
  - a) *The operator will cease any below-water extraction operations;*
  - b) *The District office of the Ministry of the Environment and the Ministry of Natural Resources, the Township, the County and the City shall be informed within seven calendar days of the impact, and the implementation of the Contingency Plan;*
  - c) *Water level measurements in all on-site monitors and mini-piezometers shall be repeated as soon as possible and practical, and continue on at least a weekly basis during the period when the impact persists;*

d) *The monitoring data and other relevant information will be reviewed by a qualified ecologist or geoscientist who will, as soon as reasonably possible, prepare a mitigation plan documenting:*

- *The nature, extent and significance of the impact,*
- *A recommendation regarding its mitigation,*
- *Recommendations regarding any additional monitoring requirements, and*
- *Recommendations regarding the resumption of operations.*

*The report shall be circulated to the District office of the Ministry of the Environment, the Ministry of Natural Resources, the Township, the County and the City; and*

e) *Subject to approval by the District office of the Ministry of the Environment and the Ministry of Natural Resources, the operator shall implement the mitigation plan.*

2. *In regard to a Contingency Plan for the isolated wetland, in the unlikely event that the water levels decrease beyond predicted levels, the deeper portion of the isolated wetland will be dredged/deepened, subject to MNR/GRCA approval. This would provide an opportunity for the dredged area to be seeded and/or planted to create a more diverse mix of wetland plant species. Details on the Contingency Plan will be shared with the Township and the County.*

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## **5. Adequacy of the Monitoring Program**

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Above-water extraction at the site commenced in November 2018 such that much of the data collected in 2018 reflects baseline conditions. The current monitoring program is adequate.



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## 6. Conclusions

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### 6.1 Hydrogeology

Based on the groundwater monitoring conducted at the site in 2018, the following conclusions are presented:

- Water level measurements collected across the site at the groundwater monitors and mini-piezometers reflect baseline pre-extraction conditions to November 2018. Water levels appear to be largely influenced by local precipitation conditions and show natural seasonal fluctuations.
- Groundwater flow is to the north-northwest. Locally, groundwater flows from the pit area towards Tributary A, as indicated by the groundwater levels collected in the vicinity.

### 6.2 Natural Environment

Monitoring of fish, amphibians and vegetation were conducted in 2018 and will provide a baseline from which the results of future monitoring can be compared. The findings of this pre-extraction monitoring are summarized as follows:

- The wetland boundaries and vegetation units have not changed significantly since 2005.
- Some natural succession has occurred since investigations associated with the Natural Environment study in mid-2000 but otherwise changes have been minor.
- Only one of the four species of fish present during 2006 surveys along Tributary A or Pond A was encountered in 2018.
- All three amphibians which were present in the Isolated Wetland in 2005 were recorded in 2018. However, the wetland did not contain a sufficient hydroperiod in 2018 for successful amphibian larval development as there was no standing water present on July 12.
- Three of the five amphibian species present in the Tributary A Wetland in 2005 were recorded in 2018.
- Only Green Frogs were confirmed to be breeding in Pond A.
- The Isolated Wetland is co-dominated by reed canary grass and broad-leaved cattail but in the past it was primarily comprised of reed canary grass. The composition of the wetland will be considered when Trigger levels (discussed in Section 4.1) are established following completion of below-water extraction in Area 2.
- Tributary A is largely dominated by reed canary grass but bittersweet nightshade is co-dominant in some sections of the transect.
- The transect in the Hanlon Creek Wetland that is meant to act as a control is botanically more diverse meadow marsh lacking organic soil and therefore has some different characteristics compared to the Isolated Wetland and Tributary A transects.

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## 7. Recommendations

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Based on the results of the 2018 monitoring program, the following recommendations are provided:

- a) Groundwater level monitoring of the on-site monitors and MPs should continue as prescribed in the approved Site Plans.
- b) Monitoring of amphibians and vegetation should be conducted in 2019 using similar methods as the 2018 baseline monitoring. The Site Plan conditions stipulate that amphibian monitoring will begin prior to below-water extraction in Area 3 and will continue annually thereafter for as long as below-water extraction occurs and vegetation monitoring once prior to below water extraction in Area 3 then annually thereafter. The amphibian surveys and vegetation survey can be suspended in 2020 until the commencement of below-water extraction in Area 3. Depending on the timing of below-water extraction in Area 3 (i.e., if it does not occur in the next four to five years), it may be prudent to complete amphibian and vegetation surveys prior to below-water extraction in Area 3 to update conditions for comparison. This will be assessed as the pit progresses.
- c) Comparisons shall be made from future monitoring to determine if changes are occurring and if those changes are likely a result of gravel extraction activities, particularly as it might affect the level of the groundwater table.
- d) As per Site Plan Condition 4 of the Natural Environment Technical Recommendations, this annual report should be submitted to the MECP, MNRF, Township, County, the City and the Grand River Conservation Authority (GRCA).

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## 8. References

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AECOM, 2011:

2010 Baseline Groundwater Level Monitoring and Site Plan Hydrogeology and Natural Environment Field Work – St Marys Mast-Snyder Pit, Township of Puslinch, County of Wellington (Letter Report), May 30, 2011, Project No. 60146419-8

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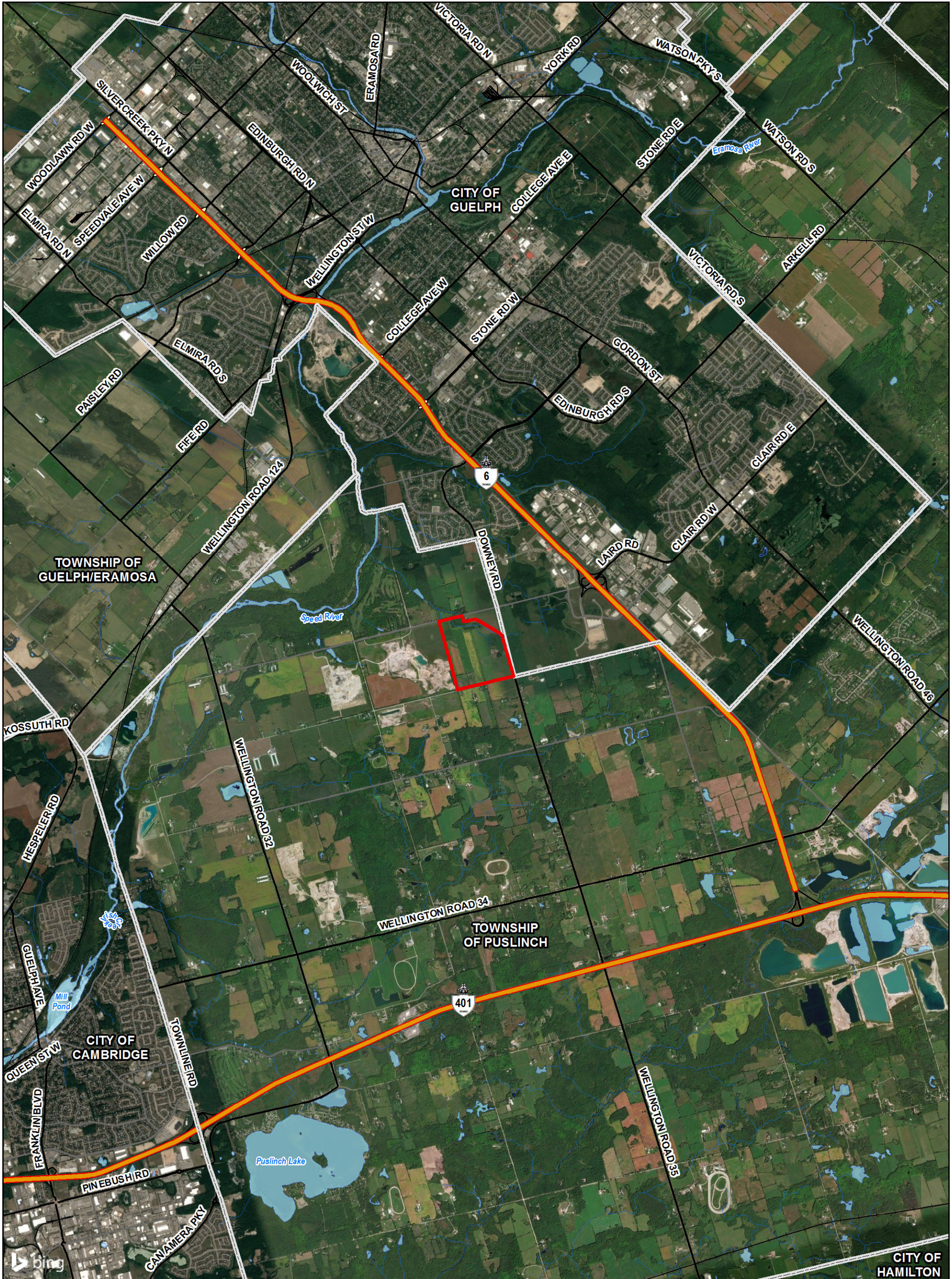
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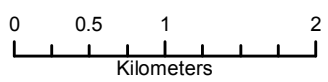
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# Figures



Basemapping from Ontario Ministry of Natural Resources  
 Orthophotography: 2016



UTM Zone 17, NAD 83

**Legend**

- Railway
- Major Road
- Watercourse
- Freeway
- Ramp
- Waterbody
- Highway
- Collector Road
- Municipal Boundary
- Site Boundary

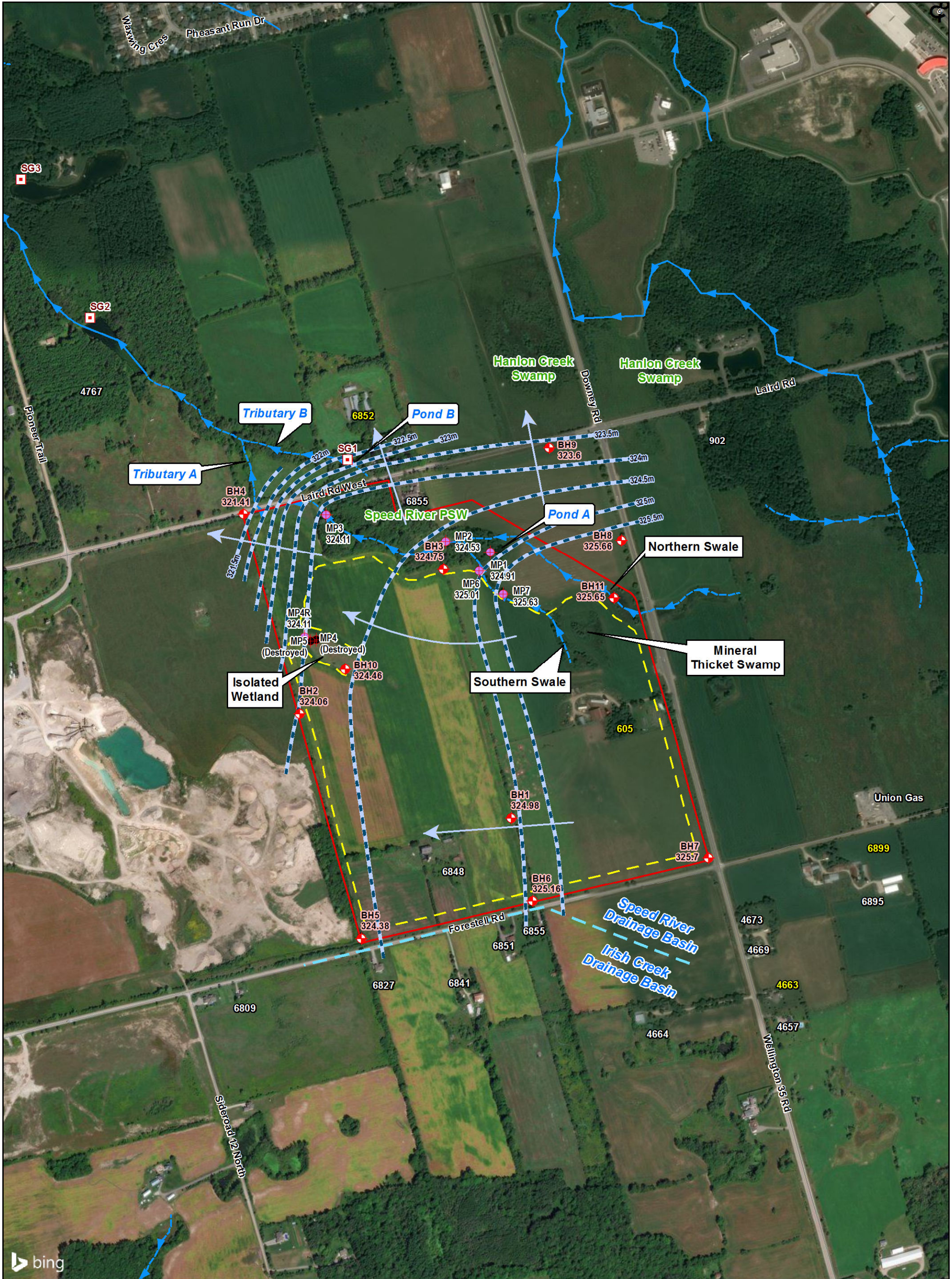
St. Marys  
 Mast-Snyder Property

**Site Location**

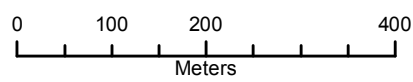
April 2019  
 Project 60568651-8



Figure 1



Basemapping from Ontario Ministry of Natural Resources  
 Orthophotography: 2016



UTM Zone 17, NAD 83

**Legend**

- Mini-Piezometer
- Destroyed Mini-Piezometer
- Staff Gauge
- Monitor Location
- Groundwater Contours (0.5m)
- Groundwater Divide
- Groundwater Flow Direction
- Well Survey Incomplete
- Well Survey Complete
- Roads
- Intermittent Watercourse
- Permanent Watercourse
- Site Boundary
- Approximate Limit of Extraction

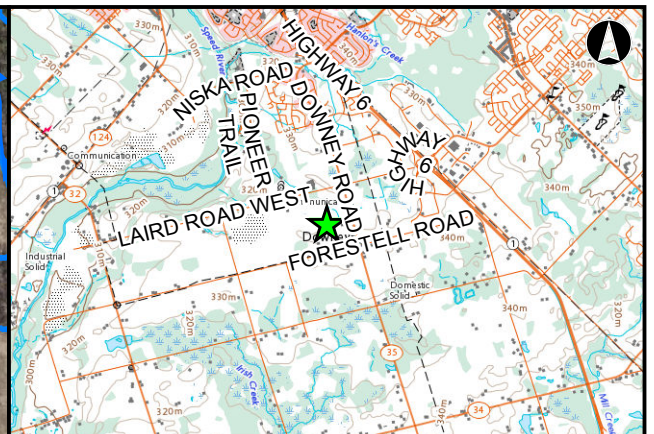
St. Marys  
 Mast-Snyder Property

**Site Plan and Groundwater  
 Flow (Nov 2018)**

April 2019  
 Project 60568651-8



Figure 2



### Legend

- ★ Project Location
- Vegetation Transect
- ▶ Watercourse
- 120m Buffer
- Property Boundary
- - - Approximate Limit of Extraction
- Site Boundary
- Provincially Significant Wetland
- Wetland, Not evaluated per OWES

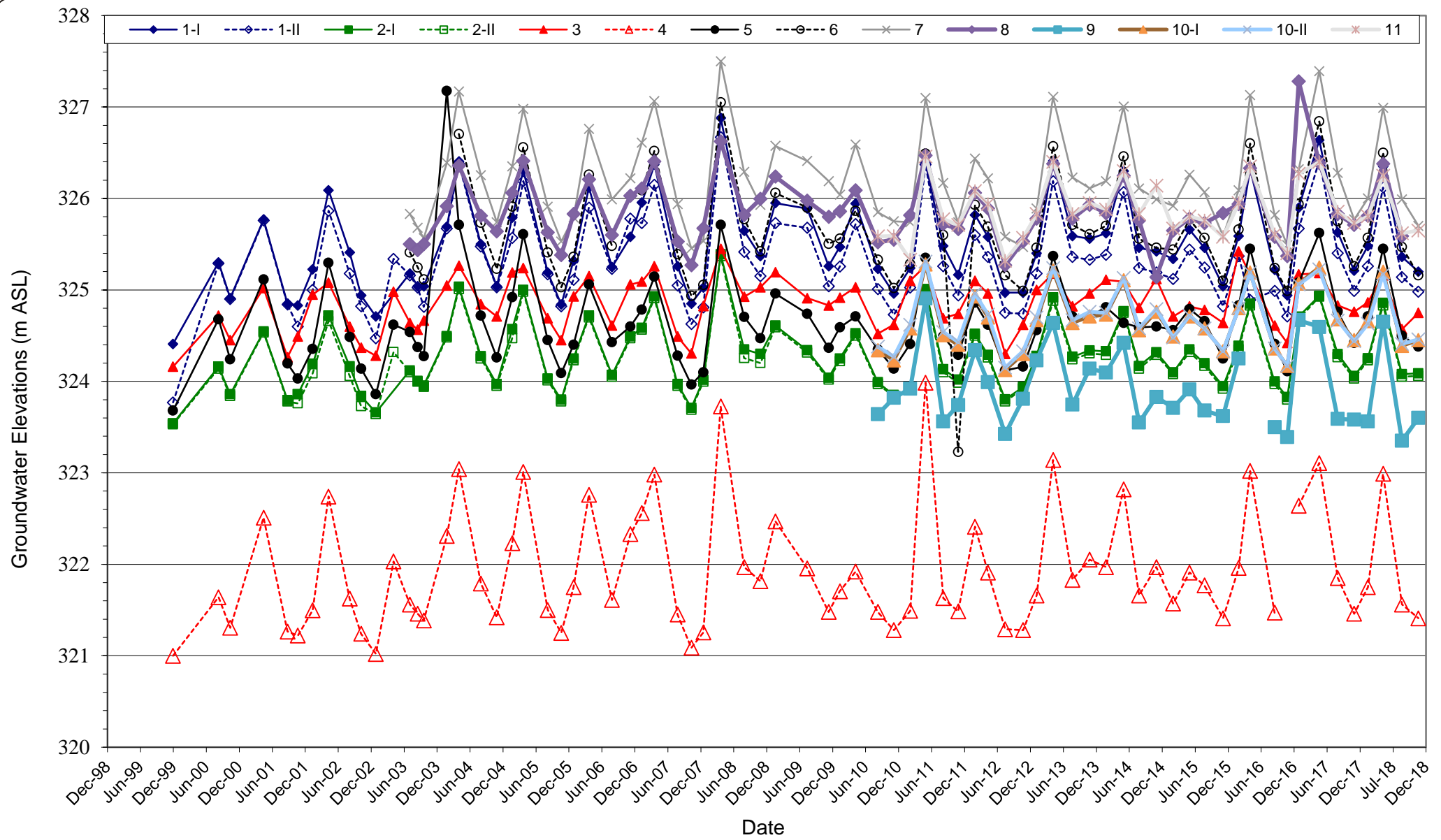
0 50 100 200 300  
Metres

Wetlands and Vegetation Transects		
Apr, 2019	1:5,405 <small>* when printed 11"x17"</small>	Datum: NAD 1983 UTM Zone 17N Source: Source
P#: 60568651		<b>Figure 3</b>
<b>AECOM</b>		

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Date Saved: 4/23/2019 11:40:40 AM User Name: amalia\_walker



**AECOM**

Groundwater Elevations - Boreholes

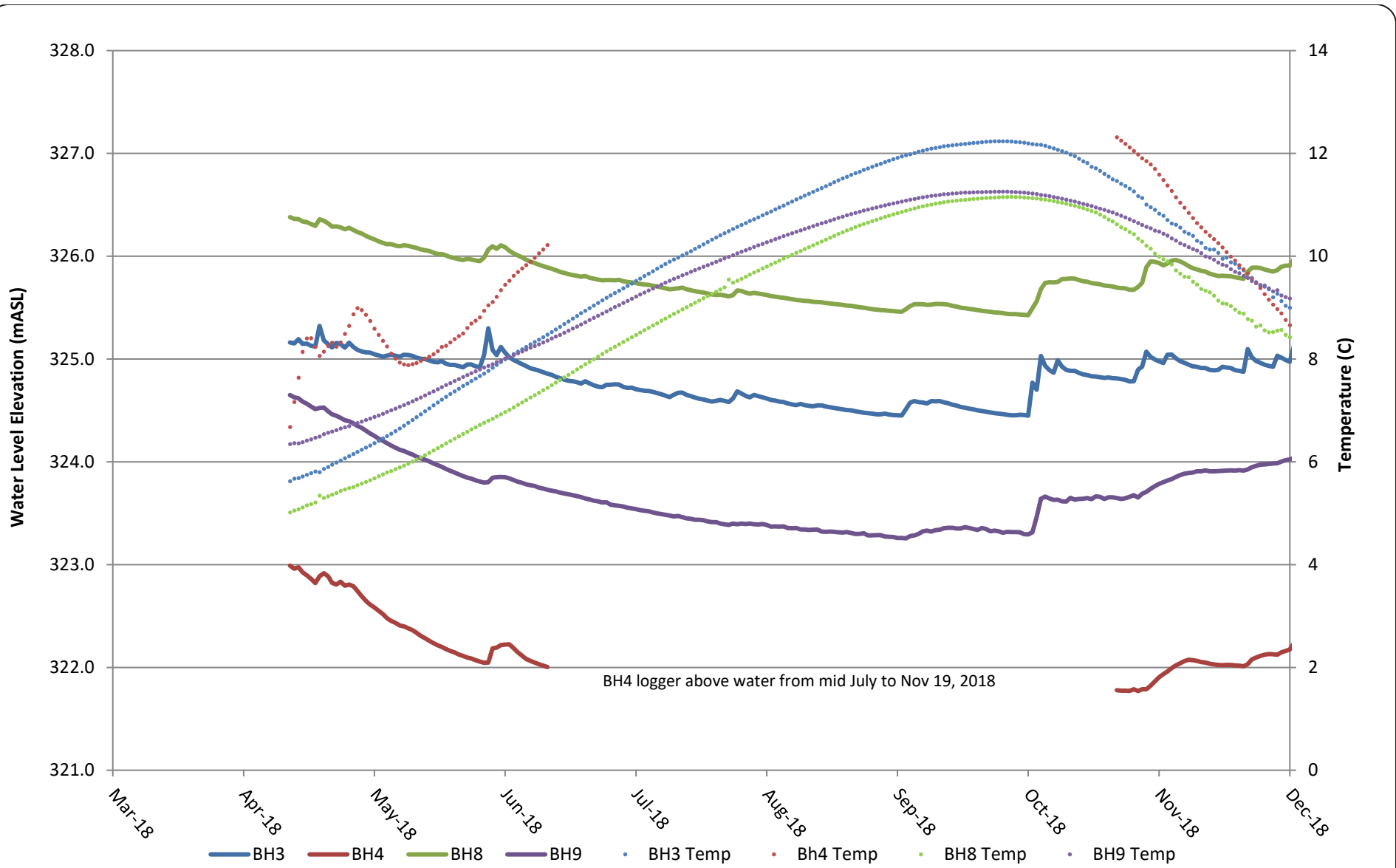
St. Marys Mast-Snyder Property

FIGURE

4

Project 60568651-8



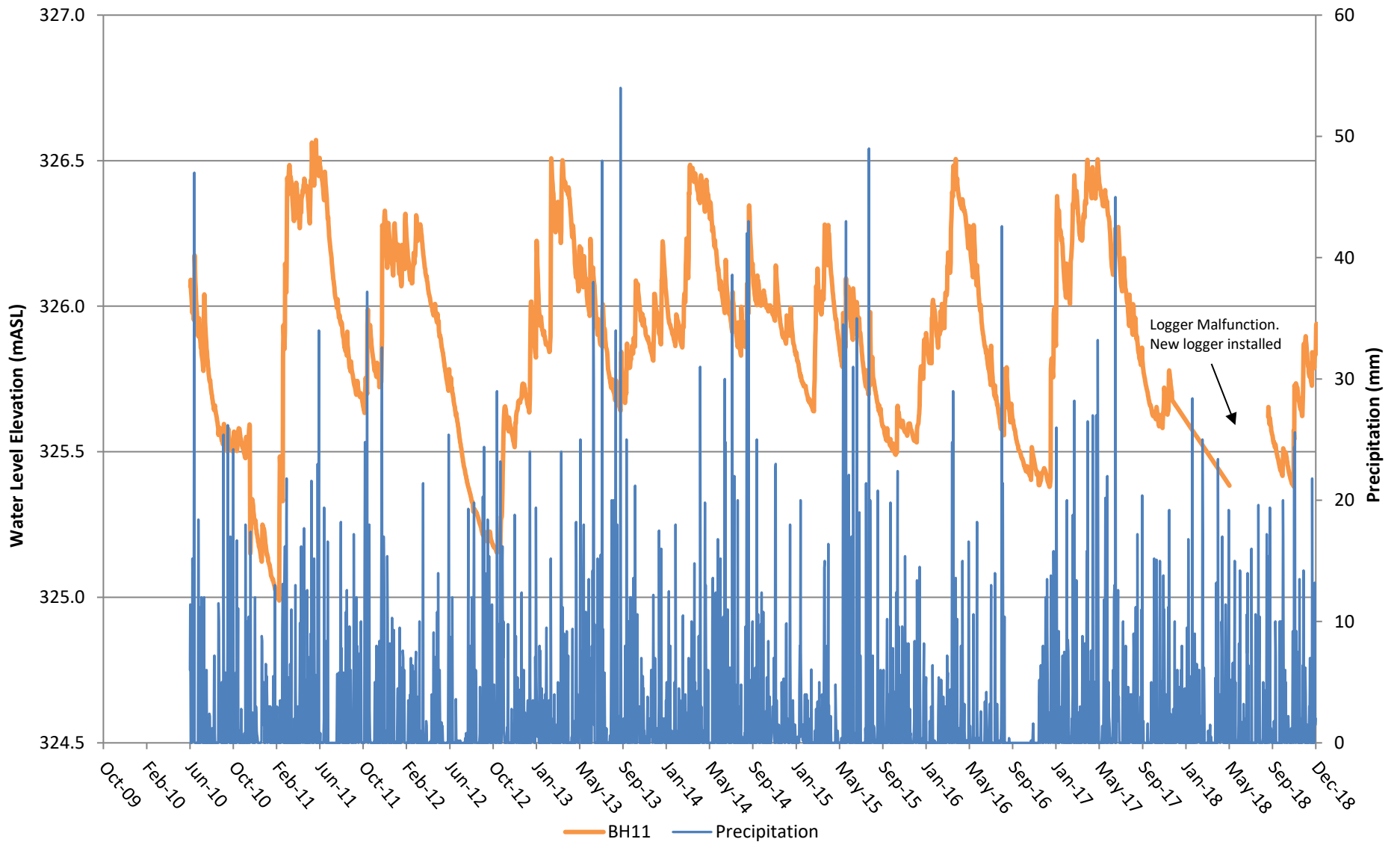


BH4 logger above water from mid July to Nov 19, 2018



Northern Monitors (BH3, BH4, BH8, BH9)  
 St Marys Mast Snyder Property

Figure 5  
 Project 60568651-8



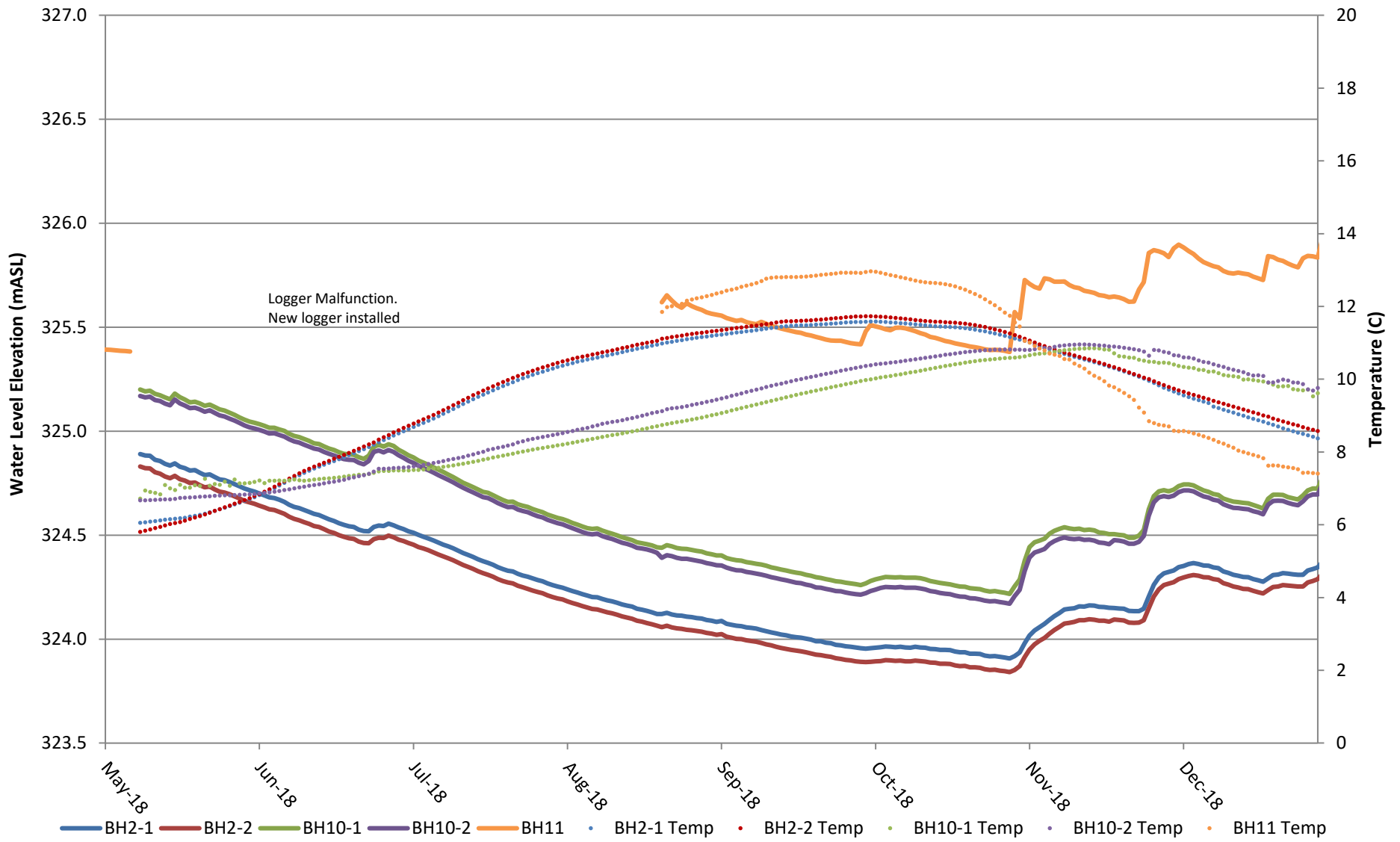
**AECOM**

**BH11 Water Levels and Precipitation**

St Marys Mast Snyder Property

**Figure 6**

**Project 60568651-8**

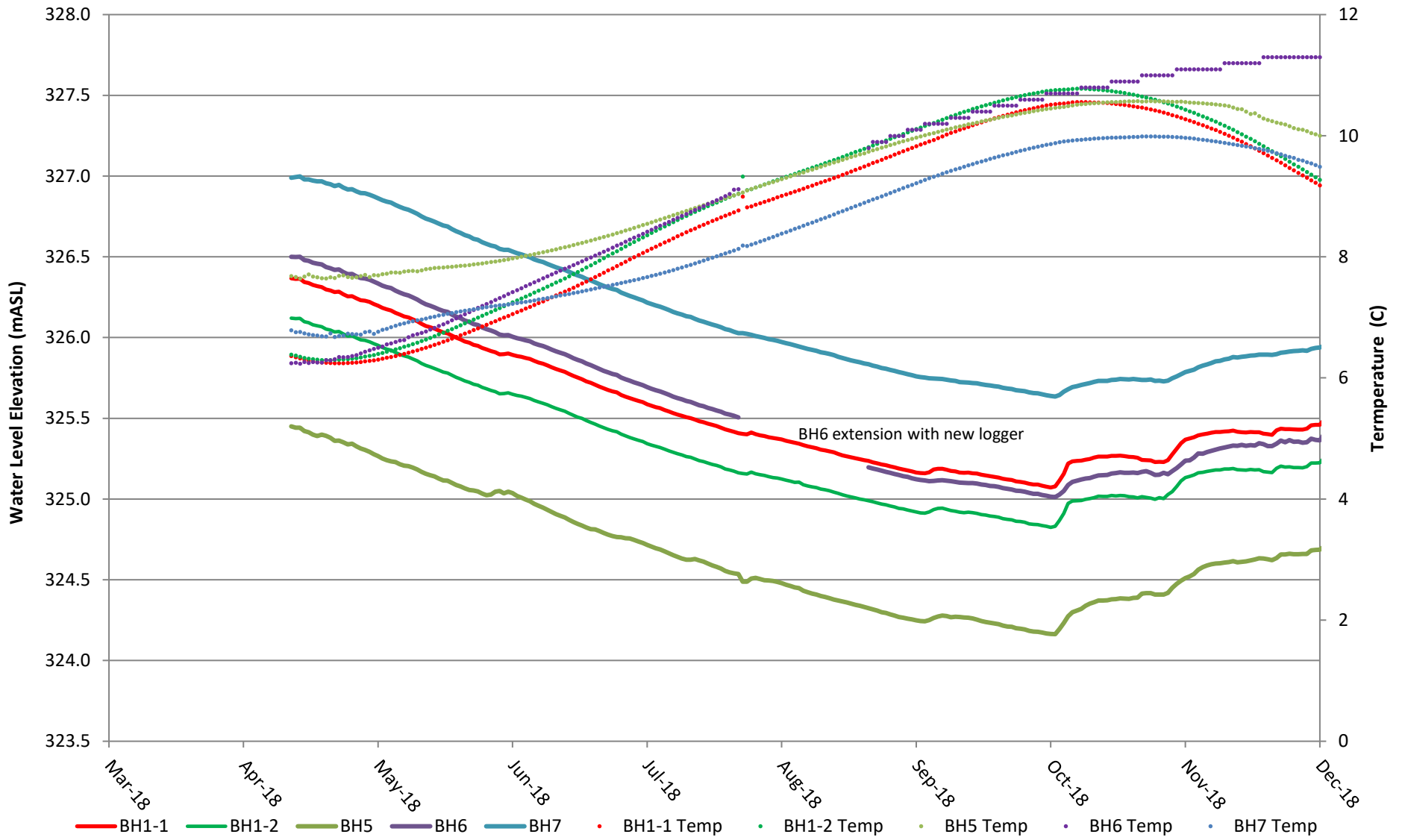


**Central Monitors (BH2,BH10,BH11)**

St Marys Mast Snyder Property

**Figure 7**

**Project 60568651-8**

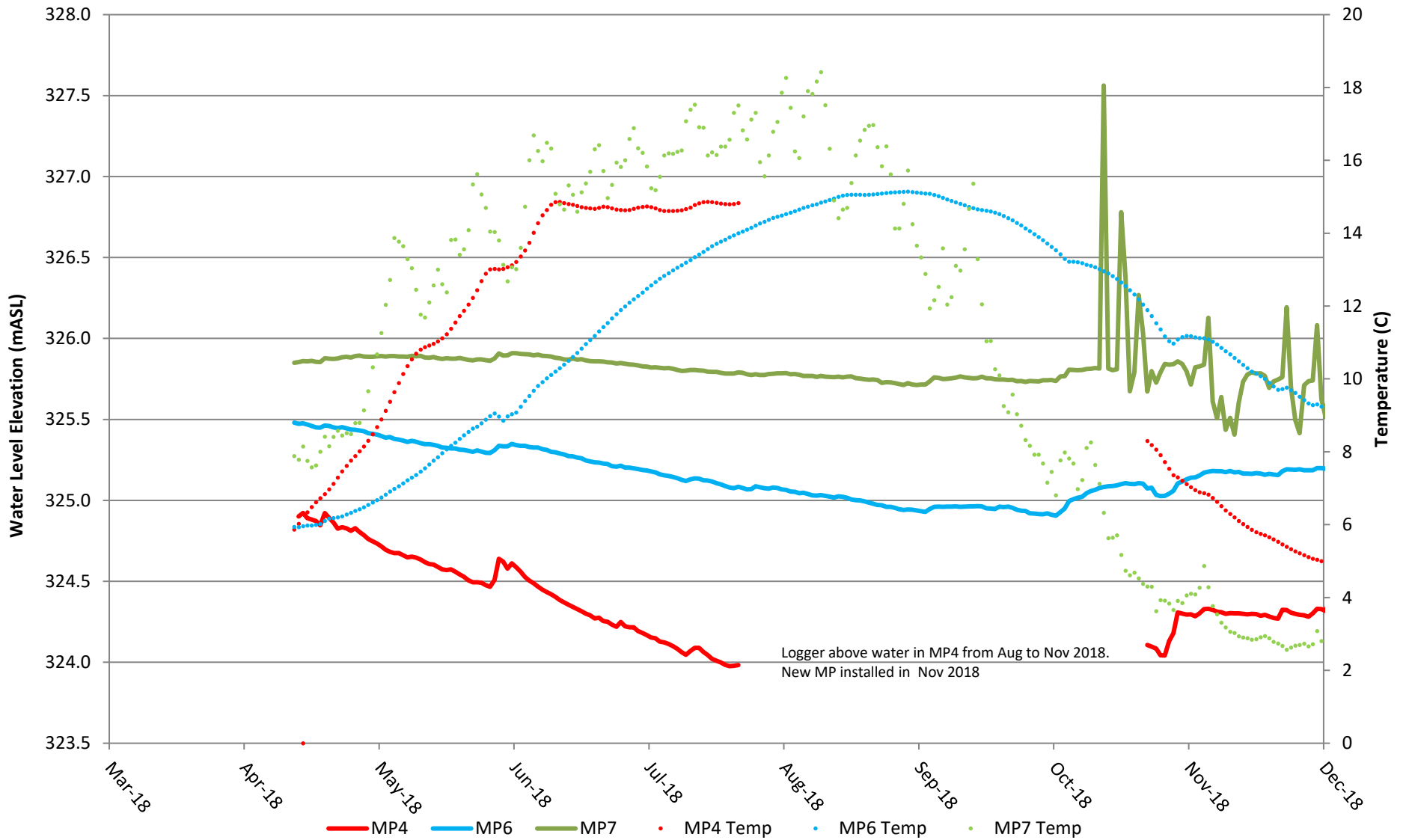


**Southern Monitors (BH1, BH5, BH6, BH7)**

St Marys Mast Snyder Property

**Figure 8**

**Project 60568651-8**

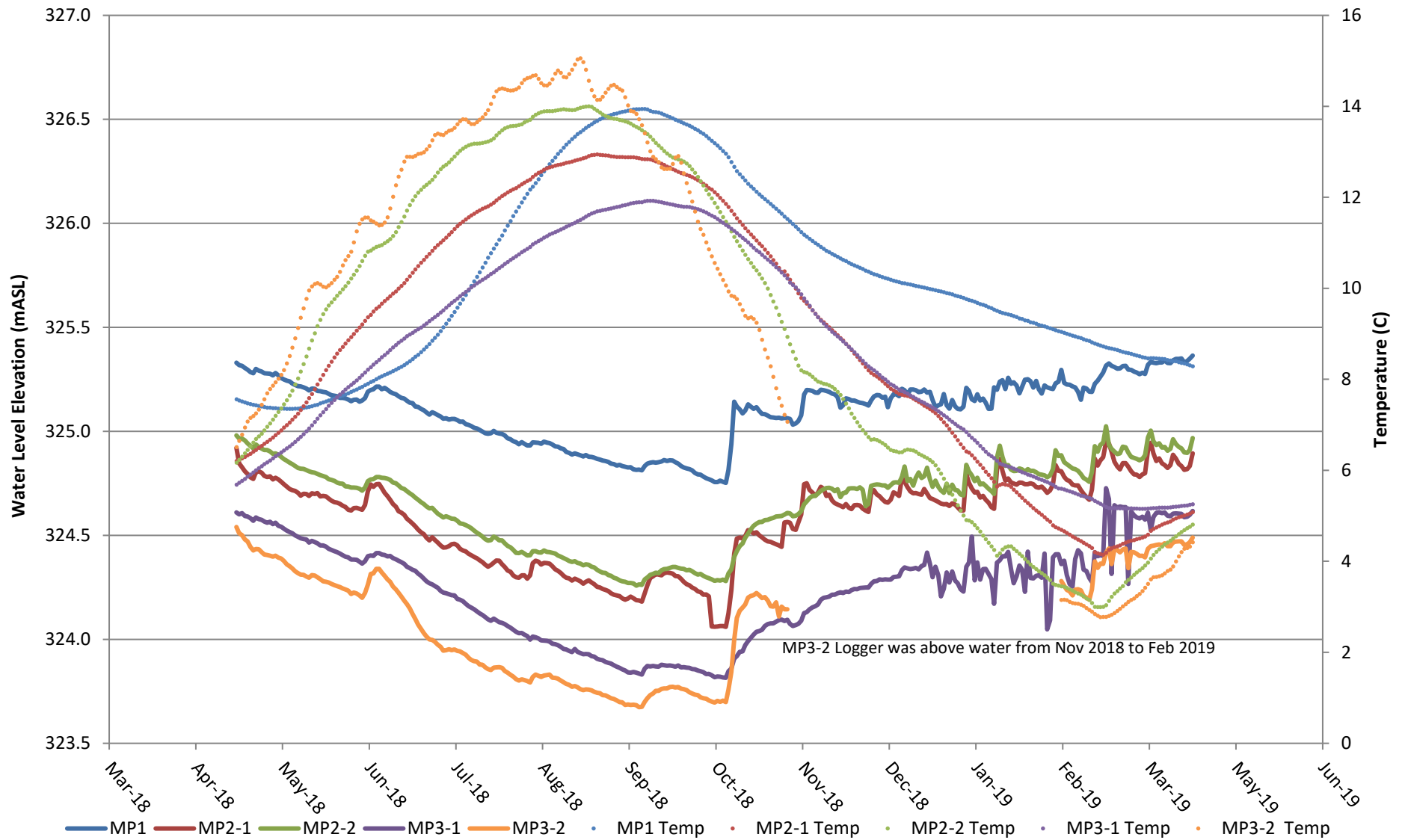


**Southern Swale (MP6, MP7) and Isolated Wetland Monitors (MP4)**

St Marys Mast Snyder Property

**Figure 9**

**Project 60568651-8**



**Tributary A Monitors (MP1, MP2, MP3)**

St Marys Mast Snyder Property

**Figure 10**

**Project 60568651-8**

# Appendix **A**

## Groundwater Elevations

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
1-1	330.54	329.60	15-Dec-99	6.13	324.41
			23-Aug-00	5.24	325.30
			27-Oct-00	5.63	324.91
			1-May-01	4.77	325.77
			11-Sep-01	5.69	324.85
			7-Nov-01	5.71	324.83
			28-Jan-02	5.32	325.23
			26-Apr-02	4.45	326.09
			22-Aug-02	5.13	325.41
			24-Oct-02	5.60	324.94
			14-Jan-03	5.83	324.71
			22-Jul-03	5.36	325.18
			3-Sep-03	5.50	325.04
			7-Oct-03	5.50	325.04
			12-Feb-04	4.85	325.69
			19-Apr-04	4.14	326.41
			19-Aug-04	5.04	325.50
			15-Nov-04	5.50	325.04
			9-Feb-05	4.75	325.79
			11-Apr-05	4.23	326.31
			25-Aug-05	5.35	325.19
			8-Nov-05	5.70	324.84
			16-Jan-06	5.22	325.32
			11-Apr-06	4.42	326.12
			17-Aug-06	5.29	325.25
			27-Nov-06	4.96	325.58
			30-Jan-07	4.59	325.96
			9-Apr-07	4.17	326.37
			16-Aug-07	5.28	325.26
			1-Nov-07	5.69	324.85
6-Jan-08	5.52	325.03			
12-Apr-08	3.66	326.88			
20-Aug-08	4.90	325.65			
18-Nov-08	5.17	325.37			
9-Feb-09	4.59	325.95			
5-Aug-09	4.65	325.89			
2-Dec-09	5.28	325.26			
2-Feb-10	5.07	325.47			
30-Apr-10	4.60	325.95			
1-Sep-10	5.31	325.23			
29-Nov-10	5.58	324.96			
28-Feb-11	5.30	325.24			
24-May-11	4.15	326.39			
30-Aug-11	5.06	325.48			
21-Nov-11	5.38	325.17			
22-Feb-12	4.72	325.82			
4-May-12	4.96	325.58			
8-Aug-12	5.57	324.97			
15-Nov-12	5.57	324.97			
29-Jan-13	5.14	325.40			



**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
1-l	330.54	329.60	1-May-13	4.13	326.41
			16-Aug-13	4.95	325.59
			20-Nov-13	4.98	325.56
			19-Feb-14	4.92	325.62
			27-May-14	4.24	326.30
			21-Aug-14	5.08	325.46
			25-Nov-14	5.12	325.42
			26-Feb-15	5.20	325.34
			28-May-15	4.88	325.66
			19-Aug-15	5.08	325.46
			30-Nov-15	5.50	325.04
			25-Feb-16	4.95	325.59
			28-Apr-16	4.22	326.32
			12-Sep-16	5.32	325.22
			21-Nov-16	5.60	324.94
			24-Jan-17	4.64	325.90
			17-May-17	3.90	326.64
			28-Aug-17	4.91	325.63
27-Nov-17	5.33	325.21			
12-Feb-18	5.06	325.48			
7-May-18	4.19	326.35			
20-Aug-18	5.18	325.36			
19-Nov-18	5.34	325.20			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
1-II	330.42	329.60	15-Dec-99	6.65	323.77
			23-Aug-00	5.13	325.29
			27-Oct-00	5.52	324.90
			1-May-01	4.66	325.76
			11-Sep-01	5.58	324.84
			7-Nov-01	5.82	324.60
			28-Jan-02	5.42	325.00
			26-Apr-02	4.56	325.87
			22-Aug-02	5.24	325.18
			24-Oct-02	5.60	324.82
			14-Jan-03	5.95	324.47
			22-Apr-03	5.08	325.34
			22-Jul-03	5.26	325.16
			3-Sep-03	5.40	325.03
			7-Oct-03	5.61	324.82
			12-Feb-04	4.75	325.67
			19-Apr-04	4.04	326.38
			19-Aug-04	4.95	325.48
			15-Nov-04	5.39	325.03
			9-Feb-05	4.85	325.57
			11-Apr-05	4.23	326.19
			25-Aug-05	5.25	325.17
			8-Nov-05	5.60	324.82
			16-Jan-06	5.31	325.11
			11-Apr-06	4.52	325.90
			17-Aug-06	5.19	325.23
			27-Nov-06	4.64	325.78
			30-Jan-07	4.69	325.73
			9-Apr-07	4.27	326.15
			16-Aug-07	5.37	325.05
			1-Nov-07	5.79	324.63
			6-Jan-08	5.61	324.81
			12-Apr-08	3.75	326.67
20-Aug-08	5.01	325.42			
18-Nov-08	5.27	325.15			
9-Feb-09	4.69	325.73			
5-Aug-09	4.74	325.68			
2-Dec-09	5.38	325.04			
2-Feb-10	5.17	325.26			
30-Apr-10	4.70	325.72			
1-Sep-10	5.41	325.01			
29-Nov-10	5.69	324.73			
28-Feb-11	5.40	325.03			
24-May-11	4.05	326.37			
30-Aug-11	5.16	325.26			
21-Nov-11	5.48	324.94			
22-Feb-12	4.82	325.60			
4-May-12	5.06	325.36			
8-Aug-12	5.67	324.75			
15-Nov-12	5.68	324.74			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
1-II	330.42	329.60	29-Jan-13	5.24	325.18
			1-May-13	4.23	326.19
			16-Aug-13	5.06	325.36
			20-Nov-13	5.09	325.33
			19-Feb-14	5.04	325.39
			27-May-14	4.35	326.07
			21-Aug-14	5.18	325.24
			25-Nov-14	5.23	325.19
			26-Feb-15	5.30	325.12
			28-May-15	4.98	325.44
			19-Aug-15	5.18	325.25
			30-Nov-15	5.60	324.82
			25-Feb-16	5.05	325.37
			28-Apr-16	5.53	324.89
			12-Sep-16	5.43	324.99
			21-Nov-16	5.71	324.71
			24-Jan-17	4.75	325.67
			17-May-17	4.00	326.42
			28-Aug-17	5.02	325.40
			27-Nov-17	5.43	324.99
12-Feb-18	5.16	325.26			
7-May-18	4.30	326.12			
20-Aug-18	5.28	325.14			
19-Nov-18	5.44	324.98			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
2-1	326.93	325.93	15-Dec-99	3.39	323.54
			23-Aug-00	2.77	324.16
			27-Oct-00	3.07	323.86
			1-May-01	2.39	324.55
			11-Sep-01	3.14	323.80
			7-Nov-01	3.07	323.86
			28-Jan-02	2.74	324.19
			26-Apr-02	2.21	324.72
			22-Aug-02	2.77	324.17
			24-Oct-02	3.09	323.84
			14-Jan-03	3.27	323.66
			22-Jul-03	2.81	324.12
			3-Sep-03	2.93	324.01
			7-Oct-03	2.98	323.96
			12-Feb-04	2.44	324.50
			19-Apr-04	1.90	325.04
			19-Aug-04	2.66	324.28
			15-Nov-04	2.96	323.97
			9-Feb-05	2.36	324.57
			11-Apr-05	1.93	325.00
			25-Aug-05	2.90	324.03
			8-Nov-05	3.13	323.80
			16-Jan-06	2.68	324.25
			11-Apr-06	2.21	324.72
			17-Aug-06	2.86	324.07
			27-Nov-06	2.44	324.49
			30-Jan-07	2.35	324.59
			9-Apr-07	2.00	324.93
			16-Aug-07	2.96	323.97
			1-Nov-07	3.22	323.71
			6-Jan-08	2.92	324.02
			12-Apr-08	1.54	325.39
			20-Aug-08	2.58	324.35
			18-Nov-08	2.63	324.30
			9-Feb-09	2.32	324.61
			5-Aug-09	2.59	324.34
			2-Dec-09	2.89	324.04
			2-Feb-10	2.68	324.25
			30-Apr-10	2.41	324.53
			1-Sep-10	2.94	323.99
	29-Nov-10	3.08	323.85		
28-Feb-11	326.90 <sup>4</sup>		Frozen		
24-May-11			1.89	325.01	
30-Aug-11			2.77	324.13	
21-Nov-11			2.88	324.02	
22-Feb-12			2.38	324.52	
4-May-12			2.61	324.29	
8-Aug-12			3.10	323.80	
15-Nov-12			2.96	323.94	
29-Jan-13			2.62	324.28	

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
2-1	326.90	325.93	1-May-13	1.98	324.92
			16-Aug-13	2.63	324.27
			20-Nov-13	2.56	324.34
			19-Feb-14	2.57	324.33
			27-May-14	2.13	324.77
			21-Aug-14	2.73	324.17
			25-Nov-14	2.58	324.32
			26-Feb-15	2.80	324.10
			28-May-15	2.55	324.35
			19-Aug-15	2.70	324.20
			30-Nov-15	2.95	323.95
			25-Feb-16	2.51	324.39
			28-Apr-16	2.05	324.85
			12-Sep-16	2.90	324.00
			21-Nov-16	3.07	323.83
			24-Jan-17	2.19	324.71
			17-May-17	1.96	324.94
			28-Aug-17	2.60	324.30
			27-Nov-17	2.84	324.06
			12-Feb-18	2.65	324.25
7-May-18	2.04	324.86			
20-Aug-18	2.82	324.08			
19-Nov-18	2.81	324.09			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
2-II	326.87	325.93	15-Dec-99	3.34	323.53
			23-Aug-00	2.73	324.14
			27-Oct-00	3.03	323.84
			1-May-01	2.34	324.54
			11-Sep-01	3.09	323.78
			7-Nov-01	3.11	323.76
			28-Jan-02	2.78	324.09
			26-Apr-02	2.21	324.66
			22-Aug-02	2.81	324.06
			24-Oct-02	3.14	323.73
			14-Jan-03	3.23	323.64
			22-Apr-03	2.55	324.32
			22-Jul-03	2.77	324.10
			3-Sep-03	2.88	324.00
			7-Oct-03	2.93	323.94
			12-Feb-04	2.39	324.48
			19-Apr-04	1.86	325.01
			19-Aug-04	2.62	324.25
			15-Nov-04	2.92	323.95
			9-Feb-05	2.40	324.47
			11-Apr-05	1.89	324.98
			25-Aug-05	2.86	324.01
			8-Nov-05	3.09	323.78
			16-Jan-06	2.64	324.23
			11-Apr-06	2.17	324.70
			17-Aug-06	2.82	324.05
			27-Nov-06	2.40	324.47
			30-Jan-07	2.31	324.57
			9-Apr-07	1.96	324.91
			16-Aug-07	2.92	323.95
			1-Nov-07	3.18	323.69
			6-Jan-08	2.88	324.00
			12-Apr-08	1.50	325.37
			20-Aug-08	2.62	324.26
			18-Nov-08	2.67	324.20
			9-Feb-09	2.28	324.59
			5-Aug-09	2.56	324.32
			2-Dec-09	2.85	324.02
			2-Feb-10	2.65	324.22
			30-Apr-10	2.37	324.50
1-Sep-10	2.90	323.97			
29-Nov-10	3.04	323.84			
28-Feb-11	Frozen				
24-May-11	1.90	324.98			
30-Aug-11	2.77	324.10			
21-Nov-11	2.89	323.99			
22-Feb-12	2.37	324.50			
4-May-12	2.61	324.26			
8-Aug-12	3.09	323.78			
15-Nov-12	2.95	323.92			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
2-II	326.87	325.93	29-Jan-13	2.62	324.25
			1-May-13	1.99	324.88
			16-Aug-13	2.63	324.24
			20-Nov-13	2.57	324.31
			19-Feb-14	2.58	324.29
			27-May-14	2.12	324.75
			21-Aug-14	2.73	324.14
			25-Nov-14	2.58	324.29
			26-Feb-15	2.79	324.08
			28-May-15	2.55	324.32
			19-Aug-15	2.70	324.17
			30-Nov-15	2.95	323.92
			25-Feb-16	2.52	324.35
			28-Apr-16	2.04	324.83
			12-Sep-16	2.90	323.97
			21-Nov-16	3.07	323.80
			24-Jan-17	2.19	324.68
			17-May-17	1.94	324.93
			28-Aug-17	2.61	324.27
			27-Nov-17	2.84	324.03
12-Feb-18	2.64	324.23			
7-May-18	2.04	324.83			
20-Aug-18	2.82	324.05			
19-Nov-18	2.81	324.06			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
3	326.46	325.65	15-Dec-99	2.30	324.16
			23-Aug-00	1.74	324.72
			27-Oct-00	2.01	324.45
			1-May-01	1.44	325.02
			11-Sep-01	2.20	324.27
			7-Nov-01	1.97	324.49
			28-Jan-02	1.51	324.95
			26-Apr-02	1.38	325.08
			22-Aug-02	1.86	324.60
			24-Oct-02	2.09	324.37
			14-Jan-03	2.18	324.28
			22-Apr-03	1.48	324.98
			22-Jul-03	1.82	324.64
			3-Sep-03	1.90	324.57
			7-Oct-03	1.80	324.67
			12-Feb-04	1.41	325.05
			19-Apr-04	1.20	325.27
			19-Aug-04	1.62	324.85
			15-Nov-04	1.75	324.71
			9-Feb-05	1.27	325.19
			11-Apr-05	1.22	325.24
			25-Aug-05	1.77	324.69
			8-Nov-05	2.01	324.45
			16-Jan-06	1.53	324.93
			11-Apr-06	1.31	325.15
			17-Aug-06	1.85	324.61
			27-Nov-06	1.40	325.06
			30-Jan-07	1.37	325.09
			9-Apr-07	1.20	325.26
			16-Aug-07	1.97	324.49
1-Nov-07	2.16	324.31			
6-Jan-08	1.64	324.83			
12-Apr-08	1.01	325.45			
20-Aug-08	1.54	324.93			
18-Nov-08	1.43	325.03			
9-Feb-09	1.27	325.20			
5-Aug-09	1.55	324.91			
2-Dec-09	1.63	324.83			
2-Feb-10	1.55	324.92			
30-Apr-10	1.43	325.03			
1-Sep-10	1.94	324.52			
29-Nov-10	1.84	324.62			
28-Feb-11	1.36	325.10			
24-May-11	1.20	325.27			
30-Aug-11	1.77	324.69			
21-Nov-11	1.72	324.74			
22-Feb-12	1.36	325.10			
4-May-12	1.50	324.96			
8-Aug-12	2.16	324.30			
15-Nov-12	1.84	324.62			



**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
3	326.46	325.65	29-Jan-13	1.46	325.00
			1-May-13	1.28	325.18
			16-Aug-13	1.64	324.82
			20-Nov-13	1.50	324.96
			19-Feb-14	1.35	325.11
			27-May-14	1.37	325.09
			21-Aug-14	1.66	324.81
			25-Nov-14	1.34	325.12
			26-Feb-15	1.75	324.71
			28-May-15	1.64	324.82
			19-Aug-15	1.68	324.78
			30-Nov-15	1.82	324.64
			25-Feb-16	1.04	325.42
			28-Apr-16	1.29	325.17
			12-Sep-16	1.85	324.61
			21-Nov-16	2.04	324.42
			24-Jan-17	1.29	325.17
			17-May-17	1.28	325.19
			28-Aug-17	1.63	324.83
			27-Nov-17	1.70	324.76
12-Feb-18	1.60	324.87			
7-May-18	1.30	325.16			
20-Aug-18	1.89	324.57			
19-Nov-18	1.71	324.75			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
4	325.18	324.42	15-Dec-99	4.18	321.00
			23-Aug-00	3.54	321.64
			27-Oct-00	3.88	321.31
			1-May-01	2.67	322.51
			11-Sep-01	3.92	321.27
			7-Nov-01	3.96	321.22
			28-Jan-02	3.68	321.50
			26-Apr-02	2.44	322.74
			22-Aug-02	3.56	321.63
			24-Oct-02	3.94	321.24
			14-Jan-03	4.16	321.02
			22-Apr-03	3.15	322.03
			22-Jul-03	3.62	321.56
			3-Sep-03	3.72	321.46
			7-Oct-03	3.80	321.39
			12-Feb-04	2.87	322.31
			19-Apr-04	2.14	323.04
			19-Aug-04	3.39	321.79
			15-Nov-04	3.76	321.42
			9-Feb-05	2.95	322.23
			11-Apr-05	2.17	323.01
			25-Aug-05	3.68	321.50
			8-Nov-05	3.93	321.25
			16-Jan-06	3.43	321.75
			11-Apr-06	2.42	322.76
			17-Aug-06	3.57	321.61
			27-Nov-06	2.85	322.33
			30-Jan-07	2.62	322.56
			9-Apr-07	2.20	322.98
			16-Aug-07	3.73	321.45
1-Nov-07	4.09	321.09			
6-Jan-08	3.93	321.26			
12-Apr-08	1.46	323.73			
20-Aug-08	3.21	321.97			
18-Nov-08	3.37	321.82			
9-Feb-09	2.71	322.47			
5-Aug-09	3.23	321.96			
2-Dec-09	3.70	321.48			
2-Feb-10	3.48	321.71			
30-Apr-10	3.26	321.92			
1-Sep-10	3.70	321.48			
29-Nov-10	3.90	321.28			
28-Feb-11	3.69	321.49			
24-May-11	1.20	323.99			
30-Aug-11	3.55	321.63			
21-Nov-11	3.70	321.49			
22-Feb-12	2.77	322.41			
4-May-12	3.27	321.91			
8-Aug-12	3.89	321.29			
15-Nov-12	3.90	321.28			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
4	325.18	324.42	29-Jan-13	3.52	321.66
			1-May-13	2.04	323.14
			16-Aug-13	3.35	321.83
			20-Nov-13	3.13	322.05
			19-Feb-14	3.21	321.97
			27-May-14	2.36	322.82
			21-Aug-14	3.52	321.66
			25-Nov-14	3.21	321.97
			26-Feb-15	3.61	321.57
			28-May-15	3.27	321.91
			19-Aug-15	3.41	321.77
			30-Nov-15	3.77	321.41
			25-Feb-16	3.22	321.96
			28-Apr-16	2.16	323.02
			12-Sep-16	3.71	321.47
			21-Nov-16	Dry	
			24-Jan-17	2.54	322.64
			17-May-17	2.07	323.11
			28-Aug-17	3.33	321.85
			27-Nov-17	3.72	321.46
12-Feb-18	3.43	321.75			
7-May-18	2.19	322.99			
20-Aug-18	3.62	321.56			
19-Nov-18	3.77	321.41			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
5	329.66	329.00	15-Dec-99	5.98	323.68
			23-Aug-00	4.98	324.68
			27-Oct-00	5.42	324.24
			1-May-01	4.55	325.12
			11-Sep-01	5.47	324.20
			7-Nov-01	5.63	324.03
			28-Jan-02	5.31	324.36
			26-Apr-02	4.37	325.30
			22-Aug-02	5.18	324.49
			24-Oct-02	5.52	324.14
			14-Jan-03	5.80	323.86
			22-Apr-03	5.04	324.62
			22-Jul-03	5.12	324.54
			3-Sep-03	5.29	324.38
			7-Oct-03	5.39	324.28
			12-Feb-04	2.49	327.18
			19-Apr-04	3.95	325.71
			19-Aug-04	4.94	324.72
			15-Nov-04	5.40	324.26
			9-Feb-05	4.74	324.92
			11-Apr-05	4.05	325.61
			25-Aug-05	5.21	324.45
			8-Nov-05	5.57	324.09
			16-Jan-06	5.26	324.40
			11-Apr-06	4.60	325.06
			17-Aug-06	5.23	324.43
			27-Nov-06	5.06	324.60
			30-Jan-07	4.88	324.79
			9-Apr-07	4.52	325.15
			16-Aug-07	5.38	324.28
			1-Nov-07	5.70	323.96
			6-Jan-08	5.56	324.10
12-Apr-08	3.95	325.71			
20-Aug-08	4.96	324.71			
18-Nov-08	5.19	324.47			
9-Feb-09	4.70	324.96			
5-Aug-09	4.92	324.74			
2-Dec-09	5.30	324.37			
2-Feb-10	5.07	324.59			
30-Apr-10	4.95	324.71			
1-Sep-10	5.31	324.35			
29-Nov-10	5.52	324.14			
28-Feb-11	5.25	324.41			
24-May-11	4.31	325.35			
30-Aug-11	5.17	324.49			
21-Nov-11	5.37	324.29			
22-Feb-12	4.80	324.86			
4-May-12	5.04	324.62			
8-Aug-12	5.54	324.12			
15-Nov-12	5.50	324.16			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
5	329.66	329.00	29-Jan-13	5.10	324.56
			1-May-13	4.29	325.37
			16-Aug-13	4.95	324.71
			20-Nov-13	4.95	324.71
			19-Feb-14	4.85	324.81
			27-May-14	5.02	324.64
			21-Aug-14	5.07	324.59
			25-Nov-14	5.06	324.60
			26-Feb-15	5.10	324.56
			28-May-15	4.87	324.79
			19-Aug-15	5.00	324.66
			30-Nov-15	5.41	324.25
			25-Feb-16	4.83	324.83
			28-Apr-16	4.21	325.45
			12-Sep-16	5.25	324.41
			21-Nov-16	5.55	324.11
			24-Jan-17	4.58	325.08
			17-May-17	4.04	325.62
			28-Aug-17	4.90	324.76
			27-Nov-17	5.24	324.42
12-Feb-18	4.95	324.71			
7-May-18	4.21	325.45			
20-Aug-18	5.16	324.50			
19-Nov-18	5.28	324.38			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
6	330.80	330.27	22-Jul-03	5.39	325.41
			3-Sep-03	5.56	325.25
			7-Oct-03	5.69	325.12
			12-Feb-04	Inaccessible	
			19-Apr-04	4.10	326.71
			19-Aug-04	5.07	325.74
			15-Nov-04	5.57	325.23
			9-Feb-05	4.89	325.91
			11-Apr-05	4.24	326.56
			25-Aug-05	5.39	325.41
			8-Nov-05	5.77	325.03
			16-Jan-06	5.44	325.36
			11-Apr-06	4.54	326.26
			17-Aug-06	5.32	325.48
			27-Nov-06	inaccessible	
			30-Jan-07	4.71	326.09
			9-Apr-07	4.28	326.52
			16-Aug-07	5.41	325.39
			1-Nov-07	5.87	324.94
			6-Jan-08	5.75	325.06
			12-Apr-08	3.75	327.05
			20-Aug-08	5.03	325.78
			18-Nov-08	5.38	325.42
			9-Feb-09	4.74	326.06
			5-Aug-09	4.90	325.90
			2-Dec-09	5.30	325.51
			2-Feb-10	5.24	325.56
			30-Apr-10	4.94	325.87
			1-Sep-10	5.47	325.33
			29-Nov-10	5.78	325.02
			28-Feb-11	5.52	325.29
			24-May-11	4.31	326.49
			30-Aug-11	5.20	325.60
21-Nov-11	7.57	323.23			
22-Feb-12	4.87	325.93			
4-May-12	5.11	325.69			
8-Aug-12	5.64	325.16			
15-Nov-12	5.81	324.99			
29-Jan-13	5.34	325.46			
1-May-13	4.23	326.57			
16-Aug-13	5.09	325.71			
20-Nov-13	5.19	325.61			
19-Feb-14	5.10	325.70			
27-May-14	4.34	326.46			
21-Aug-14	5.24	325.56			
25-Nov-14	5.34	325.46			
26-Feb-15	5.36	325.44			
28-May-15	5.03	325.77			
19-Aug-15	5.23	325.57			
30-Nov-15	5.70	325.10			
25-Feb-16	5.14	325.66			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
6	330.80	330.27	28-Apr-16	4.20	326.60
			12-Sep-16	5.56	325.24
			21-Nov-16	5.81	324.99
			24-Jan-17	4.86	325.94
			17-May-17	3.96	326.84
			28-Aug-17	5.05	325.75
			27-Nov-17	5.54	325.26
			12-Feb-18	5.23	325.57
			7-May-18	4.30	326.50
	20-Aug-18	5.33	325.47		
	337.25	336.68	19-Nov-18	12.09	325.16

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
7	330.64	330.04	22-Jul-03	4.81	325.83
			3-Sep-03	4.96	325.68
			7-Oct-03	5.08	325.57
			12-Feb-04	4.25	326.39
			19-Apr-04	3.47	327.17
			19-Aug-04	4.39	326.26
			15-Nov-04	4.90	325.74
			9-Feb-05	4.29	326.35
			11-Apr-05	3.66	326.98
			25-Aug-05	4.73	325.91
			8-Nov-05	5.11	325.53
			16-Jan-06	4.85	325.79
			11-Apr-06	3.88	326.76
			17-Aug-06	4.65	325.99
			27-Nov-06	4.42	326.22
			30-Jan-07	4.03	326.61
			9-Apr-07	3.58	327.07
			16-Aug-07	4.70	325.94
			1-Nov-07	5.19	325.46
			6-Jan-08	5.11	325.54
			12-Apr-08	3.14	327.50
			20-Aug-08	4.35	326.29
			18-Nov-08	4.71	325.93
			9-Feb-09	4.07	326.58
			5-Aug-09	4.23	326.41
			2-Dec-09	4.45	326.19
			2-Feb-10	4.60	326.04
			30-Apr-10	4.05	326.59
			1-Sep-10	4.79	325.85
			29-Nov-10	4.89	325.75
			28-Feb-11	4.90	325.74
			24-May-11	3.54	327.10
30-Aug-11	4.47	326.17			
21-Nov-11	4.90	325.74			
22-Feb-12	4.21	326.44			
4-May-12	4.42	326.22			
8-Aug-12	5.06	325.58			
15-Nov-12	5.17	325.47			
29-Jan-13	4.75	325.89			
1-May-13	3.53	327.11			
16-Aug-13	4.41	326.23			
20-Nov-13	4.53	326.11			
19-Feb-14	4.45	326.19			
27-May-14	3.64	327.01			
21-Aug-14	4.53	326.11			
25-Nov-14	4.65	325.99			
26-Feb-15	4.72	325.92			
28-May-15	4.38	326.26			
19-Aug-15	4.57	326.07			
30-Nov-15	5.05	325.59			
25-Feb-16	4.55	326.09			



**Table A1. Summary of Groundwater Elevations****Project Name: St Marys Mast-Snyder Property****Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
7	330.64	330.04	28-Apr-16	3.51	327.13
			12-Sep-16	4.82	325.82
			21-Nov-16	5.15	325.49
			24-Jan-17	4.32	326.32
			17-May-17	3.25	327.39
			28-Aug-17	4.36	326.28
			27-Nov-17	4.87	325.77
			12-Feb-18	4.64	326.00
			7-May-18	3.65	326.99
			20-Aug-18	4.65	325.99
			19-Nov-18	4.94	325.70

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
8	328.40	327.74	22-Jul-03	2.90	325.50
			3-Sep-03	2.97	325.44
			7-Oct-03	2.90	325.50
			12-Feb-04	2.49	325.92
			19-Apr-04	2.04	326.36
			19-Aug-04	2.59	325.81
			15-Nov-04	2.76	325.64
			9-Feb-05	2.34	326.06
			11-Apr-05	1.99	326.41
			25-Aug-05	2.77	325.63
			8-Nov-05	3.02	325.38
			16-Jan-06	2.57	325.83
			11-Apr-06	2.19	326.21
			17-Aug-06	2.80	325.60
			27-Nov-06	2.37	326.03
			30-Jan-07	2.29	326.11
			9-Apr-07	2.00	326.41
			16-Aug-07	2.87	325.53
			1-Nov-07	3.13	325.27
			6-Jan-08	2.73	325.68
			12-Apr-08	1.78	326.63
			20-Aug-08	2.58	325.82
			18-Nov-08	2.41	326.00
			9-Feb-09	2.16	326.24
			5-Aug-09	2.43	325.98
			2-Dec-09	2.60	325.80
			2-Feb-10	2.54	325.86
			30-Apr-10	2.31	326.09
			1-Sep-10	2.88	325.52
			29-Nov-10	2.85	325.55
			28-Feb-11	2.59	325.82
			24-May-11	1.93	326.47
30-Aug-11	2.68	325.72			
21-Nov-11	2.74	325.67			
22-Feb-12	2.34	326.06			
4-May-12	2.51	325.89			
8-Aug-12	3.13	325.27			
15-Nov-12	2.87	325.53			
29-Jan-13	2.62	325.78			
1-May-13	2.02	326.38			
16-Aug-13	2.62	325.78			
20-Nov-13	2.47	325.93			
19-Feb-14	2.56	325.84			
27-May-14	2.15	326.25			
21-Aug-14	2.64	325.76			
25-Nov-14	3.26	325.14			
26-Feb-15	2.75	325.65			
28-May-15	2.62	325.78			
19-Aug-15	2.67	325.73			
30-Nov-15	2.56	325.84			
25-Feb-16	2.46	325.94			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
8	328.40	327.74	28-Apr-16	2.07	326.33
			12-Sep-16	2.82	325.58
			21-Nov-16	3.03	325.37
			24-Jan-17	1.12	327.28
			17-May-17	2.01	326.39
			28-Aug-17	2.57	325.83
			27-Nov-17	2.69	325.71
			12-Feb-18	2.59	325.81
			7-May-18	2.02	326.38
			20-Aug-18	2.81	325.59
			19-Nov-18	2.74	325.66

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
9	327.08	326.21	1-Sep-10	3.44	323.64
			29-Nov-10	3.26	323.82
			28-Feb-11	3.16	323.92
			24-May-11	2.18	324.91
			30-Aug-11	3.52	323.56
			21-Nov-11	3.34	323.74
			22-Feb-12	2.74	324.34
			4-May-12	3.09	323.99
			8-Aug-12	3.66	323.43
			15-Nov-12	3.27	323.81
			29-Jan-13	2.85	324.23
			1-May-13	2.44	324.64
			16-Aug-13	3.34	323.75
			20-Nov-13	2.94	324.14
			19-Feb-14	2.99	324.10
			27-May-14	2.66	324.42
			21-Aug-14	3.53	323.55
			25-Nov-14	3.25	323.83
			26-Feb-15	3.37	323.71
			28-May-15	3.17	323.91
			19-Aug-15	3.40	323.68
			30-Nov-15	3.46	323.62
			25-Feb-16	2.83	324.25
			28-Apr-16	inaccessible	
			12-Sep-16	3.58	323.50
			21-Nov-16	3.69	323.39
			24-Jan-17	2.41	324.67
17-May-17	2.49	324.60			
28-Aug-17	3.49	323.59			
27-Nov-17	3.50	323.58			
12-Feb-18	3.52	323.56			
7-May-18	2.43	324.65			
20-Aug-18	3.73	323.35			
19-Nov-18	3.48	323.60			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
10-I	326.69	325.82	1-Sep-10	2.35	324.34
			29-Nov-10	2.46	324.23
			28-Feb-11	2.11	324.58
			24-May-11	1.41	325.28
			30-Aug-11	2.19	324.51
			21-Nov-11	2.29	324.40
			22-Feb-12	1.76	324.93
			4-May-12	1.99	324.70
			8-Aug-12	2.57	324.13
			15-Nov-12	2.39	324.30
			29-Jan-13	2.02	324.67
			1-May-13	1.48	325.21
			16-Aug-13	2.05	324.64
			20-Nov-13	1.98	324.71
			19-Feb-14	1.96	324.73
			27-May-14	1.59	325.11
			21-Aug-14	2.13	324.56
			25-Nov-14	1.93	324.76
			26-Feb-15	2.20	324.49
			28-May-15	1.98	324.71
			19-Aug-15	2.11	324.58
			30-Nov-15	2.36	324.33
			25-Feb-16	1.89	324.80
			28-Apr-16	1.50	325.19
			12-Sep-16	2.33	324.36
			21-Nov-16	2.52	324.17
24-Jan-17	1.62	325.07			
17-May-17	1.44	325.25			
28-Aug-17	2.01	324.68			
27-Nov-17	2.24	324.45			
12-Feb-18	2.03	324.66			
7-May-18	1.49	325.20			
20-Aug-18	2.30	324.39			
19-Nov-18	2.24	324.45			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
10-II	326.76	325.86	1-Sep-10	2.38	324.38
			29-Nov-10	2.49	324.27
			28-Feb-11	2.14	324.62
			24-May-11	1.45	325.31
			30-Aug-11	2.22	324.54
			21-Nov-11	2.33	324.43
			22-Feb-12	1.80	324.96
			4-May-12	2.03	324.73
			8-Aug-12	2.61	324.15
			15-Nov-12	2.43	324.33
			29-Jan-13	2.06	324.70
			1-May-13	1.52	325.24
			16-Aug-13	2.09	324.67
			20-Nov-13	2.00	324.76
			19-Feb-14	2.01	324.75
			27-May-14	1.63	325.13
			21-Aug-14	2.18	324.58
			25-Nov-14	1.97	324.79
			26-Feb-15	2.28	324.48
			28-May-15	2.04	324.72
			19-Aug-15	2.18	324.58
			30-Nov-15	2.43	324.33
			25-Feb-16	1.96	324.80
28-Apr-16	1.57	325.19			
12-Sep-16	2.40	324.36			
21-Nov-16	2.59	324.17			
24-Jan-17	1.70	325.06			
17-May-17	1.54	325.23			
28-Aug-17	2.10	324.67			
27-Nov-17	2.32	324.44			
12-Feb-18	2.13	324.63			
7-May-18	1.59	325.17			
20-Aug-18	2.35	324.41			
19-Nov-18	2.30	324.46			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
11	327.04	326.26	1-Sep-10	1.46	325.59
			29-Nov-10	1.45	325.59
			28-Feb-11	1.71	325.33
			24-May-11	0.58	326.46
			30-Aug-11	1.27	325.78
			21-Nov-11	1.33	325.71
			22-Feb-12	0.96	326.08
			4-May-12	1.10	325.94
			8-Aug-12	1.72	325.32
			15-Nov-12	1.47	325.57
			29-Jan-13	1.21	325.83
			1-May-13	0.64	326.40
			16-Aug-13	1.21	325.83
			20-Nov-13	1.09	325.95
			19-Feb-14	1.16	325.88
			27-May-14	0.74	326.30
			21-Aug-14	1.21	325.83
			25-Nov-14	0.90	326.14
			26-Feb-15	1.37	325.67
			28-May-15	1.24	325.81
			19-Aug-15	1.28	325.76
			30-Nov-15	1.46	325.58
			25-Feb-16	1.09	325.95
28-Apr-16	0.69	326.35			
12-Sep-16	1.43	325.61			
21-Nov-16	1.64	325.40			
24-Jan-17	0.77	326.27			
17-May-17	0.64	326.40			
28-Aug-17	1.19	325.86			
27-Nov-17	1.31	325.73			
12-Feb-18	1.24	325.81			
7-May-18	0.79	326.25			
20-Aug-18	1.42	325.62			
19-Nov-18	1.39	325.65			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP1	325.59	324.84	3-Sep-03	0.74	324.85
			5-Sep-03	0.74	324.85
			15-Sep-03	0.75	324.85
			7-Oct-03	0.66	324.94
			12-Feb-04	0.40	325.19
			19-Apr-04	0.30	325.30
			19-Aug-04	0.51	325.08
			15-Nov-04	0.57	325.02
			9-Feb-05	frozen	-
			11-Apr-05	0.29	325.30
			25-Aug-05	0.62	324.97
			8-Nov-05	0.86	324.73
			16-Jan-06	0.45	325.15
			11-Apr-06	0.35	325.24
			17-Aug-06	0.72	324.87
			27-Nov-06	0.42	325.17
			30-Jan-07	0.37	325.23
			9-Apr-07	0.30	325.29
			16-Aug-07	0.83	324.77
			1-Nov-07	1.01	324.58
			6-Jan-08	0.64	324.96
			12-Apr-08	0.25	325.34
			20-Aug-08	0.43	325.16
			18-Nov-08	0.71	324.88
			9-Feb-09	0.64	324.95
			5-Aug-09	0.45	325.14
			2-Dec-09	0.68	324.91
			2-Feb-10	0.44	325.16
			30-Apr-10	0.54	325.05
			1-Sep-10	0.80	324.79
			29-Nov-10	0.67	324.92
			28-Feb-11	Frozen	
			24-May-11	0.23	325.37
			30-Aug-11	0.48	325.11
21-Nov-11	0.54	325.05			
22-Feb-12	0.47	325.12			
4-May-12	0.58	325.01			
8-Aug-12	1.02	324.57			
15-Nov-12	0.66	324.93			
29-Jan-13	0.58	325.01			
1-May-13	0.30	325.29			
16-Aug-13	0.51	325.08			
20-Nov-13	0.36	325.24			
19-Feb-14	0.46	325.13			
27-May-14	0.55	325.04			
21-Aug-14	0.56	325.03			
25-Nov-14	0.38	325.21			
26-Feb-15	frozen				
28-May-15	0.51	325.08			
19-Aug-15	0.51	325.08			
30-Nov-15	0.65	324.94			



**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP1	325.59	324.84	25-Feb-16	0.38	325.21
			28-Apr-16	0.33	325.26
			12-Sep-16	0.66	324.93
			21-Nov-16	0.89	324.70
			24-Jan-17	0.32	325.27
			17-May-17	0.31	325.28
			28-Aug-17	0.50	325.09
			27-Nov-17	0.54	325.05
			12-Feb-18	0.40	325.19
			7-May-18	0.26	325.33
			20-Aug-18	0.79	324.80
			19-Nov-18	0.68	324.91

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP1 (outside) <sup>1</sup>	325.59	324.84	3-Sep-03	0.66	324.93
			5-Sep-03	0.69	324.90
			15-Sep-03	dry	
			7-Oct-03	0.55	325.04
			12-Feb-04	frozen	
			19-Apr-04	0.43	325.16
			19-Aug-04	0.52	325.07
			15-Nov-04	0.53	325.06
			9-Feb-05	frozen	
			11-Apr-05	0.42	325.18
			25-Aug-05	0.58	325.01
			8-Nov-05	dry	
			16-Jan-06	frozen	
			11-Apr-06	0.43	325.16
			17-Aug-06	0.66	324.93
			27-Nov-06	0.45	325.14
			30-Jan-07	frozen	
			9-Apr-07	0.43	325.16
			16-Aug-07	dry	
			1-Nov-07	dry	
			6-Jan-08	frozen	
			12-Apr-08	0.35	325.24
			20-Aug-08	0.53	325.06
			18-Nov-08	0.50	325.09
			9-Feb-09	0.48	325.11
			5-Aug-09	0.49	325.10
			2-Dec-09	0.64	324.95
			2-Feb-10	0.43	325.16
			30-Apr-10	0.53	325.06
			1-Sep-10	0.70	324.89
			29-Nov-10	0.65	324.94
			28-Feb-11	frozen	
			24-May-11	0.38	325.21
30-Aug-11	0.56	325.03			
21-Nov-11	0.54	325.06			
22-Feb-12	0.51	325.08			
4-May-12	0.60	324.99			
8-Aug-12	0.75	324.84			
15-Nov-12	0.63	324.96			
29-Jan-13	frozen				
1-May-13	0.44	325.15			
16-Aug-13	0.54	325.05			
20-Nov-13	frozen				
19-Feb-14	frozen				
27-May-14	0.63	324.97			
21-Aug-14	0.51	325.08			
25-Nov-14	0.43	325.16			
26-Feb-15	frozen				
28-May-15	0.50	325.09			
19-Aug-15	0.53	325.06			
30-Nov-15	0.60	324.99			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP1 (outside) <sup>1</sup>	325.59	324.84	25-Feb-16	0.45	325.14
			28-Apr-16	0.45	325.14
			12-Sep-16	0.63	324.96
			21-Nov-16	dry	
			24-Jan-17	0.45	325.14
			17-May-17	0.41	325.18
			28-Aug-17	0.54	325.05
			27-Nov-17	0.54	325.05
			12-Feb-18	frozen	
			7-May-18	0.41	325.18
			20-Aug-18	dry	
19-Nov-18	0.48	325.11			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP2-I	325.59	324.59	3-Sep-03	1.59	324.00
			5-Sep-03	0.98	324.61
			15-Sep-03	1.05	324.54
			7-Oct-03	0.83	324.76
			12-Feb-04	0.03	325.56
			19-Apr-04	0.43	325.16
			19-Aug-04	0.74	324.86
			15-Nov-04	0.83	324.76
			9-Feb-05	frozen	
			11-Apr-05	0.53	325.06
			25-Aug-05	0.89	324.70
			8-Nov-05	1.13	324.46
			16-Jan-06	frozen	
			11-Apr-06	0.66	324.93
			17-Aug-06	0.67	324.92
			27-Nov-06	0.63	324.96
			30-Jan-07	frozen	
			9-Apr-07	0.21	325.38
			16-Aug-07	0.82	324.77
			1-Nov-07	1.35	324.24
			6-Jan-08	frozen	
			12-Apr-08	0.43	325.16
			20-Aug-08	0.37	325.22
			18-Nov-08	0.59	325.00
			9-Feb-09	0.50	325.09
			5-Aug-09	0.63	324.96
			2-Dec-09	0.92	324.67
			2-Feb-10	covered under snow	
			30-Apr-10	could not locate	
			1-Sep-10		
			29-Nov-10	1.05	324.54
			28-Feb-11	frozen	
			24-May-11	0.56	325.03
30-Aug-11	0.99	324.60			
21-Nov-11	1.02	324.57			
22-Feb-12	0.74	324.86			
4-May-12	1.03	324.56			
8-Aug-12	1.46	324.13			
15-Nov-12	1.09	324.50			
29-Jan-13	frozen				
1-May-13	1.05	324.54			
16-Aug-13	0.92	324.67			
20-Nov-13	0.81	324.78			
19-Feb-14	frozen				
27-May-14	0.64	324.96			
21-Aug-14	0.95	324.65			
25-Nov-14	0.69	324.90			
26-Feb-15	frozen				
28-May-15	0.94	324.65			
19-Aug-15	0.46	325.13			
30-Nov-15	0.69	324.90			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)	
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)				
MP2-I	325.59	324.59	25-Feb-16	0.80	324.79	
			28-Apr-16	inaccessible		
			12-Sep-16	0.58		325.01
			21-Nov-16	0.89		324.70
			24-Jan-17	0.32		325.27
			17-May-17			
			28-Aug-17	0.46		325.13
			27-Nov-17	0.67		324.92
			12-Feb-18	frozen		
			7-May-18	0.67		324.92
			20-Aug-18	1.33		324.26
			19-Nov-18	1.08		324.51

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP2-I (outside) <sup>1</sup>	325.59	324.59	3-Sep-03	0.97	324.62
			5-Sep-03	dry	
			15-Sep-03	dry	
			7-Oct-03	0.78	324.81
			12-Feb-04	frozen	
			19-Apr-04	0.51	325.08
			19-Aug-04	0.59	325.00
			15-Nov-04	0.75	324.84
			9-Feb-05	frozen	
			11-Apr-05	0.64	324.95
			25-Aug-05	0.83	324.76
			8-Nov-05	dry	
			16-Jan-06	frozen	
			11-Apr-06	0.59	325.00
			17-Aug-06	dry	
			27-Nov-06	0.63	324.96
			30-Jan-07	frozen	
			9-Apr-07	0.29	325.30
			16-Aug-07	dry	
			1-Nov-07	dry	
			6-Jan-08	frozen	
			12-Apr-08	0.55	325.04
			20-Aug-08	0.33	325.26
			18-Nov-08	0.29	325.30
			9-Feb-09	0.24	325.35
			5-Aug-09	0.30	325.29
			2-Dec-09	0.74	324.85
			2-Feb-10	covered under snow	
			30-Apr-10	could not locate	
			1-Sep-10		
			29-Nov-10	frozen	
			28-Feb-11	frozen	
			24-May-11	0.63	324.96
30-Aug-11	dry				
21-Nov-11	dry				
22-Feb-12	frozen				
4-May-12	1.01	324.58			
8-Aug-12	dry				
15-Nov-12	1.07	324.52			
29-Jan-13	frozen				
1-May-13	1.02	324.57			
16-Aug-13	0.83	324.77			
20-Nov-13	0.76	324.83			
19-Feb-14	frozen				
27-May-14	0.64	324.95			
21-Aug-14	0.80	324.79			
25-Nov-14	0.74	324.85			
26-Feb-15	0.77	324.82			
28-May-15	0.81	324.78			
19-Aug-15	0.53	325.06			
30-Nov-15	frozen				

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP2-I (outside) <sup>1</sup>	325.59	324.59	25-Feb-16	frozen	325.23
			28-Apr-16	inaccessible	
			12-Sep-16	saturated	
			21-Nov-16	dry	
			24-Jan-17	0.36	
			17-May-17		
			28-Aug-17	0.46	
			27-Nov-17	frozen	
			12-Feb-18	frozen	
			7-May-18	0.80	
			20-Aug-18	dry	
19-Nov-18	frozen				
					325.13
					324.79

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP2-II	325.20	324.60	3-Sep-03	1.03	324.17
			5-Sep-03	0.60	324.60
			15-Sep-03	0.66	324.55
			7-Oct-03	0.44	324.76
			12-Feb-04	0.49	324.72
			19-Apr-04	0.12	325.08
			19-Aug-04	0.35	324.85
			15-Nov-04	0.43	324.77
			9-Feb-05	frozen	
			11-Apr-05	0.16	325.04
			25-Aug-05	0.52	324.68
			8-Nov-05	0.75	324.45
			16-Jan-06	frozen	
			11-Apr-06	0.80	324.40
			17-Aug-06	1.05	324.15
			27-Nov-06	0.27	324.93
			30-Jan-07	frozen	
			9-Apr-07	0.49	324.71
			16-Aug-07	1.18	324.02
			1-Nov-07	0.97	324.24
			6-Jan-08	frozen	
			12-Apr-08	0.07	325.13
			20-Aug-08	0.74	324.46
			18-Nov-08	0.65	324.55
			9-Feb-09	frozen	
			5-Aug-09	0.72	324.48
			2-Dec-09	1.06	324.14
			2-Feb-10	covered under snow	
			30-Apr-10	could not locate	
			1-Sep-10		
			29-Nov-10	0.71	324.49
			28-Feb-11	frozen	
			24-May-11	0.15	325.05
30-Aug-11	0.81	324.40			
21-Nov-11	0.82	324.38			
22-Feb-12	0.37	324.83			
4-May-12	0.65	324.56			
8-Aug-12	1.09	324.11			
15-Nov-12	0.70	324.50			
29-Jan-13	frozen				
1-May-13	0.67	324.53			
16-Aug-13	0.50	324.71			
20-Nov-13	0.35	324.85			
19-Feb-14	0.29	324.91			
21-Aug-14	0.57	324.63			
25-Nov-14	0.42	324.78			
26-Feb-15	frozen				
28-May-15	0.50	324.70			
19-Aug-15	0.93	324.27			
30-Nov-15	1.06	324.14			
25-Feb-16	0.80	324.40			



**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP2-II	325.20	324.60	28-Apr-16	inaccessible	
			12-Sep-16	1.12	324.08
			21-Nov-16	1.32	323.88
			24-Jan-17	0.72	324.48
			17-May-17	0.72	324.49
			28-Aug-17	0.93	324.27
			27-Nov-17	0.97	324.23
			12-Feb-18	frozen	
			7-May-18	0.22	324.98
			20-Aug-18	0.84	324.36
			19-Nov-18	0.67	324.53

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)	
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)				
MP2-II (outside) <sup>1</sup>	325.20	324.60	3-Sep-03	0.57	324.63	
			5-Sep-03	dry		
			15-Sep-03	dry		
			7-Oct-03	0.43		324.77
			12-Feb-04	frozen		
			19-Apr-04	0.12		325.08
			19-Aug-04	0.21		324.99
			15-Nov-04	0.37		324.83
			9-Feb-05	frozen		
			11-Apr-05	0.25		324.95
			25-Aug-05	0.45		324.75
			8-Nov-05	dry		
			16-Jan-06	frozen		
			11-Apr-06	0.22		324.98
			17-Aug-06	dry		
			27-Nov-06	0.27		324.93
			30-Jan-07	frozen		
			9-Apr-07	0.56		324.64
			16-Aug-07	dry		
			1-Nov-07	dry		
			6-Jan-08	frozen		
			12-Apr-08	0.19		325.01
			20-Aug-08	0.68		324.52
			18-Nov-08	frozen		
			9-Feb-09	frozen		
			5-Aug-09	0.60		324.60
			2-Dec-09	1.01		324.19
			2-Feb-10	covered under snow		
			30-Apr-10	could not locate		
			1-Sep-10			
			29-Nov-10	frozen		
			28-Feb-11	frozen		
			24-May-11	0.25		324.95
30-Aug-11	dry					
21-Nov-11	dry					
22-Feb-12	0.33	324.87				
4-May-12	0.63	324.57				
8-Aug-12	dry					
15-Nov-12	0.71	324.50				
29-Jan-13	frozen					
1-May-13	0.65	324.55				
16-Aug-13	0.45	324.75				
20-Nov-13	0.39	324.81				
19-Feb-14	frozen					
21-Aug-14	0.43	324.77				
25-Nov-14	0.35	324.85				
26-Feb-15	frozen					
28-May-15	0.43	324.77				
19-Aug-15	0.84	324.36				
30-Nov-15	frozen					
25-Feb-16	frozen					

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP2-II (outside) <sup>1</sup>	325.20	324.60	28-Apr-16	inaccessible	324.44 324.49 324.36
			12-Sep-16	saturated	
			21-Nov-16	dry	
			24-Jan-17	0.76	
			17-May-17	0.71	
			28-Aug-17	0.84	
			27-Nov-17	frozen	
			12-Feb-18	frozen	
			7-May-18	0.33	
			20-Aug-18	dry	
			19-Nov-18	frozen	

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP3-I	324.71	324.11	3-Sep-03	3.10	321.62
			5-Sep-03	2.45	322.26
			15-Sep-03	1.18	323.54
			7-Oct-03	0.68	324.04
			12-Feb-04	Inaccessible	
			19-Apr-04	0.16	324.55
			19-Aug-04	0.47	324.24
			15-Nov-04	0.62	324.09
			9-Feb-05	frozen	
			11-Apr-05	0.08	324.63
			25-Aug-05	0.64	324.07
			8-Nov-05	0.78	323.93
			16-Jan-06	frozen	
			11-Apr-06	0.13	324.58
			17-Aug-06	0.64	324.07
			27-Nov-06	0.26	324.45
			30-Jan-07	frozen	
			9-Apr-07	0.03	324.69
			16-Aug-07	0.63	324.08
			1-Nov-07	0.93	323.78
			6-Jan-08	0.60	324.11
			12-Apr-08	Underwater	
			20-Aug-08	0.28	324.43
			18-Nov-08	0.45	324.26
			9-Feb-09	frozen	
			5-Aug-09	0.33	324.39
			2-Dec-09	0.51	324.20
			2-Feb-10	covered under snow	
			30-Apr-10	under water	
			1-Sep-10	0.74	323.98
			29-Nov-10	0.74	323.97
			28-Feb-11	frozen	
			24-May-11	0.00	324.71
			30-Aug-11	0.76	323.95
			21-Nov-11	0.52	324.19
			22-Feb-12	0.11	324.60
			4-May-12	0.31	324.40
			8-Aug-12	1.05	323.66
			15-Nov-12	0.76	323.95
			29-Jan-13	0.43	324.28
1-May-13	0.06	324.65			
16-Aug-13	0.39	324.32			
20-Nov-13	0.33	324.38			
19-Feb-14	frozen				
27-May-14	0.09	324.62			
21-Aug-14	0.98	323.73			
25-Nov-14	0.66	324.05			
26-Feb-15	frozen				
28-May-15	0.36	324.35			
19-Aug-15	0.87	323.84			
30-Nov-15	0.69	324.02			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP3-I	324.71	324.11	25-Feb-16	0.62	324.09
			28-Apr-16	0.00	324.71
			12-Sep-16	0.65	324.06
			21-Nov-16	0.85	323.86
			24-Jan-17	0.32	324.39
			17-May-17	0.05	324.66
			28-Aug-17	0.53	324.18
			27-Nov-17	0.61	324.10
			12-Feb-18	frozen	
			7-May-18	0.10	324.61
			20-Aug-18	0.80	323.91
			19-Nov-18	0.37	324.34

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP3-I (outside) <sup>1</sup>	324.71	324.11	3-Sep-03	dry	
			5-Sep-03	dry	
			15-Sep-03	dry	
			7-Oct-03	dry	
			12-Feb-04	frozen	
			19-Apr-04	0.18	324.53
			19-Aug-04	0.52	324.20
			15-Nov-04	dry	
			9-Feb-05	frozen	
			11-Apr-05	0.17	324.54
			25-Aug-05	dry	
			8-Nov-05	dry	
			16-Jan-06	frozen	
			11-Apr-06	0.19	324.52
			17-Aug-06	dry	
			27-Nov-06	0.26	324.45
			30-Jan-07	frozen	
			9-Apr-07	0.25	324.46
			16-Aug-07	dry	
			1-Nov-07	dry	
			6-Jan-08	0.50	324.21
			12-Apr-08	Underwater	
			20-Aug-08	0.40	324.31
			18-Nov-08	0.29	324.43
			9-Feb-09	frozen	
			5-Aug-09	0.35	324.36
			2-Dec-09	0.50	324.21
			2-Feb-10	covered under snow	
			30-Apr-10	Underwater	
			1-Sep-10	dry	
			29-Nov-10	dry	
			28-Feb-11	frozen	
			24-May-11	0.08	324.63
30-Aug-11	dry				
21-Nov-11	dry				
22-Feb-12	0.25	324.46			
4-May-12	0.32	324.39			
8-Aug-12	dry				
15-Nov-12	dry				
29-Jan-13	frozen				
1-May-13	0.20	324.51			
16-Aug-13	dry				
20-Nov-13	0.35	324.36			
19-Feb-14	frozen				
27-May-14	0.20	324.51			
21-Aug-14	0.20	324.51			
25-Nov-14	0.55	324.16			
26-Feb-15	frozen				
28-May-15	saturated				
19-Aug-15	dry				
30-Nov-15	dry				

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP3-I (outside) <sup>1</sup>	324.71	324.11	25-Feb-16	0.65	324.06
			28-Apr-16	0.21	324.50
			12-Sep-16	dry	
			21-Nov-16	dry	
			24-Jan-17	0.22	324.49
			17-May-17	0.23	324.48
			28-Aug-17	0.53	324.19
			27-Nov-17	dry	
			12-Feb-18	frozen	
			7-May-18	0.26	324.45
			20-Aug-18	dry	
			19-Nov-18	0.48	324.23

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP3-II	325.04	324.04	3-Sep-03	1.54	323.51
			5-Sep-03	1.19	323.85
			15-Sep-03	1.17	323.88
			7-Oct-03	0.97	324.08
			12-Feb-04	0.46	324.58
			19-Apr-04	0.47	324.58
			19-Aug-04	0.86	324.19
			15-Nov-04	0.99	324.05
			9-Feb-05	frozen	
			11-Apr-05	0.37	324.68
			25-Aug-05	1.02	324.02
			8-Nov-05	1.23	323.81
			16-Jan-06	frozen	
			11-Apr-06	0.46	324.58
			17-Aug-06	1.09	323.95
			27-Nov-06	0.59	324.45
			30-Jan-07	frozen	
			9-Apr-07	0.36	324.68
			16-Aug-07	1.23	323.81
			1-Nov-07	1.47	323.58
			6-Jan-08	0.86	324.18
			12-Apr-08	0.26	324.78
			20-Aug-08	0.66	324.39
			18-Nov-08	0.62	324.42
			9-Feb-09	frozen	
			5-Aug-09	0.72	324.32
			2-Dec-09	0.86	324.18
			2-Feb-10	covered under snow	
			30-Apr-10	0.48	324.56
			1-Sep-10	1.17	323.87
			29-Nov-10	1.06	323.98
			28-Feb-11	frozen	
			24-May-11	0.38	324.66
			30-Aug-11	1.09	323.95
			21-Nov-11	0.93	324.11
			22-Feb-12	0.58	324.46
4-May-12	0.69	324.35			
8-Aug-12	1.41	323.63			
15-Nov-12	1.06	323.98			
29-Jan-13	frozen				
1-May-13	0.43	324.61			
16-Aug-13	0.86	324.18			
20-Nov-13	0.68	324.36			
19-Feb-14	frozen				
27-May-14	0.44	324.60			
21-Aug-14	0.51	324.53			
25-Nov-14	0.34	324.70			
26-Feb-15	frozen				
28-May-15	0.83	324.21			
19-Aug-15	0.46	324.58			
30-Nov-15	1.05	323.99			



**Table A1. Summary of Groundwater Elevations****Project Name: St Marys Mast-Snyder Property****Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
			25-Feb-16	0.29	324.75
			28-Apr-16	1.63	323.41
			12-Sep-16	1.11	323.93
			21-Nov-16	1.24	323.80
			24-Jan-17	0.52	324.52
			17-May-17	0.51	324.54
			28-Aug-17	0.53	324.51
			27-Nov-17	0.90	324.14
			12-Feb-18	frozen	
			7-May-18	0.50	324.54
			20-Aug-18	1.27	323.77
			19-Nov-18	0.93	324.11

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP3-II (outside) <sup>1</sup>	325.04	324.04	3-Sep-03	dry	
			5-Sep-03	dry	
			15-Sep-03	dry	
			7-Oct-03	dry	
			12-Feb-04	frozen	
			19-Apr-04	0.51	324.54
			19-Aug-04	0.85	324.20
			15-Nov-04	dry	
			9-Feb-05	frozen	
			11-Apr-05	0.49	324.55
			25-Aug-05	dry	
			8-Nov-05	dry	
			16-Jan-06	frozen	
			11-Apr-06	0.49	324.55
			17-Aug-06	dry	
			27-Nov-06	0.60	324.44
			30-Jan-07	frozen	
			9-Apr-07	0.46	324.58
			16-Aug-07	dry	
			1-Nov-07	dry	
			6-Jan-08	0.80	324.25
			12-Apr-08	0.27	324.78
			20-Aug-08	0.73	324.31
			18-Nov-08	0.67	324.37
			9-Feb-09	frozen	
			5-Aug-09	0.67	324.37
			2-Dec-09	0.82	324.22
			2-Feb-10	covered under snow	
			30-Apr-10	0.37	324.67
			1-Sep-10	dry	
			29-Nov-10	dry	
			28-Feb-11	frozen	
24-May-11	0.44	324.60			
30-Aug-11	dry				
21-Nov-11	dry				
22-Feb-12	0.59	324.45			
4-May-12	0.66	324.38			
8-Aug-12	dry				
15-Nov-12	dry				
29-Jan-13	frozen				
1-May-13	0.51	324.53			
16-Aug-13	dry				
20-Nov-13	0.69	324.35			
19-Feb-14	frozen				
27-May-14	0.55	324.49			
21-Aug-14	0.53	324.51			
25-Nov-14	0.23	324.81			
26-Feb-15	frozen				
28-May-15	saturated				
19-Aug-15	dry				
30-Nov-15	dry				

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP3-II (outside) <sup>1</sup>	325.04	324.04	25-Feb-16	0.29	324.75
			28-Apr-16	0.55	324.49
			12-Sep-16	dry	
			21-Nov-16	dry	
			24-Jan-17	0.58	324.46
			17-May-17	0.59	324.45
			28-Aug-17	0.53	324.52
			27-Nov-17	dry	
			12-Feb-18	frozen	
			7-May-18	0.63	324.41
			20-Aug-18	dry	
			19-Nov-18	0.81	324.23

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP4	325.61	324.25	29-Jun-04	1.19	324.43
			19-Aug-04	1.24	324.38
			9-Dec-04	1.28	324.33
			9-Feb-05	0.89	324.72
			11-Apr-05	0.37	325.24
			25-Aug-05	1.29	324.32
			8-Nov-05	1.50	324.11
			16-Jan-06	0.99	324.62
			11-Apr-06	0.57	325.04
			17-Aug-06	1.34	324.27
			MP4R	325.63	324.25
14-Jun-10	2.39	323.24			
1-Sep-10	1.58	324.05			
29-Nov-10	1.60	324.04			
28-Feb-11	iced over				
24-May-11	underwater				
30-Aug-11	destroyed				
20-Nov-13	re-installed				
19-Feb-14	0.94	325.46			
27-May-14					
21-Aug-14	2.20	324.19			
25-Nov-14	1.90	324.49			
26-Feb-15	2.96	323.43			
28-May-15	1.95	324.45			
19-Aug-15					
30-Nov-15	2.36	324.03			
25-Feb-16	1.90	324.49			
28-Apr-16	inaccessible				
12-Sep-16	2.93	323.46			
21-Nov-16	2.55	323.84			
24-Jan-17	1.58	324.81			
17-May-17	1.42	324.97			
28-Aug-17	2.06	324.34			
27-Nov-17	2.27	324.12			
12-Feb-18	2.10	324.29			
7-May-18	1.49	324.90			
20-Aug-18	2.43	323.96			
19-Nov-18	2.28	324.11			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)		
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)					
MP4 (outside) <sup>1</sup>	325.61	324.25	29-Jun-04	0.75	324.86		
			19-Aug-04	1.11	324.50		
			9-Dec-04	1.28	324.33		
			9-Feb-05	frozen	-		
			11-Apr-05	0.26	325.35		
			25-Aug-05	dry	-		
			8-Nov-05	dry	-		
			16-Jan-06	frozen	-		
			11-Apr-06	0.44	325.17		
			17-Aug-06	dry			
			27-Nov-06	Note 3			
			325.63	324.25	14-Jun-10	1.06	324.57
					1-Sep-10	1.23	324.40
	29-Nov-10	1.23			324.40		
	28-Feb-11	iced over					
	24-May-11	underwater					
	30-Aug-11	destroyed					
	326.39	324.73			20-Nov-13	re-installed	
					19-Feb-14	snow	
					27-May-14	1.35	325.04
					21-Aug-14	saturated	
					25-Nov-14	saturated	
					26-Feb-15	1.46	324.93
					28-May-15	dry	
					19-Aug-15	dry	
					30-Nov-15	dry	
					25-Feb-16	dry	
	28-Apr-16	inaccessible					
	12-Sep-16	dry					
	21-Nov-16	dry					
24-Jan-17	1.48	324.91					
17-May-17	1.34	325.05					
28-Aug-17	dry						
27-Nov-17	dry						
12-Feb-18	1.46	324.93					
7-May-18	1.35	325.04					
20-Aug-18	dry						
19-Nov-18	dry						

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP5	325.72	324.10	29-Jun-04	1.53	324.19
			19-Aug-04	1.20	324.52
			9-Dec-04	1.28	324.44
			9-Feb-05	0.93	324.79
			11-Apr-05	0.36	325.36
			25-Aug-05	1.48	324.24
			8-Nov-05	1.73	323.99
			16-Jan-06	1.20	324.52
			11-Apr-06	0.72	325.00
			17-Aug-06	1.54	324.18
			27-Nov-06	0.97	324.75
			30-Jan-07	frozen	
			9-Apr-07	0.62	325.10
			16-Aug-07	1.71	324.01
			1-Nov-07	1.90	323.82
			6-Jan-08	1.45	324.27
			12-Apr-08	0.92	324.80
			20-Aug-08	1.12	324.60
			18-Nov-08	1.12	324.60
			9-Feb-09	frozen	
			5-Aug-09	1.04	324.68
2-Dec-09	1.33	324.39			
2-Feb-10	1.11	324.61			
30-Apr-10	DESTROYED				

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP5 (outside) <sup>1</sup>	325.72	324.10	29-Jun-04	0.85	324.88
			19-Aug-04	1.18	324.54
			9-Dec-04	1.24	324.48
			9-Feb-05	frozen	-
			11-Apr-05	0.36	325.36
			25-Aug-05	1.35	324.37
			8-Nov-05	dry	-
			16-Jan-06	frozen	-
			11-Apr-06	0.77	324.95
			17-Aug-06	dry	-
			27-Nov-06	0.84	324.88
			30-Jan-07	frozen	-
			9-Apr-07	frozen	-
			16-Aug-07	dry	-
			1-Nov-07	dry	-
			6-Jan-08	frozen	-
			12-Apr-08	0.60	325.12
			20-Aug-08	1.08	324.64
			18-Nov-08	1.11	324.61
			9-Feb-09	frozen	-
5-Aug-09	0.88	324.84			
2-Dec-09	1.25	324.47			
2-Feb-10	96.00	229.72			
30-Apr-10	DESTROYED	-			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP6	325.96	325.14	16-Jan-06	frozen	
			11-Apr-06	0.61	325.35
			17-Aug-06	0.83	325.13
			27-Nov-06	0.65	325.31
			30-Jan-07	frozen	
			9-Apr-07	0.53	325.43
			16-Aug-07	1.02	324.94
			1-Nov-07	1.25	324.71
			6-Jan-08	frozen	
			12-Apr-08	0.46	325.50
			20-Aug-08	0.68	325.28
			18-Nov-08	0.64	325.32
			9-Feb-09	0.55	325.41
			5-Aug-09	0.63	325.33
			2-Dec-09	0.74	325.22
			2-Feb-10	covered under snow	
			30-Apr-10	0.60	325.36
			1-Sep-10	0.72	325.24
			29-Nov-10	0.92	325.04
			28-Feb-11	0.70	325.26
			24-May-11	0.48	325.48
			30-Aug-11	0.87	325.09
			21-Nov-11	0.81	325.15
			22-Feb-12	0.64	325.32
			4-May-12	0.68	325.28
			8-Aug-12	1.24	324.72
			15-Nov-12	1.00	324.96
			29-Jan-13	0.74	325.22
			1-May-13	0.53	325.43
			16-Aug-13	0.71	325.25
			20-Nov-13	0.64	325.32
			19-Feb-14	covered under snow	
			27-May-14	0.53	325.43
			21-Aug-14	0.75	325.21
			25-Nov-14	0.65	325.31
			26-Feb-15	covered under snow	
			28-May-15	0.69	325.27
			19-Aug-15	0.74	325.22
			30-Nov-15	0.91	325.05
			25-Feb-16	0.64	325.32
28-Apr-16	0.52	325.44			
12-Sep-16	0.86	325.10			
21-Nov-16	1.07	324.89			
24-Jan-17	0.67	325.29			
17-May-17	0.47	325.49			
28-Aug-17	0.76	325.20			
27-Nov-17	0.81	325.15			
12-Feb-18	0.67	325.30			
7-May-18	0.48	325.48			
20-Aug-18	0.95	325.01			
19-Nov-18	0.95	325.01			



**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP6 (outside) <sup>1</sup>	325.96	325.14	16-Jan-06	frozen	
			11-Apr-06	0.69	325.27
			17-Aug-06	dry	
			27-Nov-06	0.71	325.25
			30-Jan-07	0.73	325.23
			9-Apr-07	0.67	325.29
			16-Aug-07	dry	
			1-Nov-07	dry	
			6-Jan-08	frozen	
			12-Apr-08	0.57	325.39
			20-Aug-08	0.77	325.20
			18-Nov-08	0.73	325.23
			9-Feb-09	0.67	325.29
			5-Aug-09	0.72	325.24
			2-Dec-09	saturated	
			2-Feb-10	covered under snow	
			30-Apr-10	0.70	325.26
			1-Sep-10	dry	
			29-Nov-10	0.81	325.15
			28-Feb-11	frozen	
			24-May-11	0.67	325.29
			30-Aug-11	dry	
			21-Nov-11	0.83	325.13
			22-Feb-12	0.73	325.23
			4-May-12	0.76	325.20
			8-Aug-12	dry	
			15-Nov-12	dry	
			29-Jan-13	frozen	
			1-May-13	0.71	325.25
			16-Aug-13	dry	
			20-Nov-13	dry	
			19-Feb-14	covered under snow	
			27-May-14	0.63	325.34
			21-Aug-14	saturated	
			25-Nov-14	0.72	325.24
			26-Feb-15	covered under snow	
28-May-15	saturated				
19-Aug-15	dry				
30-Nov-15	dry				
25-Feb-16	0.71	325.25			
28-Apr-16	0.66	325.30			
12-Sep-16	dry				
21-Nov-16	dry				
24-Jan-17	0.70	325.26			
17-May-17	0.66	325.31			
28-Aug-17	0.76	325.20			
27-Nov-17	dry				
12-Feb-18	dry				
7-May-18	0.64	325.32			
20-Aug-18	dry				
19-Nov-18	0.76	325.20			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP7	326.34	325.57	16-Jan-06	0.93	325.41
			11-Apr-06	0.65	325.69
			17-Aug-06	1.14	325.20
			27-Nov-06	0.77	325.57
			30-Jan-07	0.70	325.65
			9-Apr-07	0.54	325.80
			16-Aug-07	1.24	325.10
			1-Nov-07	1.51	324.83
			6-Jan-08	frozen	
			12-Apr-08	0.45	325.89
			20-Aug-08	0.86	325.49
			18-Nov-08	could not locate	
			9-Feb-09	0.62	325.72
			5-Aug-09	0.70	325.64
			2-Dec-09	0.82	325.52
			2-Feb-10	0.90	325.44
			30-Apr-10	0.67	325.67
			1-Sep-10	0.85	325.49
			29-Nov-10	1.25	325.09
			28-Feb-11	1.06	325.28
			24-May-11	0.45	325.89
			30-Aug-11	1.01	325.33
			21-Nov-11	1.10	325.24
			22-Feb-12	0.70	325.64
			4-May-12	0.86	325.48
			8-Aug-12	dry	
			15-Nov-12	1.24	325.10
			29-Jan-13	0.96	325.38
			1-May-13	0.68	325.66
			16-Aug-13	1.03	325.31
			20-Nov-13	0.86	325.48
			19-Feb-14	Covered under snow	
			27-May-14	0.72	325.62
			21-Aug-14	1.01	325.33
			25-Nov-14	0.73	325.61
			26-Feb-15	frozen	
			28-May-15	0.83	325.52
			19-Aug-15	0.83	325.51
			30-Nov-15	1.09	325.25
			25-Feb-16	0.77	325.57
28-Apr-16	0.55	325.79			
12-Sep-16	0.97	325.37			
21-Nov-16	obstruction at 1.07				
24-Jan-17	0.73	325.61			
17-May-17	0.42	325.92			
28-Aug-17	0.57	325.78			
27-Nov-17	0.67	325.67			
12-Feb-18	frozen				
7-May-18	0.49	325.85			
20-Aug-18	0.60	325.74			
19-Nov-18	0.71	325.63			

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
MP7 (outside) <sup>1</sup>	326.34	325.57	16-Jan-06	dry	
			11-Apr-06	0.74	325.60
			17-Aug-06	dry	
			27-Nov-06	0.78	325.56
			30-Jan-07	frozen	
			9-Apr-07	0.69	325.65
			16-Aug-07	dry	
			1-Nov-07	dry	
			6-Jan-08	frozen	
			12-Apr-08	0.60	325.74
			20-Aug-08	dry	
			18-Nov-08	could not locate	
			9-Feb-09	frozen	
			5-Aug-09	dry	
			2-Dec-09	dry	
			2-Feb-10	frozen	
			30-Apr-10	0.76	325.58
			1-Sep-10	dry	
			29-Nov-10	dry	
			28-Feb-11	0.49	325.85
			24-May-11	0.64	325.70
			30-Aug-11	dry	
			21-Nov-11	dry	
			22-Feb-12	0.72	325.62
			4-May-12	saturated	
			8-Aug-12	dry	
			15-Nov-12	dry	
			29-Jan-13	0.96	325.38
			1-May-13	0.70	325.64
			16-Aug-13	dry	
			20-Nov-13	dry	
			19-Feb-14	covered under snow	
			27-May-14	0.64	325.70
			21-Aug-14	dry	
			25-Nov-14	0.74	325.60
			26-Feb-15	frozen	
28-May-15	dry				
19-Aug-15	dry				
30-Nov-15	dry				
25-Feb-16	frozen				
28-Apr-16	0.62	325.72			
12-Sep-16	dry				
21-Nov-16	dry				
24-Jan-17	0.67	325.67			
17-May-17	0.57	325.77			
28-Aug-17	0.77	325.57			
27-Nov-17	dry				
12-Feb-18	frozen				
7-May-18	0.62	325.72			
20-Aug-18	dry				
19-Nov-18	frozen				

**Table A1. Summary of Groundwater Elevations**

**Project Name: St Marys Mast-Snyder Property**

**Project No.: 60568651-8**

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
SG1 (Mink Farm Pond)			6-May-04	0.39	
			19-Aug-04		
			9-Dec-04	0.21	
			9-Feb-05	frozen @ 0.22	
			11-Apr-05	0.25	
			25-Aug-05	Note 2	
SG2 (Middle Pond)			6-May-04	0.68	
			19-Aug-04		
			9-Dec-04	0.61	
			9-Feb-05	frozen @ 0.75	
			11-Apr-05	0.80	
			25-Aug-05	0.68	
			8-Nov-05	0.55	
			16-Jan-06	frozen	
			11-Apr-06	0.76	
			17-Aug-06	0.61	
			27-Nov-06	0.72	
			30-Jan-07	frozen	
			9-Apr-07	gate locked	
			16-Aug-07	0.62	
			1-Nov-07	0.45	
			6-Jan-08	frozen	
			12-Apr-08	0.87	
			20-Aug-08	0.81	
			18-Nov-08	0.80	
			9-Feb-09	0.92	
			5-Aug-09	0.82	
			2-Dec-09	0.77	
			2-Feb-10	0.80	
			30-Apr-10	1.03	
			1-Sep-10	0.79	
			29-Nov-10	0.68	
			28-Feb-11	iced over	
		24-May-11	0.99		
		30-Aug-11	0.77		
		21-Nov-11	0.80		
		22-Feb-12	inaccessible		
		4-May-12	0.58		
		8-Aug-12	0.28		
		15-Nov-12	0.30		
		29-Jan-13	0.98		
		1-May-13	0.97		
		16-Aug-13	destroyed		

### Table A1. Summary of Groundwater Elevations

Project Name: St Marys Mast-Snyder Property

Project No.: 60568651-8

Monitor No.	Elevation		Date	Depth to Water Below Top of Pipe/ Reading on SG (m)	Groundwater Elevation (m.a.s.l.)
	Top of Pipe (m.a.s.l.)	Ground (m.a.s.l.)			
SG3 (R.Reid House Pond)			6-May-04	0.42	
			19-Aug-04		
			9-Dec-04	0.35	
			9-Feb-05	frozen @ 0.36	
			11-Apr-05	0.47	
			25-Aug-05	0.18	
			8-Nov-05	0.16	
			16-Jan-06	frozen	
			11-Apr-06	0.25	
			17-Aug-06	0.14	
			27-Nov-06	0.25	
			30-Jan-07	frozen	
			9-Apr-07	missing	
			16-Aug-07	0.04	
			1-Nov-07	dry	
			6-Jan-08	frozen	
		12-Apr-08	0.22		
		20-Aug-08	0.80		
		18-Nov-08	unable to contact owner		

- Note:
1. Water level measured on the outside of the mini-piezometer.
  2. Property owner decline further participation in the monitoring of the staff gauge on his property.
  3. MP4 was out of the ground, track marks over MP location - MP4 possibly destroyed by a tractor
  4. Monitor 2-1 PVC cut by 3.175 cm to facilitate casing closure

# Appendix **B**

## Aquatic Field Notes

Fisheries Habitat Assessment

AECOM

Page 1 of 4

General Information

Study Area: MAST SNYDER Site ID: \_\_\_\_\_

Date: May 7, 2018 Start time: 09:30 End Time: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_ Field Crew: OB, MG  
Field Notes By: OB

Site Location

TRIB A

UTM Co-ordinates (continue on page 3 if necessary)

Easting: 561611 Northing: 4815039 Description: dis extent

Easting: 561730 Northing: 4814963 Description: side trib

Easting: \_\_\_\_\_ Northing: \_\_\_\_\_ Description: \_\_\_\_\_

Easting: \_\_\_\_\_ Northing: \_\_\_\_\_ Description: \_\_\_\_\_

Surrounding Landuse		Type of Watercourse	
Residential <input type="checkbox"/>	Meadow <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Channelized <input type="checkbox"/>
Agriculture <input checked="" type="checkbox"/>	Wetland <input type="checkbox"/>	Permanent <input type="checkbox"/>	Natural Channel <input type="checkbox"/>
Forest <input checked="" type="checkbox"/>	Livestock <input type="checkbox"/>	Ephemeral <input type="checkbox"/>	
Other <input type="checkbox"/>			
Description: _____		Description: _____	

Notes: (include any inputs into the system i.e. tile drainage, seepages, overland flow)

overland flow, drains from pond.

Is any portion of the water body underground or not as mapped? Y / N  
if Yes describe:

GPS Coordinate: Easting - \_\_\_\_\_ Northing - \_\_\_\_\_ Description - \_\_\_\_\_

Description of Land Topography Surrounding Water Body (rolling hills, sloping towards water body)

relatively flat

In-Situ Water Quality		Ground Water and Seepage Indicators	
WT (°C): <u>12.5</u>	AT (°C): _____	Watercress <input checked="" type="checkbox"/>	Bank Seepage <input type="checkbox"/>
pH: _____	Cond ( s/cm): _____	Iron Staining <input type="checkbox"/>	None <input type="checkbox"/>
D.O. (mg/L): _____		Bubbling <input type="checkbox"/>	<input type="checkbox"/>
Water Clarity: <u>Clear</u> <input checked="" type="checkbox"/> <u>Turbid</u> <input type="checkbox"/>		Other <input type="checkbox"/>	
Water Colour: _____		Details: _____	
Notes: _____			

### Fisheries Habitat Assessment

\*evidence  
trib floods  
into adjacent  
forest

Stream Morphology			
Site Length (m):		Bank Stability:	
Channel Dimensions		Stable	Slightly unstable
Mean Wetted Width (m):	2	Mean Wetted Depth (m):	0.5
Mean Bankfull Width (m):	>25*	Mean Bankfull Depth (m):	0.7
Mean Top of Bank Width (m):	-	Mean Top of Bank Depth (m):	-
		Left Bank	<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Slightly unstable <input type="checkbox"/> Moderately unstable <input type="checkbox"/> Unstable
		Right Bank	<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Slightly unstable <input type="checkbox"/> Moderately unstable <input type="checkbox"/> Unstable
Description:			
Flow Description: (high or low flow conditions, stagnant, etc)			
very low-flow; presence of duckweed indicates low flows are typical			
Substrate (<=>)		Habitat	
Bo - Boulder	Si > DT	Morphological Structure (%)	
Co - Cobble		Pool	Riffle
Gr - Gravel		Run	Flat
Sa - Sand		100	
Sl - Silt			
Cl - Clay			
MK - Muck			
DT - Detritus			
Instream Cover (%)		Notes:	
Other	Woody Debris	Boulders	Cobble
-	5	-	-
		Aquatic Vegetation*	None
		95	-
		Undercut Banks	
		Average Depth: _____	
		(% Cover) _____	
Note: Low = 0 - 30%; Moderate = 30 - 75%; High = 75 - 100%			
*Aquatic Vegetation Species Present (algae, submergent, emergent etc.)			
milfoil, grasses			
Canopy Cover (% closed cover):		Types of Cover (% cover)	
100-90%	<input type="checkbox"/>	30-1%	<input type="checkbox"/>
90-60%	<input checked="" type="checkbox"/>	0%	<input type="checkbox"/>
60-30%	<input type="checkbox"/>	Trees	30
		Shrubs	30
		Grasses	60
		Herbaceous	_____
		Man-made structures	_____
		Other	_____
Note: Low = 0 - 30%; Moderate = 30 - 60%; High = 60 - 100%			
Notes: (vegetation species, types of structures)			
ups of trib flows through grasses into woodlot w/ trees/shrubs; exits woodlot ~25m from pool to grasses/shrubs			
Width and Description of riparian vegetation:		Riparian Vegetation	
LB -		RB -	
Overhanging Vegetation Present Y / N		% Overhanging Vegetation:	
Description of Overhanging Vegetation:			
Obstructions to Fish Passage			
None Observed	<input checked="" type="checkbox"/>	Man-Made	<input type="checkbox"/>
		Natural	<input type="checkbox"/>
		Low Flow Barrier	<input type="checkbox"/>
Description of Barrier:			
Height of Barrier (m)		GPS Coordinates:	





# Fisheries Habitat Assessment

<b>AECOM</b>	<b>Page 4 of 4</b>																																																						
<b>Watercourse Sketch</b>																																																							
<b>Study Area:</b> _____	<b>Site ID</b> _____																																																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">LEGEND</th> </tr> </thead> <tbody> <tr> <td>10d depth (cm)</td> <td>→</td> </tr> <tr> <td>5w width</td> <td>→</td> </tr> <tr> <td>RUNs</td> <td>→</td> </tr> <tr> <td>Run/Glide</td> <td>→</td> </tr> <tr> <td>Pool</td> <td>○</td> </tr> <tr> <td>Island/Bar</td> <td>■</td> </tr> <tr> <td>Fine Substrate</td> <td>▨</td> </tr> <tr> <td>Gravel Substrate</td> <td>▩</td> </tr> <tr> <td>Cobble/Boulder</td> <td>○●○●○●</td> </tr> <tr> <td>Debris</td> <td>***</td> </tr> <tr> <td>Catfall</td> <td>CT</td> </tr> <tr> <td>Submerg/Flot Veg</td> <td>SV/FV</td> </tr> <tr> <td>Emergent Vegetation</td> <td>EV</td> </tr> <tr> <td>Waterweas</td> <td>W</td> </tr> <tr> <td>Iron Staining</td> <td>Fe</td> </tr> <tr> <td>Eroded Bank</td> <td>     </td> </tr> <tr> <td>Riprap / Other Stabilization</td> <td>     </td> </tr> <tr> <td>Instream Log/Tree</td> <td>—</td> </tr> <tr> <td>Dam/Weld Obstruction</td> <td>***</td> </tr> <tr> <td>Riparian Tree</td> <td>⊗</td> </tr> <tr> <td>Seep/Spring</td> <td>↳</td> </tr> <tr> <td>Undercut Bank</td> <td>—</td> </tr> <tr> <td>Barrier to Fish Movement</td> <td>—</td> </tr> <tr> <td>Seasonal Barrier</td> <td>→</td> </tr> <tr> <td>Fence line</td> <td>- - -</td> </tr> <tr> <td>Culvert</td> <td>—</td> </tr> </tbody> </table>		LEGEND		10d depth (cm)	→	5w width	→	RUNs	→	Run/Glide	→	Pool	○	Island/Bar	■	Fine Substrate	▨	Gravel Substrate	▩	Cobble/Boulder	○●○●○●	Debris	***	Catfall	CT	Submerg/Flot Veg	SV/FV	Emergent Vegetation	EV	Waterweas	W	Iron Staining	Fe	Eroded Bank		Riprap / Other Stabilization		Instream Log/Tree	—	Dam/Weld Obstruction	***	Riparian Tree	⊗	Seep/Spring	↳	Undercut Bank	—	Barrier to Fish Movement	—	Seasonal Barrier	→	Fence line	- - -	Culvert	—
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Culvert	—																																																						
<b>LAIRD RD</b>																																																							
<b>Horizontal View of Channel</b>																																																							

Fisheries Habitat Assessment

AECOM

Page 1 of 4

General Information

Study Area: Mast Snyder

Site ID: \_\_\_\_\_

Date: May 7

Start time: \_\_\_\_\_

End Time: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Field Crew: OB M &

Field Notes By: \_\_\_\_\_

Site Location

Pond.

UTM Co-ordinates (continue on page 3 if necessary)

Easting: \_\_\_\_\_ Northing: \_\_\_\_\_ Description: \_\_\_\_\_

Easting: \_\_\_\_\_ Northing: \_\_\_\_\_ Description: \_\_\_\_\_

Easting: \_\_\_\_\_ Northing: \_\_\_\_\_ Description: \_\_\_\_\_

Easting: \_\_\_\_\_ Northing: \_\_\_\_\_ Description: \_\_\_\_\_

Residential <input type="checkbox"/> Agriculture <input type="checkbox"/> Forest <input type="checkbox"/> Other <input type="checkbox"/>		Surrounding Landuse Meadow <input type="checkbox"/> Wetland <input type="checkbox"/> Livestock <input type="checkbox"/>	Type of Watercourse Intermittent <input type="checkbox"/> Permanent <input type="checkbox"/> Ephemeral <input type="checkbox"/>		Channelized <input type="checkbox"/> Natural Channel <input type="checkbox"/>
Description: _____			Description: _____		

Notes: (Include any inputs into the system i.e. tile drainage, seepages, overland flow)

tile drainage, overland flow

Is any portion of the water body underground or not as mapped? Y / N

If Yes describe: \_\_\_\_\_

GPS Coordinate: Easting - \_\_\_\_\_ Northing - \_\_\_\_\_ Description - \_\_\_\_\_

Description of Land Topography Surrounding Water Body (rolling hills, sloping towards water body)

Flat / agricultural

In-Situ Water Quality		Ground Water and Seepage Indicators	
WT (°C): _____	AT (°C): _____	Watercress <input type="checkbox"/>	Bank Seepage <input type="checkbox"/>
pH: _____	Cond ( s/cm): _____	Iron Staining <input type="checkbox"/>	None <input type="checkbox"/>
D.O. (mg/L) _____		Bubbling <input type="checkbox"/>	_____ <input type="checkbox"/>
Water Clarity: Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/>		Other <input type="checkbox"/>	
Water Colour: _____		Details: _____	
Notes: _____			

### Fisheries Habitat Assessment

Stream Morphology																		
Site Length (m): <i>depths not taken</i>		Bank Stability:																
Channel Dimensions		<table style="width: 100%; text-align: center;"> <tr> <td></td> <td>Stable</td> <td>Slightly unstable</td> <td>Moderately unstable</td> <td>Unstable</td> </tr> <tr> <td>Left Bank</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Right Bank</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>			Stable	Slightly unstable	Moderately unstable	Unstable	Left Bank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Right Bank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Stable	Slightly unstable	Moderately unstable	Unstable														
Left Bank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
Right Bank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
Mean Wetted Width (m): <i>30</i>	Mean Wetted Depth (m): <i>—</i>	Description:																
Mean Bankfull Width (m): <i>—</i>	Mean Bankfull Depth (m): <i>—</i>																	
Mean Top of Bank Width (m): <i>2</i>	Mean Top of Bank Depth (m): <i>—</i>																	
Flow Description: (high or low flow conditions, stagnant, etc)																		
Substrate (<=>)		Habitat																
Bo - Boulder Co - Cobble Gr - Gravel Sa - Sand Si - Silt Cl - Clay MK - Muck DT - Detritus	Description: <i>Si &gt; MK &gt; DT</i>	<table border="1" style="width: 100%; text-align: center;"> <tr> <th colspan="4">Morphological Structure (%)</th> </tr> <tr> <th>Pool</th> <th>Riffle</th> <th>Run</th> <th>Flat</th> </tr> <tr> <td><i>—</i></td> <td><i>—</i></td> <td><i>—</i></td> <td><i>—</i></td> </tr> </table>	Morphological Structure (%)				Pool	Riffle	Run	Flat	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	Notes: <i>pond</i>			
Morphological Structure (%)																		
Pool	Riffle	Run	Flat															
<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>															
Instream Cover (%)																		
Other	Woody Debris	Boulders	Cobble	Aquatic Vegetation*	None	Undercut Banks												
	<i>10</i>			<i>90</i>		Average Depth: (% Cover)												
Note: Low = 0 - 30%; Moderate = 30 - 75%; High = 75 - 100% *Aquatic Vegetation Species Present (algae, submergent, emergent etc.)																		
Canopy Cover (% closed cover):				Types of Cover (% cover)														
100-90%	<input type="checkbox"/>	30-1%	<input type="checkbox"/>	Trees	Shrubs	Man-made structures												
90-60%	<input type="checkbox"/>	0%	<input type="checkbox"/>	Grasses	Herbaceous	Other												
60-30%	<input type="checkbox"/>																	
Note: Low = 0 - 30%; Moderate = 30 - 60%; High = 60 - 100% Notes: (vegetation species, types of structures)																		
Riparian Vegetation																		
Width and Description of riparian vegetation: LB -		RB -																
Overhanging Vegetation Present Y / N				% Overhanging Vegetation:														
Description of Overhanging Vegetation:																		
Obstructions to Fish Passage																		
None Observed	<input type="checkbox"/>	Man-Made	<input type="checkbox"/>	Natural	<input type="checkbox"/>	Low Flow Barrier	<input type="checkbox"/>											
Description of Barrier:																		
Height of Barrier (m)			GPS Coordinates:															



# Fisheries Habitat Assessment

AECOM

Page 4 of 4

## Watercourse Sketch

Study Area: \_\_\_\_\_

Site ID: \_\_\_\_\_



LEGEND	
10d depth (cm)	
Bar width	
Riffle	→
Run/Glide	→
Pool	○
Island/Bar	■
Fine Substrate	○
Gravel Substrate	○○
Cobble/Boulder	○○○○
Debris	***
Cellar	CT
Submerg/Poel Veg	SV/PV
Emergent Vegetation	EV
Watercress	W
Iron Staining	Fe
Eroded Bank	
Riprap / Other Stabilization	
Instream Log/Tree	⊃
Dam/Weld Obstruction	***
Riparian Tree	⊙
Seep/Spring	⊢
Undercut Bank	—
Barrier to Fish Movement	—
Seasonal Barrier	-S-
Fence line	-#-
Culvert	⊥

Horizontal View of Channel

# Appendix **C**

## Plant Species List

## Appendix C. Mast-Snyder Plant Species List

BOTANICAL NAME	COMMON NAME	Isolated Wetland Edge	Isolated Wetland Interior	Tributary A Wetland	Hanlon Creek Swamp
<b>PTERIDOPHYTES</b>	<b>FERNS &amp; ALLIES</b>				
<b>Dryopteridaceae</b>	<b>Wood Fern Family</b>				
<i>Onoclea sensibilis</i>	Sensitive Fern			x	x
<b>Equisetaceae</b>	<b>Horsetail Family</b>				
<i>Equisetum arvense</i>	Field Horsetail	x	x	x	x
<i>Equisetum fluviatile</i>	Water Horsetail		x		
<b>Thelypteridaceae</b>	<b>Marsh Fern Family</b>				
<i>Thelypteris palustris</i> var. <i>pubescens</i>	Marsh Fern			x	
<b>GYMNOSPERMS</b>	<b>CONIFERS</b>				
<b>Cupressaceae</b>	<b>Cedar Family</b>				
<i>Thuja occidentalis</i>	Eastern White Cedar			x	x
<b>DICOTYLEDONS</b>	<b>DICOTS</b>				
<b>Aceraceae</b>	<b>Maple Family</b>				
<i>Acer X freemanii</i>	Freeman's Maple				
<b>Apiaceae</b>	<b>Carrot or Parsley Family</b>				
<i>Cicuta virosa</i>	Water-hemlock			x	
<i>Daucus carota</i>	Wild Carrot	x			x
<b>Asclepiadaceae</b>	<b>Milkweed Family</b>				
<i>Asclepias syriaca</i>	Common Milkweed	x			
<b>Asteraceae</b>	<b>Composite or Aster Family</b>				
<i>Ambrosia artemisiifolia</i>	Common Ragweed	x			
<i>Symphyotrichum lanceolatum</i>	Tall White Aster	x		x	x
<i>Symphyotrichum puniceum</i> var. <i>puniceum</i>	Purple-stemmed Aster			x	x
<i>Conyza canadensis</i>	Horseweed	x			
<i>Erigeron annuus</i>	Eastern Daisy Fleabane	x			
<i>Erigeron philadelphicus</i> ssp. <i>philadelphicus</i>	Philadelphia Fleabane				
<i>Eupatorium perfoliatum</i>	Boneset	x		x	x
<i>Eupatorium maculatum</i>	Spotted Joe-pye-weed			x	
<i>Euthamia graminifolia</i>	Flat-topped Bushy Goldenrod				x
<i>Solidago altissima</i>	Tall Goldenrod	x		x	x
<i>Solidago macrophylla</i>	Large-leaved Goldenrod				
<i>Solidago patula</i>	Rough-leaved Goldenrod				x
<i>Solidago rugosa</i> ssp. <i>rugosa</i>	Rough Goldenrod			x	x
<i>Sonchus arvensis</i> ssp. <i>arvensis</i>	Field Sow-thistle				
<i>Taraxacum officinale</i>	Common Dandelion				x
<b>Caprifoliaceae</b>	<b>Honeysuckle Family</b>				
<i>Sambucus nigra</i>	European Elderberry			x	
<b>Cornaceae</b>	<b>Dogwood Family</b>				
<i>Cornus amomum</i>	Silky Dogwood	x			
<i>Cornus racemosa</i>	Gray dogwood				
<i>Cornus sericea</i>	Red-osier Dogwood	x		x	
<b>Cucurbitaceae</b>	<b>Gourd Family</b>				
<i>Echinocystis lobata</i>	Prickly Cucumber	x			
<b>Fabaceae</b>	<b>Pea Family</b>				
<i>Lotus corniculatus</i>	Bird's-foot Trefoil				x
<i>Trifolium hybridum</i> ssp. <i>elegans</i>	Alsike Clover	x			x
<i>Vicia cracca</i>	Tufted Vetch	x			
<b>Grossulariaceae</b>	<b>Currant Family</b>				
<i>Ribes americanum</i>	Wild Black Currant			x	
<b>Lamiaceae</b>	<b>Mint Family</b>				
<i>Lycopus americanus</i>	Cut-leaved Water-horehound	x			
<i>Mentha arvensis</i>	American Wild Mint			x	x
<b>Lythraceae</b>	<b>Loosestrife Family</b>				
<i>Lythrum salicaria</i>	Purple Loosestrife	x			
<b>Onagraceae</b>	<b>Evening-primrose Family</b>				
<i>Epilobium ciliatum</i> ssp. <i>glandulosum</i>	Northern Willow-herb	x			
<i>Epilobium hirsutum</i>	Great Hairy Willow-herb	x			
<i>Epilobium parviflorum</i>	Sparse-flowered Willow-herb	x			
<b>Polygonaceae</b>	<b>Smartweed Family</b>				
<i>Polygonum persicaria</i>	Lady's-thumb	x			



## Appendix C. Mast-Snyder Plant Species List

BOTANICAL NAME	COMMON NAME	Isolated Wetland Edge	Isolated Wetland Interior	Tributary A Wetland	Hanlon Creek Swamp
<b>Primulaceae</b>	<b>Primrose Family</b>				
<i>Lysimachia thyrsoiflora</i>	Tufted Loosestrife		x		
<b>Ranunculaceae</b>	<b>Buttercup Family</b>				
<i>Ranunculus acris</i>	Tall Buttercup	x			
<i>Ranunculus pensylvanicus</i>	Bristly Buttercup	x			
<b>Rhamnaceae</b>	<b>Buckthorn Family</b>				
<i>Rhamnus cathartica</i>	Common Buckthorn	x		x	x
<i>Frangula alnus</i>	Glossy Buckthorn				x
<b>Rosaceae</b>	<b>Rose Family</b>				
<i>Potentilla norvegica</i> ssp. <i>monspeliensis</i>	Rough Cinquefoil	x			
<i>Rubus idaeus</i>	Red Raspberry			x	
<b>Rubiaceae</b>	<b>Madder Family</b>				
<i>Galium palustre</i>	Marsh Bedstraw			x	x
<b>Salicaceae</b>	<b>Willow Family</b>				
<i>Salix alba</i>	White Willow	x			
<i>Salix amygdaloides</i>	Peach-leaved Willow	x			
<i>Salix bebbiana</i>	Long-beaked Willow				
<i>Salix discolor</i>	Pussy Willow				
<i>Salix eriocephala</i>	Missouri Willow	x		x	
<i>Salix exigua</i>	Sandbar Willow	x			
<i>Salix purpurea</i>	Basket Willow				x
<b>Solanaceae</b>	<b>Nightshade Family</b>				
<i>Solanum dulcamara</i>	Bitter Nightshade	x		x	
<b>Ulmaceae</b>	<b>Elm Family</b>				
<i>Ulmus americana</i>	White Elm				x
<b>Verbenaceae</b>	<b>Vervain Family</b>				
<i>Verbena hastata</i>	Blue Vervain	x			
<b>Vitaceae</b>	<b>Grape Family</b>				
<i>Parthenocissus inserta</i>	Inserted Virginia-creeper	x			
<i>Vitis riparia</i>	Riverbank Grape	x		x	
<b>MONOCOTYLEDONS</b>	<b>MONOCOTS</b>				
<b>Alismataceae</b>	<b>Water-plantain Family</b>				
<i>Alisma plantago-aquatica</i>	Common Water-plantain	x			
<b>Cyperaceae</b>	<b>Sedge Family</b>				
<i>Carex bebbii</i>	Bebb's Sedge				x
<i>Carex hystericina</i>	Porcupine Sedge				x
<i>Carex stipata</i>	Awl-fruited Sedge	x			
<i>Carex utriculata</i>	Beaked Sedge		x		
<i>Carex vulpinoidea</i>	Fox Sedge	x			x
<i>Scirpus atrovirens</i>	Dark-green Bulrush	x			x
<b>Juncaceae</b>	<b>Rush Family</b>				
<i>Juncus articulatus</i>	Jointed Rush				x
<i>Juncus bufonius</i>	Toad Rush	x			
<i>Juncus tenuis</i>	Path Rush	x			x
<b>Poaceae</b>	<b>Grass Family</b>				
<i>Festuca</i> sp.	Fescus species				x
<i>Phalaris arundinacea</i>	Reed Canary Grass	x	x	x	x
<i>Phleum pratense</i>	Timothy				x
<i>Phragmites australis</i>	Common Reed				x
<i>Poa palustris</i>	Fowl Meadow Grass			x	
<i>Poa pratensis</i> ssp. <i>pratensis</i>	Kentucky Bluegrass			x	x
<b>Typhaceae</b>	<b>Cattail Family</b>				
<i>Typha angustifolia</i>	Narrow-leaved Cattail				x
<i>Typha latifolia</i>	Broad-leaved Cattail	x	x		
<i>Typha X glauca</i>	Glaucous Cattail			x	x

### FLORISTIC SUMMARY & ASSESSMENT

#### Species Diversity

Total Species:	72
Native Species:	56
Exotic Species:	16

**EXPLANATION OF TERMINOLOGY** (See the following pages for addition detailed information on terms.)

**Botanical and Common Name:** From Newmaster et. al, 1998. Species requiring confirmation noted (cf).

**Co-efficient of Conservatism:** This value, ranging from 0 (low) to 10 (high), is based on a species tolerance of disturbance and fidelity to a specific

**Wetness Index:** This value, ranging from -5 (obligate wetland) to 5 (upland) provides the probability of a species occurring in wetland or upland

**Weediness Index:** This value, ranging from -1 (low) to -3 (high) quantifies the potential invasiveness of non-native plants. In combination with the percentage of non-native plants, it can be used as an indicator of disturbance.

**Provincial Status:** Provincial ranks are used by the NHIC to set protection priorities for rare species and natural communities. These ranks are not legal designations. S4 and S5 species are generally uncommon to common in the province. Species ranked S1-S3 are considered to be rare in

**Local Status:**

**X:** native species present (collection-based) and all exotic species

**R:** native species locally rare (number of stations): Durham (<10 stations), GTA (<40 stations), Site District 6E7 (<20 stations)

**U:** native species locally uncommon Durham (11-20 stations), GTA (41-80 stations), Site District 6E7 (21-40 stations)

Note: study area in Site District 6E13

**Record Type**

SR - sight record

SRP - sight record with photograph

KRAUS-00-001 - collection by D.T. Kraus for deposition into OAC (University of Guelph) herbarium

**Annotations:** Provides comments on general distribution and abundance on the subject lands. Definitions of terminology and abbreviations used as

**Abundance**

**Dominant:** A plant with the greatest cover and/or biomass within a plant community and represented throughout the community by large numbers of individuals. Visually more abundant than other species in the same stratum and forming >10% ground cover, and >35% of the vegetation cover in any

**Abundant:** Referring to a plant which is represented throughout the polygon or community by large numbers of individuals or clumps. Likely to be encountered anywhere in the polygon. Usually forming >10% ground cover.

**Occasional:** Referring to plants which are present as scattered individuals throughout a community, or represented by one or more large clumps of many individuals. Most species will fall into this category.

**Rare:** Cover or abundance of a plant species that is represented in the area of interest by only one to a few individuals.

**DETAILED EXPLANATION OF TERMS**

**Floral Quality Index and Coefficient of Conservatism Values**

Vegetation species and community sensitivity was assessed through the application of coefficient of conservatism values (CC), assigned to each native species in southern Ontario (Oldham, et. al, 1995). The value of CC, ranging from 0 (low) to 10 (high), is based on a species tolerance of disturbance and fidelity to specific habitat integrity. The occurrence of species with a CC of 9 or 10 can be good indicators of undisturbed conditions

General habitat values associated with the CC values are:

0-3: species found in a wide variety of communities, including disturbed sites

4-6: species associated with a specific community, but tolerate moderate disturbance

7-8: species associated with a community in an advanced successional stage, tolerant of minor disturbances

9-10: species with a high degree of fidelity to a narrow range of synecological parameters

The floristic quality of an area is reflected in the mean value of CC. For example, an old field or grazed woodlot would tend have a low mean CC; these habitats are dominated by opportunistic species that occur in a wide range of site conditions and are tolerant of disturbance. A bog, prairie or intact forest would have a higher value, reflecting the specific habitat requirements of many of the species and a generally undisturbed condition. The

*mean CC value / % spp CC >8 / Condition of the Landscape*

5 / 27 / intact

3.5 / 19 / slightly degraded

1.3 / 2 / severely degraded

The FQI accounts for the species diversity of the area by equating the number of native species with the mean CC value. The FQI is generally used for comparing natural areas. The CC value and FQI of the study area were calculated for the entire study area.

**Weediness Index**

The sensitivity of natural areas can be assessed through application of the Weediness Index. The Weediness Index quantifies the potential invasiveness of non-native plants, and, in combination with the percentage of non-native plants can be used as an indicator of disturbance. Values (ranging from 1- to -3) have been assigned to most non-native species based on the potential impact each species can have in natural areas:

-1: little or no impact on natural areas (most non-native plants are in this category)

-2: occasional impacts on natural areas, generally infrequent or localized

-3: major potential impacts on natural areas

**Wetness Index**

All plants in southern Ontario have been assigned a wetland category, based on the designations developed for use by the United States Fish & Wildlife Service. Plants are designated into the following categories:

**OBL** (Obligate Wetland): occurs almost always in wetlands under natural conditions (estimated >99% probability)

**FACW** (Facultative Wetland): usually occurs in wetlands, but occasionally found in non-wetlands (estimated 67-99% probability)

**FAC** (Facultative): equally likely to occur in wetlands or non-wetlands (estimated 34-66% probability)

**FACU** (Facultative Upland): occasionally occurs in wetlands, but usually occurs in non-wetlands (estimated 1-33% probability)

**UPL** (Upland): occurs almost never in wetlands under natural conditions (estimated <1% probability)

Further refinement of the Facultative categories are denoted by a "+" or "-" to express exaggerated tendencies for those species. The "+" denotes a greater estimated probability occurring in wetlands than species in the general indicator category, but a lesser probability than species occurring in the next higher category. The "-" denotes a lesser estimated probability of occurring in wetlands than species in the general indicator category, but a

Each wetland category has been assigned a numerical value to facilitate the quantification of the wetness index. The wetland categories and their

OBL : -5  
FACW+ : -4  
FACW : -3  
FACW- : -2  
FAC+ : -1  
FAC : 0  
FAC- : 1  
FACU+ : 2  
FACU : 3  
FACU- : 4  
UPL : 5

### Provincial Status

Provincial ranks are used by the NHIC to set protection priorities for rare species and natural communities. These rankings are based on the total number of extant Ontario populations and the degree to which they are potentially or actively threatened with destruction. The ranks are:

**S1: Critically Imperiled**—Critically imperiled in the nation or state/province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province

**S2: Imperiled**—Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province

**S3: Vulnerable**—Vulnerable in the nation or state/province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation

**S4: Apparently Secure**—Uncommon but not rare; some cause for long-term concern due to declines or other factors.

**S5: Secure**—Common, widespread, and abundant in the nation or state/province

**SH: Possibly Extirpated (Historical)**—Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years. A species or community could become NH or SH without such a 20-40 year delay if the only known occurrences in a nation or state/province were destroyed or if it had been extensively and unsuccessfully looked for. The NH or SH rank is reserved for species or communities for which some effort has been made to relocate occurrences, rather than simply using this status for all elements not known from verified extant occurrences

**SNR Unranked**—Nation or state/province conservation status not yet assessed

**SX: Presumed Extirpated**—Species or community is believed to be extirpated from the nation or state/province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered

**SNA Not Applicable**—A conservation status rank is not applicable because the species is not a suitable target for conservation activities.

**SU: Unrankable**—Currently unrankable due to lack of information or due to substantially conflicting information about status or trends

Rank ranges, e.g. S2S3, indicate that the rank is either S2 or S3, but that current information is insufficient to differentiate.

**S#S# Range Rank**—A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community.

Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).

### REFERENCES

#### Nomenclature based on:

Newmaster, S.G., A. Lehela, P.W.C Uhlig, S. McMurray and M.J. Oldham. 1998. Ontario plant list. Ontario Ministry of Natural Resources, Ontario Forest Research Institute, Sault Ste. Marie, ON, Forest Research Information Paper No. 123. 550 pp. + appendices.

#### Co-efficient of Conservatism, Wetness & Weediness

Oldham, M.J., W.D. Bakowsky and D.A. Sutherland. 1995. Floristic quality assessment for southern Ontario. OMNR, Natural Heritage Information

#### Provincial (Ontario) Status:

Natural Heritage Information Centre (NHIC). 2000. Provincial status of plants, wildlife and vegetation communities database.

<http://www.mnr.gov.on.ca/MNR/nhic/nhic.html>. OMNR, Peterborough.

#### Local Status:

Varga, S., editor. August 2000. Distribution and status of the vascular plants of the Greater Toronto Area. Ontario Ministry of Natural Resources,

# Appendix **D**

## Site Photographs



**Photograph 1. North end of transect TR 1 at Isolated Wetland. Note the dominance of forbs at the wetland edge (July 12, 2018) ↑**



**Photograph 2. South end of transect TR 1 at Isolated Wetland (July 12, 2018) ↑**



**Photograph 3. Willow grove at the east end of Isolated Wetland. Reed canary grass dominates in east portion (July 12, 2018) ↑**



**Photograph 4. Willow thicket at the west end of Isolated Wetland. Broad-leaved cattail dominates in west portion (July 12, 2018) ↑**



**Photograph 5. Area of transect TR 2 along Tributary A (July 12, 2018) ↑**



**Photograph 6. Co-dominance of reed canary grass and bittersweet nightshade (July 12, 2018) ↑**



**Photograph 7. Facing east across Pond A (July 12, 2018) ↑**



**Photograph 8. Abundant stonewort in west portion of Pond A (July 12, 2018) ↑**





**Photograph 9. Soil profile along TR 2 (Tributary A). Note deep organic soil over clayey silt (July 12, 2018) ↑**



**Photograph 10. East end of transect TR 3 showing quadrant (July 12, 2018) ↑**



**Photograph 11. West end of transect TR 3 showing abundant articulated rush (July 12, 2018) ↑**



**Photograph 12. Soil profile along TR 3. Note clay loam with mottles over sandy silt layer (July 12, 2018) ↑**



**Photograph 13. Overview of North Bank at Pond A (May 7, 2018) ↑**



**Photograph 14. Overview of South Bank at Pond A (May 7, 2018) ↑**



**Photograph 15. Overview of East Bank at Pond A (May 7, 2018) ↑**



**Photograph 16. Minnow traps on North-east bank at Pond A (May 7, 2018) ↑**



**Photograph 17. Brook Stickleback (*Culaea inconstans*) captured within minnow traps at Pond A (May 7, 2018) ↑**



**Photograph 18. Overview of pond and drainage to surrounding grasses at downstream extent of Tributary A (May 7, 2018) ↑**



**Photograph 19. Drainage from grasses to surrounding forested area within Tributary A (May 7, 2018) ↑**



**Photograph 20. Drainage through grasses at Tributary A (May 7, 2018) ↑**



**Photograph 21. Overview of forested area with overflow approximately 25m from Laird Road (May 7, 2018) ↑**



**Photograph 22. Duckweed within Tributary A (May 7, 2018) ↑**



**Photograph 23. Watercress within Tributary A (May 7, 2018) ↑**







Groundwater Studies  
Geochemistry  
Phase I / II  
Regional Flow Studies  
Contaminant Investigations  
OMB Hearings  
Water Quality Sampling  
Monitoring  
Groundwater Protection  
Studies  
Groundwater Modelling  
Groundwater Mapping

File: 0402

October 4, 2019

Township of Puslinch  
7404 Wellington Road 34  
Guelph, ON, N1H 6H9

Attention: CAO/Clerk

Dear Sir or Madam:

**Re: Hydrogeological Review – Mast-Snyder Pit 2018 Monitoring Report**

We have reviewed the Groundwater Monitoring Report prepared by AECOM Canada Ltd. in May 2019. The report summarizes groundwater measurements obtained on-site since 1998. Active above water table extraction commenced in November 2018. Below-water-table extraction is scheduled to commence in 2019 (a review of June 6, 2019 Google Earth image confirms that this has occurred).

The 2018 monitoring report is a good background document that confirms that all elements of the monitoring plan have been incorporated and provides background data against which future potential impacts can be measured.

In terms of groundwater elevations, the data, extending from 1998 to 2018 shows that groundwater elevations have seasonal fluctuation but do not show any significant trend to decreasing or increasing water levels over the 20-year period. The report includes groundwater temperatures and a groundwater monitoring pair designed to confirm groundwater discharge to the on-site tributary.

We are thus satisfied with the report and conclude that there has been no change to the groundwater system from aggregate extractive activities at the site to-date.



Sincerely,

Harden Environmental Services Ltd.

Stan Denhoed, M.Sc., P.Eng.  
Senior Hydrogeologist



File:2402  
By: email

October 10, 2019

Township of Puslinch  
7404 Wellington Road 34  
Guelph, ON  
N0B 2J0

Attention: Ms. Lynne Banks  
Development and Legislative Coordinator

Dear: Ms.Banks

**Re: Mast-Snyder Pit 2018 Monitoring Report-Natural Environment Review**

As requested, I have reviewed the Natural Environment component of the 2018 Monitoring Report for the Mast-Snyder Pit prepared by AECOM Canada Ltd. for Votorantim Cimentos/CBM Aggregates Ltd. This monitoring report provides a good update on baseline natural environment conditions on the subject properties prior to the commencement of aggregate extraction. It was particularly focused on vegetation cover in sensitive wetlands, amphibian breeding activity and fish utilization of waterbodies. Data previously recorded on these natural features goes back to 2006 so an update was certainly warranted. The monitoring report confirms that all elements of the monitoring plan have been incorporated and provides good background data against which future potential impacts can be assessed. Above-water extraction activities commenced in November 2018 and below-water extraction is expected to begin in 2019.

The report adequately documents existing conditions on the site and the monitoring protocols to be employed in future years. Please feel free to contact me if you require further clarification on this matter.

Yours truly,  
**GWS Ecological & Forestry Services Inc.**

Greg W. Scheifele, M. A., R.P.F.  
**Principal Ecologist/Forester**



# CAPITAL PAVING INC.

**Quality Construction by Quality People**  
P.O. Box 815 Guelph, Ontario N1H 6L8

March 26, 2019

Ontario Ministry of Natural Resources and Forestry  
Guelph District  
1 Stone Rd. West  
Guelph ON N1H 4Y2

**Attention: Ms. Seanna Richardson**

**RE: 2018 Groundwater Monitoring Report  
Capital Paving Inc., Wellington Pit, Licence No. 20085  
Part Lots 7 and 8, Concession 3, Township of Puslinch**

Dear Ms. Richardson,

Please find enclosed with this letter, as per Site Plan requirements, a copy of the 2018 Groundwater Monitoring Annual Report for Capital Paving's Wellington Pit, prepared by Groundwater Science Corp.

A copy has also been submitted to the Township of Puslinch and the Ministry of Environment, Conservation and Parks.

Should you have any questions, please do not hesitate to contact me at (519) 822-4511 or [glourenco@capitalpaving.on.ca](mailto:glourenco@capitalpaving.on.ca)

Sincerely,

**George Lourenco, P.Eng  
Resources Manager**

**C.C. Karen Landry, Township of Puslinch**

(enclosures)





March 26, 2019

George Lourenco  
Resource Manager,  
Capital Paving Inc.  
P.O. Box 815  
Guelph, ON  
N1H 6L8

Dear Mr. Lourenco:

**RE: 2018 Groundwater Monitoring Summary,  
Wellington Pit, Licence No. 20085  
Part Lots 7 and 8, Concession 3, Township of Puslinch**

This letter is a summary of the results of the 2018 groundwater monitoring program completed for the above reference property. The site location is shown on **Figure 1** (attached).

### **1.0 Monitoring Program Requirements**

The Licence conditions as listed on the Site Plan are summarized as follows:

- *Quarterly (seasonal) groundwater level measurements at locations BH204, BH205, BH213, BH214, BH219, A3, A4, A5, A8, A10, and TP319 for the life of the pit;*
- *Annual reporting of the monitoring data. The report shall include a review of the monitoring program and recommendations regarding future monitoring frequency. It will also include a determination of the "normal" seasonal groundwater table variations that will trigger mitigation measures;*
- *Should groundwater levels at any time be measured above or below the "normal" seasonal groundwater table variations, all below groundwater table extraction will cease immediately and the operator will inform the Ministry of Natural Resources (MNR), Ministry of the Environment (MOE) and the Township of Puslinch.*

### **2.0 Monitoring Completed**

Water level monitoring at the site during the period 1997 to 2010 was completed by Stantec Consulting Ltd. Annual reporting was prepared by Stantec during years of site operation up until 2010 summarizing operational activities and monitoring results. Please refer to those previous reports for specific information. Based on recommendations made by Stantec in the March 30, 2010 report, monitoring was discontinued at that time. The historical data (April 1997 to January 2010) available for the site is incorporated into this (2018) report.

Groundwater Science Corp. was retained in November 2012 to reinstate the monitoring program. As part of that work the monitors were located, or reinstalled, and ongoing measurements obtained. Annual monitoring reports have been provided previously for the years 2012 to 2017.

The monitoring locations are shown on **Figure 1**. Monitor installation details are shown in **Table 1**.

Monitor	Elevations (mAMSL)			
	Ground	Top of Well	Top of Screen	Bottom of Well
BH204	318.71	319.63	305.51	304.01
BH205	315.52	316.57	301.12	299.62
BH213	324.79	325.56	304.69	303.19
BH214	324.30	325.17	316.00	314.50
BH219	330.21	331.21	315.21	313.71
TP319	319.0*	319.9*	317.9*	316.4*
A3	315.6*	316.4*	314.5*	314.2*
A4	316.7*	317.6*	315.6*	315.3*
A5	313.9*	314.8*	312.9*	312.6*
A8	317.0*	317.9*	316.6*	316.3*
A10	315.4*	316.3*	313.7*	313.4*

mAMSL = metres above mean sea level  
 monitor elevations as per Stantec Consulting Ltd. report March 30, 2010  
 A3 and A5 elevations revised as per installation notes January 29, 2013  
 \* elevations estimated from Site Plan topographic mapping

**Table 1: Monitor Installation Details**

Summaries of the water level data available for the site are attached to this letter report, in both tabular and hydrograph formats.

### 3.0 Discussion of Monitoring Results

For comparison to the hydrographs, a plot of the monthly precipitation and current 30-year monthly precipitation normal (1981-2010) reported by Environment Canada for the weather station location closest to the site (at the Region of Waterloo International Airport) for the years 2001 to 2018 is attached to this report. The data is provided by Golder Associates as part of a coordinated approach to monthly and annual precipitation analysis for the Township of Puslinch, and to our knowledge as of the date of this report, is consistent with other annual monitoring assessments for the area (e.g. Nestlé Waters Canada).

The graph indicates seasonal and annual variation, and a comparison to “average” values as represented by the Environment Canada reported 30-year Climate Normal. As indicated, on an annual basis the reported total precipitation in 2018 of 807.1 mm was below “average” (916.5 mm). Relatively “dry” conditions occurred in “winter” 2017/2018, “normal” conditions occurred during “spring” and “summer”, and relatively “dry” conditions occurred again later in “fall” 2018.

The water level data gathered to date indicates that groundwater elevations during extraction periods at the site have been maintained within in similar range under varying climate conditions since prior to extraction (1997). As shown on the hydrographs, water levels in 2018 also remain within the historical range of water levels observed. The relatively “dry” precipitation conditions in 2018 are reflected at drive-point piezometer A5. However given fact that water levels at the adjacent monitoring well BH219 remain within the historical range, this indicates that lower water levels at A5 are a result of reduced surface water (precipitation and runoff) inputs to the wetland (i.e. not related to groundwater conditions between the pit operations and the wetland). The overall annual pattern of groundwater level variation in 2018 is consistent with precipitation patterns.

There are no evident long-term trends that indicate significant or measurable groundwater level impacts (e.g. declines). Therefore both historical and current water level elevations are interpreted to be within the range of “natural” seasonal conditions for the site and immediate area. This is consistent with monitoring results at other nearby sites over the same period.

Theoretically the reduction in runoff associated with the extraction to date has likely led to additional recharge as compared to the original site condition. This effect would tend to slightly increase local seasonal water table fluctuation and average annual groundwater levels. As illustrated by the hydrographs however, it is likely that the on-going seasonal and annual variation in recharge has a larger influence on local water table elevations, and masks any potential small-scale effect related to the extraction.

The maximum and minimum elevations measured in the period 1997 to 2018 are shown on the data tables and likely represents the “natural” range in fluctuation at the site. No mitigation measures response is recommended as a result of the monitoring data.

#### 4.0 Recommendations

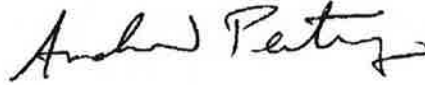
The monitoring program as listed on the Site Plan should continue in 2019.

If you have any questions or require further assistance please do not hesitate to contact us.

Sincerely,



Dave Nahrgang, P.Geol.  
Project Hydrogeologist.

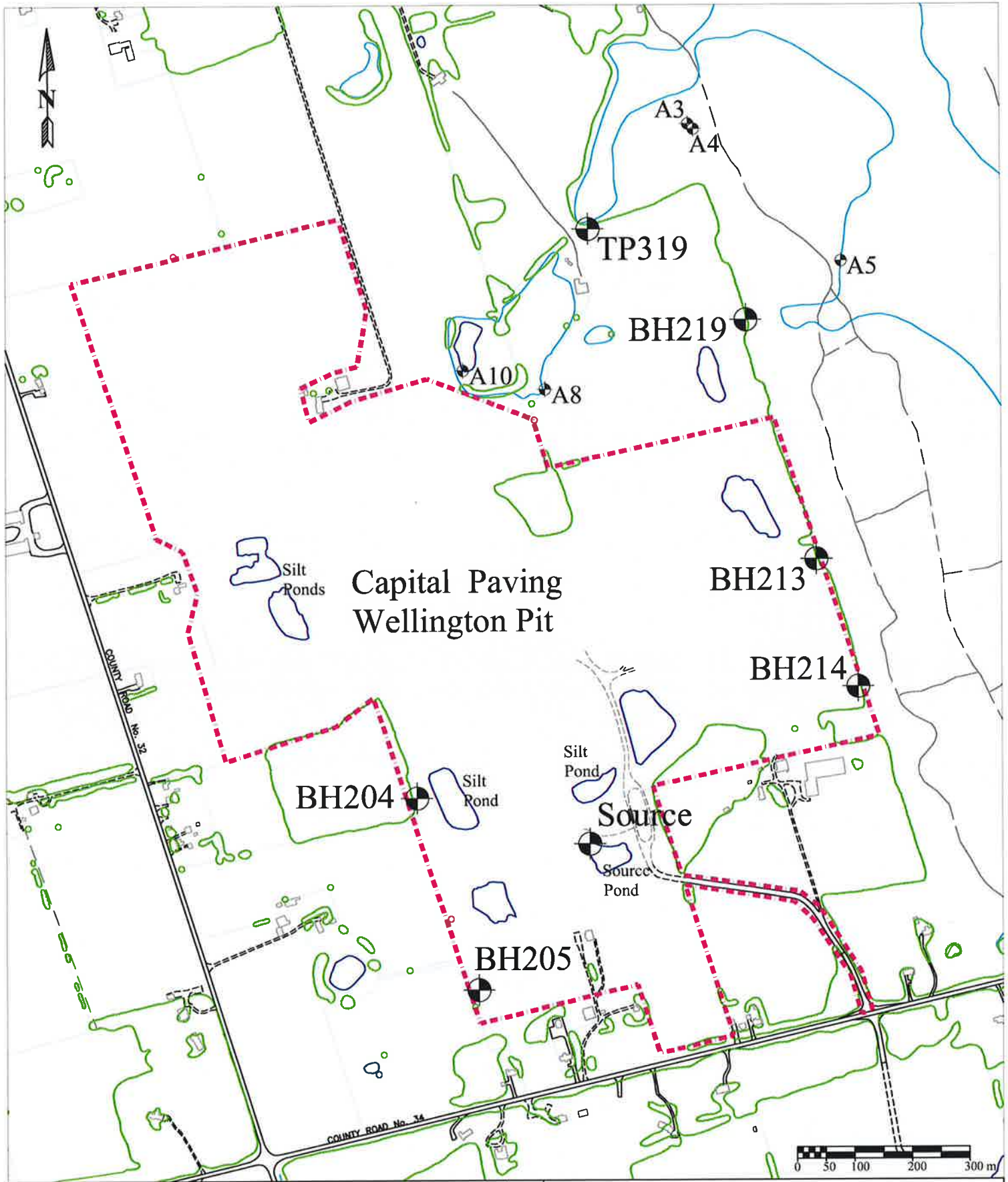


Andrew Pentney, P.Geol.  
Senior Hydrogeologist



Attached:      Figure 1 Monitoring Locations  
                    Water Level Monitoring Data Summary Table  
                    Hydrograph – Monitoring Well Water Level Data  
                    Hydrograph – Drive-Point Piezometer Water Level Data  
                    Puslinch Area Precipitation Summary





● monitoring location  
 - - - Licenced boundary (approx.)  
 — surface water (pond, creek)  
 — mapped wetlands

scale : as shown  
 March 2017

modified from: 1:10,000 OBM Mapping  
 UNDER LICENSE, WITHOUT PREJUDICE OR  
 ENDORSEMENT FROM THE QUEEN'S PRINTER OF ONTARIO

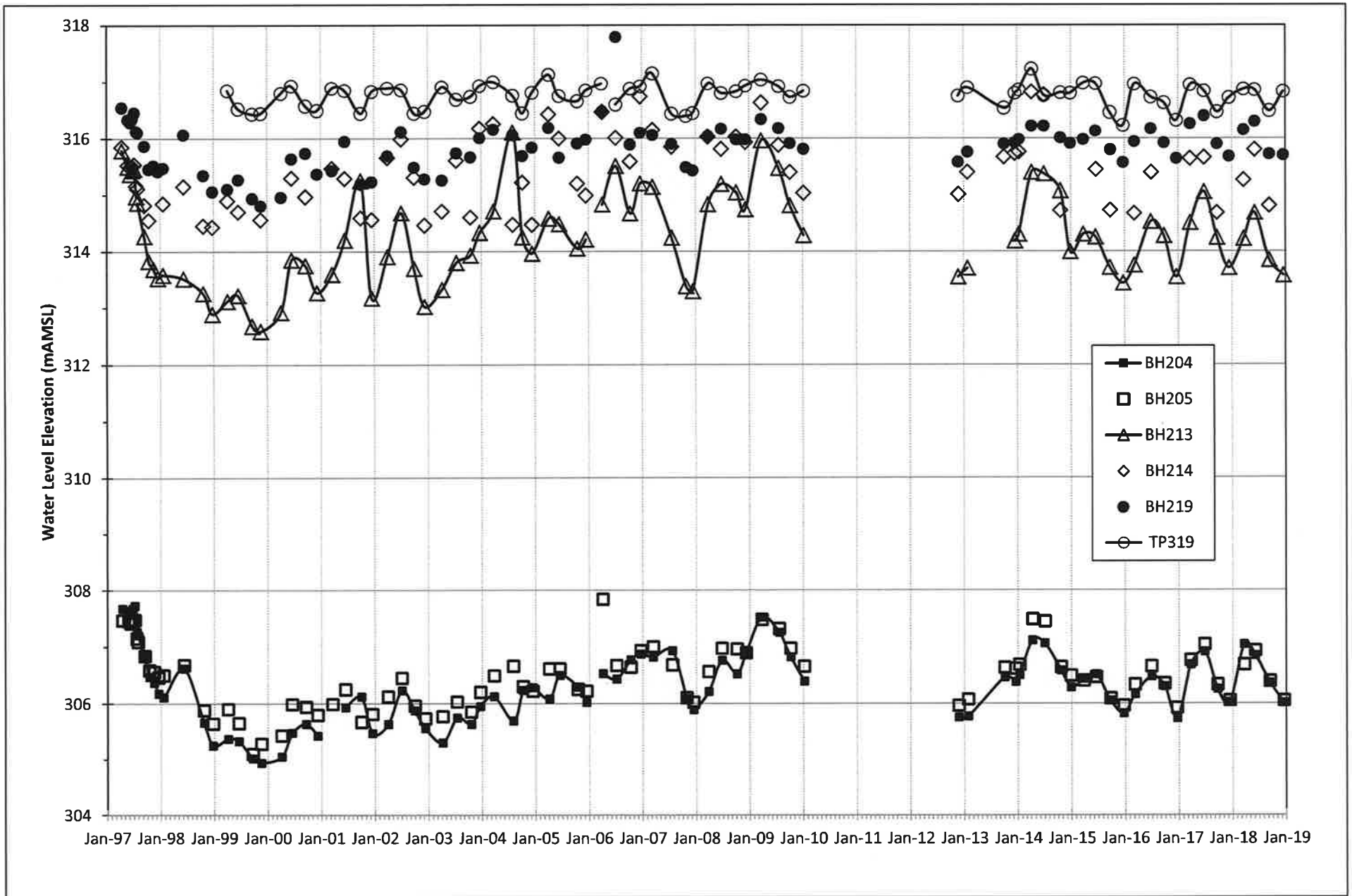
**Figure 1: Monitoring Locations**  
 Annual Monitoring Report  
 Capital Paving Inc. Wellington Pit  
 Lot 7, Con. 3, Township of Puslinch, County of Wellington

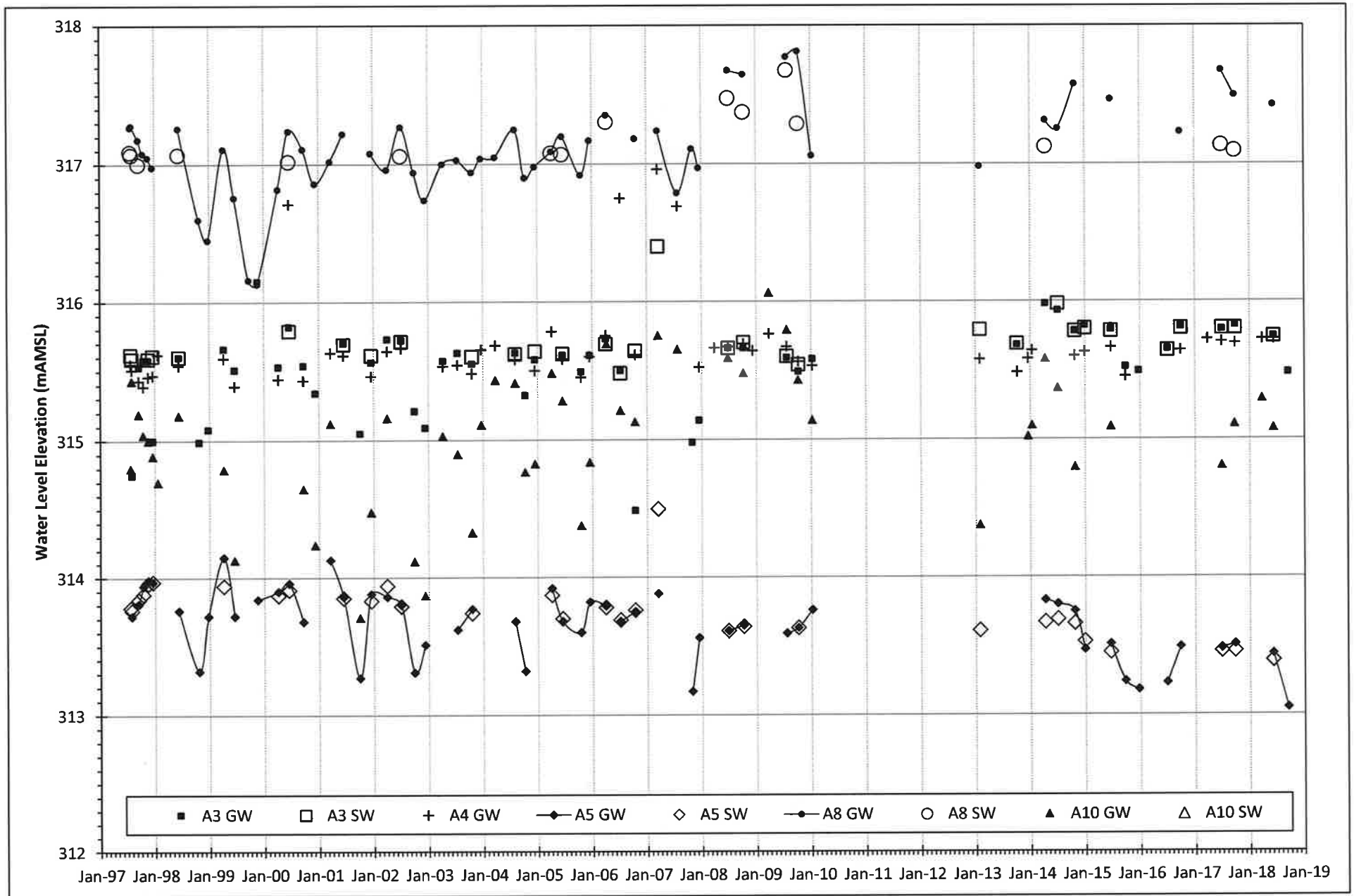
Date	Water Level Elevation (mAMSL)														
	BH204	BH205	BH213	BH214	BH219	TP319	A3 GW	A3 SW	A4 GW	A5 GW	A5 SW	A8 GW	A8 SW	A10 GW	A10 SW
15-Apr-97	307.68	307.47	315.79	315.85	316.55	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
26-May-97	307.64	307.46	315.50	315.53	316.34	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
11-Jun-97	307.58	307.42	315.37	315.49	316.29	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
25-Jun-97	307.68	307.45	315.44	315.51	316.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9-Jul-97	307.73	307.48	315.46	315.54	316.46	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
22-Jul-97	307.27	307.15	314.98	315.16	316.13	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
23-Jul-97	n/a	n/a	n/a	n/a	n/a	n/a	n/a	315.62	315.55	n/a	313.78	317.27	317.09	314.80	315.50
30-Jul-97	307.21	307.09	314.87	315.11	316.11	n/a	314.75	315.59	315.51	313.72	313.76	317.28	317.07	315.43	315.45
15-Sep-97	306.83	306.84	314.27	314.82	315.87	n/a	315.53	n/a	315.43	313.81	313.84	317.18	317.00	315.19	n/a
15-Oct-97	306.47	306.59	313.83	314.55	315.46	n/a	315.58	n/a	315.39	313.94	313.88	317.08	n/a	315.04	n/a
17-Nov-97	306.37	306.56	313.69	dry	315.52	n/a	315.58	315.59	315.46	313.98	313.96	317.05	n/a	315.00	n/a
17-Dec-97	306.18	306.46	313.53	dry	315.42	n/a	315.00	315.61	315.47	313.97	313.97	316.98	n/a	314.89	n/a
21-Jan-98	306.11	306.50	313.59	314.85	315.48	n/a	n/a	n/a	315.62	fr	n/a	fr	n/a	314.70	n/a
10-Jun-98	306.62	306.68	313.52	315.15	316.07	n/a	315.60	315.60	315.54	313.76	n/a	317.26	317.07	315.18	n/a
23-Oct-98	305.66	305.88	313.26	314.45	315.35	n/a	314.99	dry	dry	313.32	dry	316.60	dry	dry	n/a
24-Dec-98	305.25	305.64	312.89	314.43	315.06	n/a	315.08	dry	dry	313.72	dry	316.45	dry	dry	n/a
6-Apr-99	305.37	305.90	313.12	314.90	315.10	316.85	315.66	fr	315.59	314.15	313.94	317.11	dry	314.79	dry
18-Jun-99	305.33	305.65	313.22	314.70	315.27	316.53	315.51	dry	315.39	313.72	dry	316.76	dry	314.13	dry
22-Sep-99	305.02	305.10	312.68	dry	314.94	316.44	dry	dry	dry	dry	dry	316.16	dry	dry	dry
19-Nov-99	304.94	305.28	312.59	314.56	314.81	316.45	316.15	dry	dry	313.84	dry	316.13	dry	dry	dry
5-Apr-00	305.05	305.43	312.92	dry	314.96	316.80	315.53	dry	315.44	313.90	313.87	316.82	dry	dry	dry
16-Jun-00	305.48	305.99	313.85	315.30	315.64	316.93	315.82	315.79	316.71	313.96	313.91	317.24	317.02	dry	dry
19-Sep-00	305.64	305.94	313.75	314.97	315.74	316.58	315.54	dry	315.43	313.68	dry	317.11	dry	314.65	dry
7-Dec-00	305.43	305.80	313.27	dry	315.37	316.50	315.34	dry	dry	fr	fr	316.86	dry	314.24	dry
19-Mar-01	n/a	305.99	313.60	315.47	315.43	316.89	dry	n/a	315.63	314.13	n/a	317.02	dry	315.12	dry
14-Jun-01	305.93	306.25	314.20	315.29	315.95	316.85	315.70	315.69	315.61	313.86	313.85	317.22	dry	n/a	dry
1-Oct-01	306.12	305.67	315.25	314.59	315.19	316.45	315.05	dry	dry	313.27	dry	n/a	dry	313.71	dry
15-Dec-01	305.47	305.81	313.18	314.56	315.23	316.83	315.56	315.61	315.46	313.88	313.83	317.08	dry	314.48	dry
1-Apr-02	305.63	306.12	313.91	315.66	315.69	316.89	315.73	fr	315.64	313.86	313.94	316.96	dry	315.16	dry
4-Jul-02	306.23	306.45	314.68	315.99	316.12	316.86	315.72	315.71	315.66	313.80	313.79	317.27	317.06	n/a	dry
30-Sep-02	305.87	305.96	313.70	315.31	315.49	316.45	315.21	dry	dry	313.31	dry	316.94	dry	314.12	dry
10-Dec-02	305.56	305.73	313.02	314.46	315.28	316.48	315.09	dry	dry	313.51	dry	316.74	dry	313.87	dry
8-Apr-03	305.30	305.77	313.33	314.71	315.26	316.91	315.57	fr	315.53	fr	fr	317.00	fr	315.03	dry
15-Jul-03	305.75	306.03	313.80	315.61	315.74	316.69	315.63	dry	315.54	313.62	dry	317.03	dry	314.90	dry
20-Oct-03	305.63	305.85	313.93	314.60	315.67	316.74	315.55	315.60	315.48	313.77	313.74	316.94	dry	314.33	dry

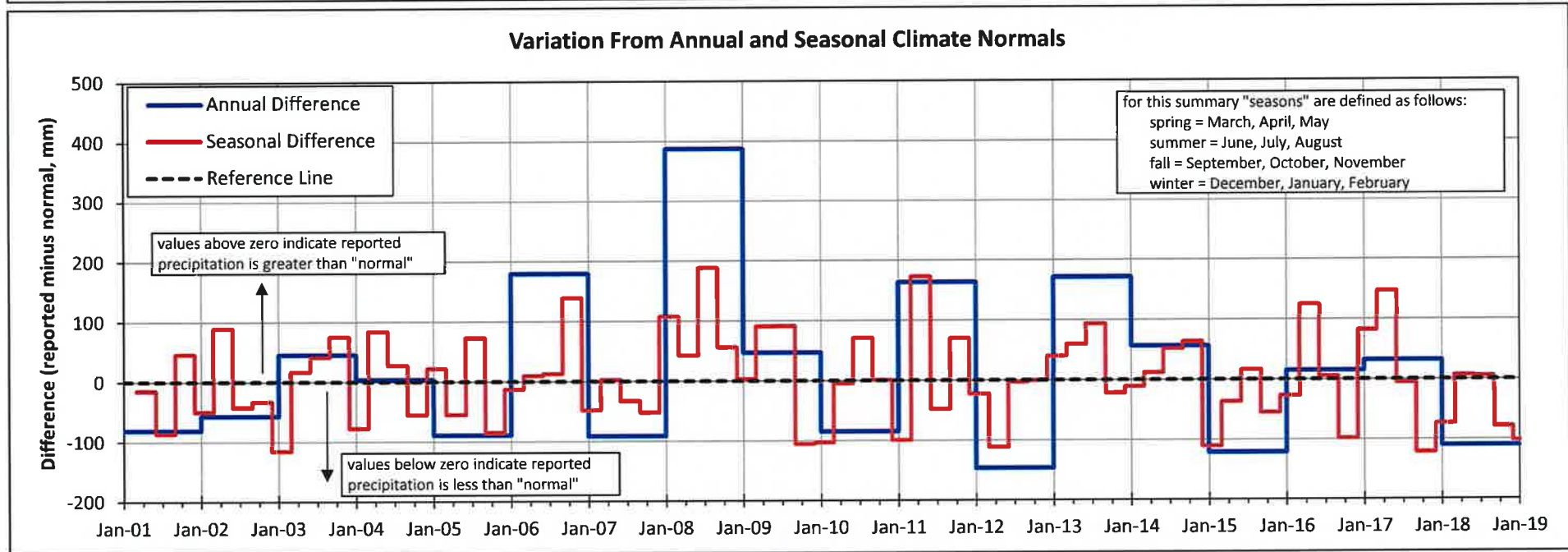
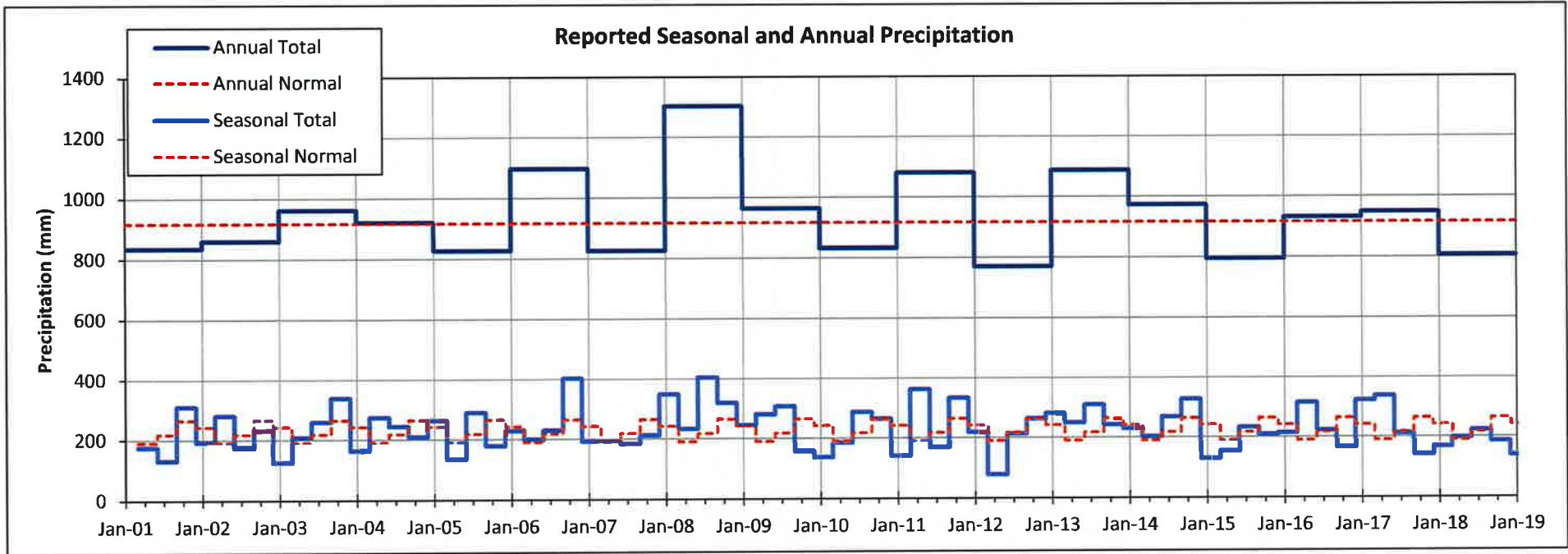
Date	Water Level Elevation (mAMSL)														
	BH204	BH205	BH213	BH214	BH219	TP319	A3 GW	A3 SW	A4 GW	A5 GW	A5 SW	A8 GW	A8 SW	A10 GW	A10 SW
21-Dec-03	305.95	306.20	314.33	316.18	316.01	316.93	fr	fr	315.65	fr	fr	317.04	dry	315.11	dry
24-Mar-04	306.13	306.49	314.71	316.26	316.16	317.00	fr	fr	315.68	fr	fr	317.05	dry	315.43	
3-Aug-04	305.69	306.66	316.11	314.47	316.06	316.76	315.63	315.62	315.58	313.68	dry	317.25	dry	315.41	315.40
8-Oct-04	306.24	306.30	314.25	315.22	315.69	316.45	315.32	dry	dry	313.32	dry	316.90	dry	314.77	dry
13-Dec-04	306.28	306.22	313.96	314.47	315.84	316.81	315.58	315.64	315.50	fr	fr	316.98	dry	314.83	dry
5-Apr-05	306.08	306.61	314.58	316.43	316.19	317.13	fr	fr	315.78	313.92	313.87	317.09	317.08	315.48	315.48
15-Jun-05	306.50	306.61	314.48	316.00	315.66	316.75	315.61	315.62	315.58	313.68	313.70	317.20	317.07	315.28	dry
17-Oct-05	306.29	306.25	314.05	315.20	315.91	316.66	315.49	dry	315.45	313.60	dry	316.92	dry	314.38	dry
15-Dec-05	306.02	306.22	314.21	314.99	315.98	316.85	315.61	fr	315.60	313.82	fr	317.17	dry	314.84	dry
31-Mar-06	n/a	n/a	n/a	n/a	n/a	316.97	315.73	315.69	315.75	313.79	313.78	n/a	n/a	n/a	n/a
6-Apr-06	306.53	307.84	314.83	316.47	316.48	n/a	n/a	n/a	n/a	n/a	n/a	317.35	317.30	315.69	315.69
7-Jul-06	306.43	306.67	315.51	316.01	317.79	316.60	315.50	315.48	316.75	313.68	313.69	n/a	n/a	315.21	dry
13-Oct-06	306.77	306.64	314.67	315.59	315.89	316.88	314.49	315.64	315.61	313.75	313.76	317.18	dry	315.13	dry
20-Dec-06	306.87	306.93	315.20	316.74	316.10	316.92	fr	fr	fr	fr	fr	fr	fr	fr	fr
15-Mar-07	306.82	307.00	315.14	316.15	316.06	317.15	fr	316.40	316.96	313.88	314.50	317.24	dry	315.75	dry
23-Jul-07	306.93	306.68	314.24	315.85	315.90	316.44	dry	dry	316.69	dry	dry	316.79	dry	315.65	dry
29-Oct-07	306.09	306.10	313.38	dry	315.49	316.40	314.98	dry	dry	313.17	dry	317.11	dry	dry	dry
14-Dec-07	305.89	306.02	313.29	dry	315.43	316.45	315.14	n/a	315.52	313.56	n/a	316.97	n/a	dry	n/a
27-Mar-08	306.21	306.56	314.83	316.03	316.04	316.97	fr	fr	315.66	fr	fr	fr	fr	fr	fr
26-Jun-08	306.76	306.97	315.19	315.81	316.17	316.80	315.66	315.66	315.67	313.61	313.61	317.67	317.47	315.59	315.57
6-Oct-08	306.52	306.96	315.04	316.03	315.98	316.83	315.66	315.70	315.69	313.65	313.64	317.64	317.37	315.48	315.48
7-Dec-08	306.89	306.89	314.74	315.93	315.98	316.93	fr	fr	315.64	fr	fr	fr	fr	fr	fr
25-Mar-09	307.52	307.48	315.96	316.63	316.34	317.04	fr	fr	315.76	fr	fr	fr	fr	316.06	316.06
22-Jul-09	307.25	307.32	315.47	315.88	316.18	316.92	315.59	315.60	315.67	313.59	dry	317.77	317.67	315.79	315.79
7-Oct-09	306.82	306.97	314.81	315.40	315.91	316.73	315.49	315.54	315.56	313.63	313.63	317.81	317.29	315.43	315.40
8-Jan-10	306.39	306.65	314.28	315.03	315.81	316.84	315.58	fr	315.53	313.76	fr	317.06	fr	315.14	fr
26-Nov-12	305.75	305.96	313.55	315.00	315.58	316.75	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
29-Jan-13	305.77	306.07	313.70	315.40	315.76	316.90	n/a	315.79	315.58	n/a	313.61	316.98	dry	314.38	dry
4-Oct-13	306.46	306.63	n/a	315.67	315.90	316.54	315.68	315.69	315.48	n/a	n/a	n/a	n/a	n/a	n/a
17-Dec-13	306.38	306.61	314.18	315.73	315.92	316.80	fr	fr	315.58	fr	fr	fr	dry	315.02	dry
13-Jan-14	306.50	306.68	314.30	315.76	315.98	316.86	fr	fr	315.64	fr	fr	fr	fr	315.10	dry
10-Apr-14	307.11	307.49	315.40	316.82	316.22	317.23	315.98	fr	fr	313.83	313.67	317.31	317.12	315.58	fr
3-Jul-14	307.06	307.45	315.37	316.77	316.22	316.76	315.93	315.98	n/a	313.80	313.69	317.25	dry	315.37	dry
23-Oct-14	306.58	306.64	315.07	314.72	316.01	316.81	315.78	315.78	315.60	313.75	313.66	317.57	dry	314.80	dry
29-Dec-14	306.28	306.49	313.99	dry	315.91	316.80	315.82	315.80	315.63	313.47	313.53	fr	dry	fr	dry

Date	Water Level Elevation (mAMSL)														
	BH204	BH205	BH213	BH214	BH219	TP319	A3 GW	A3 SW	A4 GW	A5 GW	A5 SW	A8 GW	A8 SW	A10 GW	A10 SW
27-Mar-15	306.43	306.40	314.30	dry	315.98	316.98	fr	fr	fr	fr	fr	fr	fr	fr	fr
19-Jun-15	306.51	306.46	314.25	315.44	316.13	316.97	315.79	315.78	315.66	313.51	313.45	317.46	dry	315.09	dry
24-Sep-15	306.05	306.09	313.71	314.72	315.79	316.46	315.52	dry	315.45	313.24	dry	dry	dry	dry	dry
23-Dec-15	305.82	305.96	313.43	dry.	315.57	316.23	315.49	dry	dry	313.18	dry	dry	dry	dry	dry
8-Mar-16	306.16	306.33	313.75	314.67	315.94	316.96	fr	fr	dry	fr	fr	fr	dry	fr	fr
29-Jun-16	306.47	306.65	314.52	315.39	316.17	316.73	315.65	315.64	dry	313.23	dry	dry	dry	dry	dry
26-Sep-16	306.30	306.35	314.27	dry	315.92	316.63	315.81	315.80	315.64	313.49	313.54	317.23	dry	dry	dry
20-Dec-16	305.73	305.92	313.54	dry	315.64	316.32	fr	fr	dry	fr	fr	fr/dry	dry	fr	fr
23-Mar-17	306.68	306.76	314.50	315.64	316.26	316.95	fr	fr	315.72	fr	fr	dry	dry	fr	fr
26-Jun-17	306.91	307.04	315.05	315.66	316.40	316.84	315.79	315.80	315.70	313.48	313.46	317.67	317.13	314.81	dry
22-Sep-17	306.25	306.33	314.24	314.68	315.90	316.47	315.82	315.80	315.69	313.51	313.46	317.49	317.09	315.11	dry
13-Dec-17	306.02	306.05	313.70	dry	315.68	316.72	fr	fr	dry	fr	fr	fr/dry	dry	fr	fr/dry
22-Mar-18	307.04	306.68	314.22	315.26	316.15	316.87	fr	fr	315.72	fr	fr	fr	dry	315.29	dry
6-Jun-18	306.84	306.93	314.68	315.80	316.30	316.86	315.74	315.74	315.72	313.44	313.39	317.42	dry	315.08	dry
14-Sep-18	306.36	306.39	313.84	314.81	315.72	316.49	315.48	dry	dry	313.05	dry	dry	dry	dry	dry
18-Dec-18	306.01	306.05	313.57	dry	315.70	316.83	fr	fr	dry	fr	fr	fr	dry	fr	dry
Note:	GW = groundwater, SW = surface water 1997 to 2010 data as reported by Stantec						n/a = not available subsequent data as measured by Groundwater Science Corp.			fr = frozen					

1997 to 2018 Maximum and Minimum Elevations (mAMSL)															
max	307.73	307.84	316.11	316.82	317.79	317.23	316.15	316.40	316.96	314.15	314.50	317.81	317.67	316.06	316.06
min	304.94	305.10	312.59	314.43	314.81	316.23	314.49	315.48	315.39	313.05	313.39	316.13	317.00	313.71	315.40









Harden Environmental Services Ltd.  
4622 Nassagaweya-Puslinch Townline Road  
R.R. 1, Moffat, Ontario, L0P 1J0  
Phone: (519) 826-0099 Fax: (519) 826-9099

Groundwater Studies  
Geochemistry  
Phase I / II  
Regional Flow Studies  
Contaminant Investigations  
OMB Hearings  
Water Quality Sampling  
Monitoring  
Groundwater Protection  
Studies  
Groundwater Modeling  
Groundwater Mapping  
Permits to Take Water  
Environmental Compliance  
Approvals

Our File: 9711

April 9, 2019

Township of Puslinch  
7404 Wellington Road 34  
Guelph, ON, N1H 6H9

Attention: Ms. Karen Landry  
CAO

Dear Ms. Landry;

Re: Capital Paving Inc., Wellington Pit, License 20085  
Puslinch File: E10 CAP – Wellington License: 20085

We have reviewed the 2018 Monitoring Report for the Capital Paving Inc. Wellington Pit, License 20085 prepared by Groundwater Science Corp. on March 26, 2019.

We agree with Groundwater Science Corp. that there is no indication of long term trends of declining groundwater or surface water levels for on-site monitors. Water levels are observed to vary seasonally but remain within a relatively narrow range over the historical record period. There is no indication that water levels are outside of their normal range.

The downward trend in water levels observed in previous years continues in off-site station A5 SW and A5 GW. There is no indication that the on-site extractive activities can be causing this water level trend. The nearest on-site monitor is BH219 and it consistently has higher water levels than the A5 series and there is no trend toward lower water levels.

There has been limited below-water-table extraction to-date, therefore any change in water levels are expected to be subtle. Based on this review we conclude that groundwater and surface water conditions adjacent to the pit are not being affected by pit activities.



Township of Puslinch  
April 9, 2019  
Page 2

Sincerely,

Harden Environmental Services Ltd.

A handwritten signature in black ink, appearing to read 'S. Denhoed', is written over a light blue rectangular background.

Stan Denhoed, M.Sc., P.Eng.  
Senior Hydrogeologist



September 3, 2019

Bill Hartung  
General Manager,  
Cox Construction Limited  
P.O. Box 427  
687 Eramosa Rd.  
Guelph, Ontario  
N1H 6K5

Dear Mr. Hartung:

**RE: Groundwater Monitoring Summary,  
Cox Construction Ltd - Puslinch Pit Northeast Extension (Licence #625710)**

This letter provides a summary of the groundwater monitoring program results to date completed for the above reference property.

#### **1.0 Water Level Monitoring Program**

The monitoring program conditions as listed on the Site Plan (Robert Stovel) are as follows:

##### Monitoring

1. Prior to extraction at the site two new water table monitoring wells shall be constructed on-site as shown on the Site Plan and maintained in working order.
2. As soon as possible after below water table extraction occurs within the expansion area a staff gauge shall be established within the extraction pond.
3. During extraction groundwater level measurements shall be obtained at on-site locations including the two new wells and staff gauge (as accessible), in addition to Mast-Snyder Pit monitors BH2, BH4, MP4 and MP5 (as accessible) on a monthly basis. Note Puslinch Pit BH22 will be destroyed and will not be replaced. If Mast-Snyder Pit monitor BH4 becomes inaccessible or is destroyed, the operator shall construct a replacement well in that general area of the Puslinch Pit Expansion site.
4. Monitoring data shall be shared with adjacent operator(s) upon request, in addition monitoring data summaries from adjacent sites will be requested on an annual basis.
5. Prior to below water table extraction at the site Trigger Thresholds will be established to the satisfaction of MNR, MOE, GRCA and the Township of Puslinch for the two new Puslinch Pit Expansion monitors and Mast-Snyder monitoring locations BH2, BH4 (and/or replacement well as required), MP4 and MP5.  

The thresholds shall include an Interim Trigger Level prior to potential impacts are expected at which monitoring frequency will be increased to weekly. The weekly monitoring frequency will be maintained until three consecutive water level measurements are above the Interim Trigger level.
6. The monitoring data available to this program shall be summarized and submitted to the MNR, MOE, GRCA and the Township of Puslinch on an annual basis. This report shall assess the need for mitigation measures on an ongoing basis through comparison to trigger thresholds.

The monitoring locations are shown on the attached figure. Monitoring results are summarized on the attached table and hydrograph.

New monitors MW1-17 and MW2-17 were installed on November 15, 2017. The respective borehole logs were provided in the previous annual report. The monitors have been surveyed relative to the existing monitor BH30b on the adjacent Puslinch Pit. Access to the Mast-Snyder monitors was obtained in May 2018.

To date operations have been limited. No below water extraction has occurred at the site to date, or is expected in 2019/2020.

Monitoring Thresholds will be established after sufficient baseline data is available at the two new monitors, and prior to below water extraction at the site.

## 2.0 2018/2019 Monitoring Results

The water level data collected to date reflects baseline conditions with respect to the approved below water extraction within this site. No extraction related influences on the water table have been observed to date.

We note that CBM MP4 and MP5 monitors are drive-point piezometers installed within a wetland/pond area, and are not always accessible depending on pond levels. Water level monitoring occurs at these location as access permits.

## 3.0 Recommendations

Monitoring should continue in 2019/2020 as per Site Plan conditions.

If you have any questions or require further assistance please do not hesitate to contact me.

Sincerely,

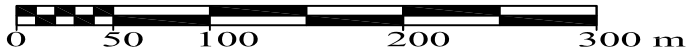
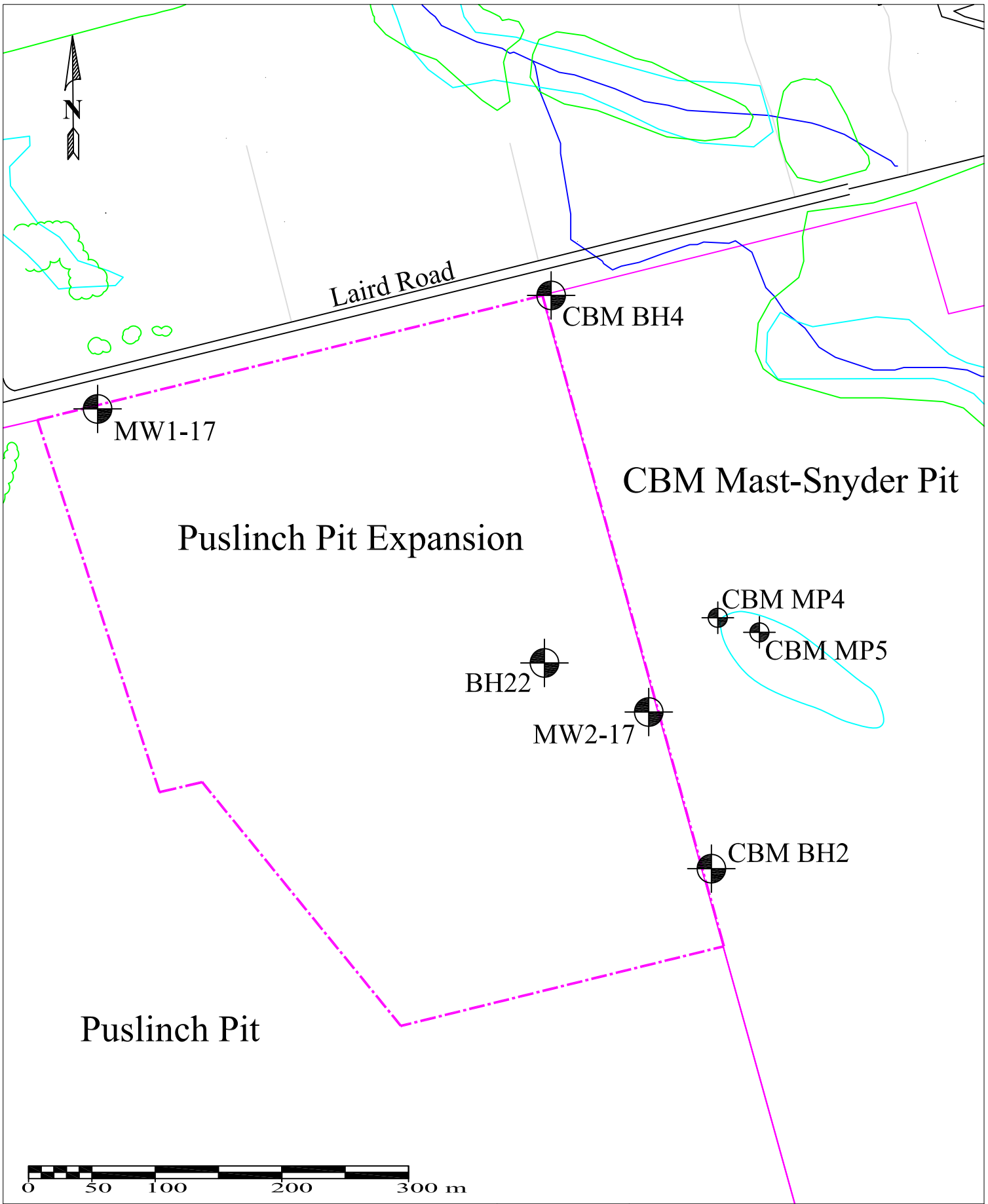







Andrew Pentney, B.Sc., P.Geo.  
Hydrogeologist



Cc: Rob Stovel

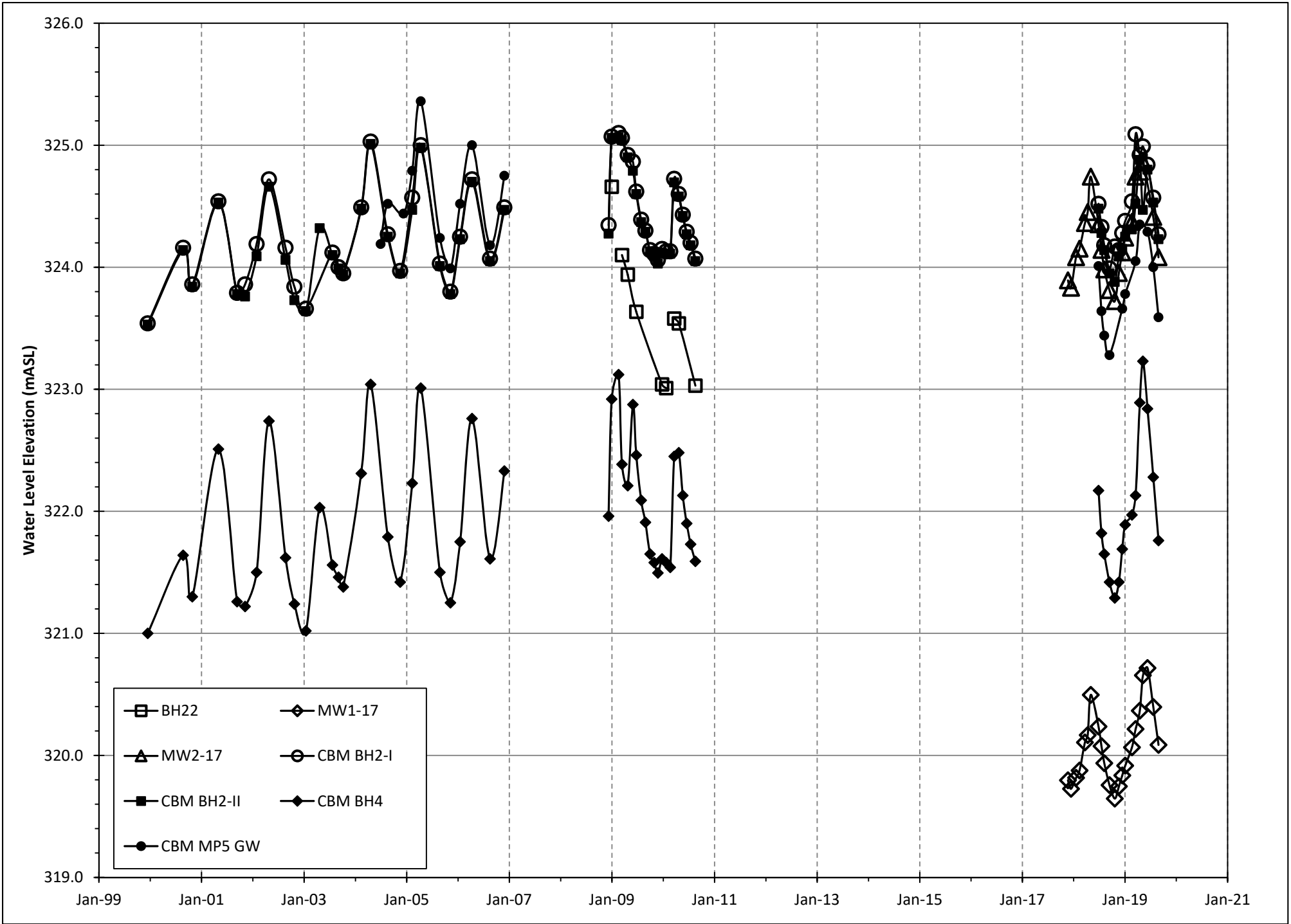
Attached: Figure 1 Monitoring Locations  
Water Level Monitoring Results Table  
Water Level Hydrograph



<ul style="list-style-type: none"> <li> monitor locations</li> <li> Licence boundaries (approximate)</li> <li> watercourse or pond</li> <li> wetland</li> </ul>	<p>September 2018 scale: as shown Monitoring Program</p>	<h2>Monitoring Locations</h2>
<p><small>modified from: Site Plan (Stovel and Associates Inc.); and, 1:10,000 OBM Mapping UNDER LICENSE, WITHOUT PREJUDICE OR ENDORSEMENT FROM THE QUEEN'S PRINTER OF ONTARIO</small></p>	 <b>Goundwater Science Corp.</b>	

Date	Water Level Elevation (mASL)						
	MW1-17	MW2-17	CBM BH2-I	CBM BH2-II	CBM BH4	CBM MP5 GW	CBM MP5 SW
15-Dec-99	-	-	323.54	323.53	321.00	-	-
23-Aug-00	-	-	324.16	324.14	321.64	-	-
27-Oct-00	-	-	323.86	323.84	321.30	-	-
1-May-01	-	-	324.54	324.53	322.51	-	-
11-Sep-01	-	-	323.79	323.78	321.26	-	-
7-Nov-01	-	-	323.86	323.76	321.22	-	-
28-Jan-02	-	-	324.19	324.09	321.50	-	-
26-Apr-02	-	-	324.72	324.66	322.74	-	-
22-Aug-02	-	-	324.16	324.06	321.62	-	-
24-Oct-02	-	-	323.84	323.73	321.24	-	-
14-Jan-03	-	-	323.66	323.64	321.02	-	-
22-Apr-03	-	-	#N/A	324.32	322.03	-	-
22-Jul-03	-	-	324.12	324.10	321.56	-	-
3-Sep-03	-	-	324.00	323.99	321.46	-	-
7-Oct-03	-	-	323.95	323.94	321.38	-	-
12-Feb-04	-	-	324.49	324.48	322.31	-	-
19-Apr-04	-	-	325.03	325.01	323.04	-	-
29-Jun-04	-	-	#N/A	#N/A	#N/A	324.19	324.87
19-Aug-04	-	-	324.27	324.25	321.79	324.52	324.54
15-Nov-04	-	-	323.97	323.95	321.42	#N/A	#N/A
9-Dec-04	-	-	#N/A	#N/A	#N/A	324.44	324.48
9-Feb-05	-	-	324.57	324.47	322.23	324.79	fr
11-Apr-05	-	-	325.00	324.98	323.01	325.36	325.36
25-Aug-05	-	-	324.03	324.01	321.50	324.24	324.37
8-Nov-05	-	-	323.80	323.78	321.25	323.99	dry
16-Jan-06	-	-	324.25	324.23	321.75	324.52	fr
11-Apr-06	-	-	324.72	324.70	322.76	325.00	324.95
17-Aug-06	-	-	324.07	324.05	321.61	324.18	dry
27-Nov-06	-	-	324.49	324.47	322.33	324.75	324.88
8-Dec-08	-	-	324.35	324.28	321.96	#N/A	#N/A
30-Dec-08	-	-	325.07	325.06	322.92	#N/A	#N/A
17-Feb-09	-	-	325.10	325.07	323.12	#N/A	#N/A
13-Mar-09	-	-	325.06	325.04	322.39	#N/A	#N/A
23-Apr-09	-	-	324.92	324.90	322.21	#N/A	#N/A
30-May-09	-	-	324.87	324.79	322.88	#N/A	#N/A
23-Jun-09	-	-	324.62	324.60	322.46	#N/A	#N/A
28-Jul-09	-	-	324.39	324.37	322.09	#N/A	#N/A
27-Aug-09	-	-	324.30	324.29	321.91	#N/A	#N/A
29-Sep-09	-	-	324.14	324.13	321.65	#N/A	#N/A
29-Oct-09	-	-	324.11	324.09	321.58	#N/A	#N/A
24-Nov-09	-	-	324.06	324.03	321.50	#N/A	#N/A
23-Dec-09	-	-	324.15	324.12	321.61	#N/A	#N/A
22-Jan-10	-	-	324.13	324.11	321.58	#N/A	#N/A
20-Feb-10	-	-	324.13	324.11	321.54	#N/A	#N/A
20-Mar-10	-	-	324.73	324.70	322.45	#N/A	#N/A
22-Apr-10	-	-	324.60	324.58	322.48	#N/A	#N/A
20-May-10	-	-	324.43	324.42	322.13	#N/A	#N/A
17-Jun-10	-	-	324.29	324.27	321.90	#N/A	#N/A
15-Jul-10	-	-	324.20	324.18	321.73	#N/A	#N/A
18-Aug-10	-	-	324.07	324.05	321.59	#N/A	#N/A
21-Nov-17	319.80	323.89	#N/A	#N/A	#N/A	#N/A	#N/A
13-Dec-17	319.73	323.83	#N/A	#N/A	#N/A	#N/A	#N/A
18-Jan-18	319.82	324.08	#N/A	#N/A	#N/A	#N/A	#N/A
12-Feb-18	319.88	324.15	#N/A	#N/A	#N/A	#N/A	#N/A
22-Mar-18	320.11	324.36	#N/A	#N/A	#N/A	#N/A	#N/A

Date	Water Level Elevation (mASL)						
	MW1-17	MW2-17	CBM BH2-I	CBM BH2-II	CBM BH4	CBM MP5 GW	CBM MP5 SW
11-Apr-18	320.17	324.45	#N/A	#N/A	#N/A	#N/A	#N/A
3-May-18	320.50	324.74	#N/A	#N/A	#N/A	#N/A	#N/A
27-Jun-18	320.24	324.35	324.52	324.48	322.17	324.01	324.18
18-Jul-18	320.08	324.14	324.33	324.28	321.82	323.64	324.16
7-Aug-18	319.94	323.98	324.18	324.14	321.65	323.44	dry
13-Sep-18	319.76	323.81	323.99	323.95	321.42	323.28	dry
21-Oct-18	319.65	323.72	324.17	323.88	321.29	#N/A	#N/A
19-Nov-18	319.75	323.95	324.14	324.09	321.42	dry	dry
13-Dec-18	319.84	324.12	324.28	324.15	321.69	323.66	dry
3-Jan-19	319.92	324.24	324.38	324.25	321.89	323.78	dry
20-Feb-19	320.07	324.37	324.54	324.31	321.97	frozen	frozen
18-Mar-19	320.22	324.74	325.09	324.52	322.13	324.05	frozen
17-Apr-19	320.37	324.78	324.92	324.88	322.89	324.35	324.39
9-May-19	320.66	324.86	324.99	324.47	323.23	#N/A	flooded
11-Jun-19	320.72	#N/A	324.84	324.80	322.84	324.29	324.38
22-Jul-19	320.40	324.41	324.57	324.53	322.28	324.00	324.22
28-Aug-19	320.09	324.08	324.27	324.23	321.76	323.59	dry
notes:	mASL = metres above sea level		GW = groundwater		SW = surface water		





4622 Nassagaweya-Puslinch Townline R.R. 1 Moffat Ontario Canada L0P 1J0  
Phone: 519.826.0099 fax: 519.826.9099 www.hardenv.com

Groundwater Studies  
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Water Quality Sampling  
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Groundwater Protection  
Studies  
Groundwater Modelling  
Groundwater Mapping

File: 1201

October 4, 2019

Township of Puslinch  
7404 Wellington Road 34  
Guelph, ON, N1H 6H9

Attention: CAO/Clerk

Dear Sir or Madam:

**Re: Puslinch Pit Expansion Part Lot 13, Concession 4, Puslinch Township**

We have reviewed the Groundwater Monitoring Summary prepared by Groundwater Science Corporation on September 3, 2019. The report summarizes groundwater measurements obtained on-site and on the adjacent Mast-Snyder property since 1999.

There has been no below-water-table extraction to-date and the groundwater elevations presented fall within historical values.

We are thus satisfied with the report and conclude that there has been no change to the groundwater system from aggregate extractive activities at the site.

Sincerely,

Harden Environmental Services Ltd.

A handwritten signature in blue ink that reads "Stan Denhoed".

Stan Denhoed, M.Sc., P.Eng.  
Senior Hydrogeologist



September 26, 2019

Ministry of the Attorney General  
McMurtry-Scott Building  
720 Bay Street, 11th Floor  
Toronto ON, M7A 2S9

**Re: Joint and Several Liability Consultation**

---

Please be advised that in response to your letter dated July 12, 2019, the Township of Springwater provides the following comments in regards to Joint and Several Liability.

***1. Please describe the nature of the problem as you see it?***

In response to the Province's request for consultation, the Township has a significant issue with Joint and Several Liability (JSL) and the impact it has on the municipality.

***a. No Requirement of Proof***

JSL is a tool that is used by the legal industry without any discretion to the point that this municipality feels that its use is negligent and in fact unethical. Most law suits that municipalities see are frivolous and vexations as lawyers cast their nets wide and attempt to use shotgun justice for their clients that are more than often the sole cause of a claim. A statement of claim does not require any proof that there is fault. A plaintiff only has to state who they think is involved and a significant amount of court time is spent determining who should be a party to the legal claim.

***b. No Consequence for Being Wrongly Identified in a Statement of Claim***

To add to this, there is no consequence that lawyers and their clients face for submitting a claim against a municipality when it is clear that a municipality is not involved. Municipalities incur significant administrative costs in managing these claims and the municipalities and their insurers pay significant costs to go through a lengthy process to prove that a claim was made in error (intentionally) only to find that a judge sees no reason to compensate a municipality for cost for incorrectly being named in a lawsuit by a plaintiff. Municipalities are seen as having deep pockets by the legal industry as well as the judicial system that makes decisions on these claims. Proof of innocence is often furnished to the plaintiff and lawyer by a municipality immediately upon notification of a pending legal action of statement of claim. This information is ignored by the plaintiff's lawyer. A plaintiff and their lawyer should have to reimburse a municipality for

all administrative and legal costs when the municipality is cleared of liability. Judges rarely compensate municipalities for being wrongly named in a legal action.

A recent example from 2019 occurred when a statement of claim was made against the Township of Springwater for an accident on a County Road (not the jurisdiction of Springwater). After legal and administrative costs totaling more than \$5,000, Springwater was dismissed from the claim. Unfortunately no costs were assigned to the plaintiff for wrongly naming Springwater in the statement of claim. The current system is broken and Springwater tax payers are left paying the bill.

**2. What are the problems that you need addressed to benefit your community?**

*a. Ethical Standard of Due Diligence Required Before Submitting a Legal Action*

Lawyer's representing plaintiff's should be required to submit documentation that provides significant research into why a claim is being made and a municipality is being named in a law suit. The claim should clearly prove authority and responsibility. The current practice of naming every party under the sun in a legal claim is negligent and unethical.

*b. Frivolous and Vexatious Suits are Costing Taxpayers*

The Township of Springwater is seeing a significant waste of administrative time and cost in managing legal claims against the municipality that are predominantly frivolous and vexatious due to JSL. Over the last seven years, the municipality has had 55 claims made against the municipality. These claims range from trips/falls resulting in broken eyeglasses to cases that unfortunately involve loss of life. The Township has no problem dealing with claims that the municipality is responsible for; however the Township does have a problem dealing with claims it does not have any responsibility for. Of the 55 claims against the municipality, 42 of these claims are frivolous and vexatious. Claims that the municipality has no responsibility for. Over the past 7 years, Springwater has paid more than \$100,000 on these frivolous and vexatious claims as they work themselves through the legal process. Many of these files are still open. This does not include additional costs paid by Springwater's insurance company that are beyond the municipality's deductible.

*c. Negligent Legal Actions (Beyond Frivolous and Vexatious)*

The Township of Springwater is currently named in 4 legal actions and an additional legal action (recently abandoned) for claims that occurred in another municipality (no where near Springwater). The Township is currently named in 3 claims that occurred in the Township of Clearview west of Stayner and one claim in the Township of Brock that have nothing to do with the Township. Springwater was named in a claim that occurred

in Wasaga Beach that was abandoned recently. All of these claims cost the Springwater taxpayer in administrative and legal costs as they work their way through the process.

*d. Triage System for Claims*

Before a claim makes it to a court date, the file should be triaged. It is at this stage that negligent of frivolous and vexatious claims will be filtered or thrown out. This process will trigger the reimbursement of costs to municipalities by unethical law firms.

*e. Law Society of Ontario Charges*

Lawyers that use JSL in an unethical way should be charged by the Law Society of Ontario. If a lawyer names a municipality in a legal action that should not be named, these lawyers should be suspended and potentially lose their license to practice law. There is a significant commonality when comparing frivolous and vexatious claims and the law firms/lawyers that submit them. The current code of ethics of the Law Society of Ontario should be updated by the Province to reprimand lawyers and law firms that negligently use JSL. The Province of Ontario should be involved in creating a new Code of Ethics for Ontario's legal industry.

**3. Is it increased premiums? Rising deductibles?**

A recent survey by CAO's in Simcoe County shows that insurance premiums are going up between 10% at the lowest to 59% being the highest in 2019. The Township of Springwater experienced a 10.8% increase in its 2019 insurance renewal. The area that typically sees an annual increase is related to the Municipal General Liability and Excess Liability lines of the business. The municipality was advised by its insurance broker that "over the past several years, insurance companies' appetite for Municipal Insurance has remained fairly stable. Insurance rates across all lines have seen only modest increases intended to simply keep pace with inflation and the rising cost of claims. Larger rate increases have been reserved for those accounts experiencing adverse claims development; either in frequency or severity (or both). However, starting in June 2018, the insurance market as a whole has shown clear signs of "hardening". Insurance companies for all sectors are putting stricter rules in place regarding the amount and breadth of coverage they will provide, and to which clients. Since the overall insurance supply is being reduced, the demand for insurer capacity is increasing, and as such, prices are elevating."

The table below provides at a high level (includes all lines of coverage) the Township's annual insurance premiums over the past five years.

2015	2016	2017	2018	2019
\$234,942	\$247,262	\$254,388	\$274,936	\$304,688

The Township continues to consult with its insurance broker in an effort to ensure that Springwater's constituents are receiving the best value for their tax dollar; however, the rising costs of insurance are not sustainable over the long run. Staff and its insurance broker have looked at increasing our deductibles in an effort to reduce the overall premium; however this has led to minimal reductions in the overall annual premium to the Township.

**4. Being unfairly named in lawsuits?**

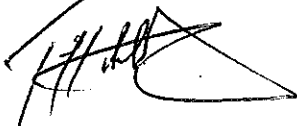
As detailed above, Springwater continues to be unfairly named in legal actions. Issues here range from a complete absence of research by legal firms on causality to the municipality being named in legal action in completely separate jurisdictions (other municipalities).

**5. Feeling you cannot offer certain services because of liability risks?**

More recently, with the advice of the Township's insurance broker, the Township has changed the way in which it delivers some of its recreational programs/services, especially as it relates to children's programs/activities. For example, the Township in partnership with its Community Recreation Associations will host a number of community based events throughout the year, which includes children's activities. In order to allow inflatable Bouncy castles at community events, the Township now requires the service provider to indemnify the Township and to also provide staff to monitor the safety of participants while in the inflatable Bouncy castle. Some vendors are reluctant to take on this risk.

Thank you for allowing the Township to participate in this consultation. We are open to further dialogue should you feel it necessary.

Yours truly,



Jeff Schmidt, CPA, CGA, B.A.S.  
Chief Administrative Officer

Cc: Ontario Municipalities

## Courtenay Hoytfox

---

**From:** AMO Communications <Communicate@amo.on.ca>  
**Sent:** Thursday, October 10, 2019 10:01 AM  
**To:** Courtenay Hoytfox  
**Subject:** AMO WatchFile - October 10, 2019

AMO Watch File not displaying correctly? [View the online version](#) | [Send to a friend](#)  
Add Communicate@amo.on.ca to your safe list



October 10, 2019

### In This Issue

- AMO regulation submission on paramedic services.
- 2020 Youth Fellows Program - Open for applications.
- AMO Blue Box program update meetings announced.
- AMO partners with a Digital Citizen Relationship Management provider.
- Municipal health and safety compliance.
- Save 15% off Deluxe Canada products.
- Long-term care bed expansion - Applications open.
- Ontario's Job Site Challenge is coming.
- AMO's Fall Policy Forum - Registration filling up fast!
- ONE Investment fall workshops - Sessions in Orillia, Peterborough & Brockville.
- Designing energy efficient projects for BPS institutions.
- Career with AMO.

### AMO Matters

AMO provided a [submission](#) to the Ministry of Health about proposed regulation changes to enable new models of care for select 9-1-1 patients which will affect municipal Paramedic Services. AMO's view is that dispatch must be fixed first and municipal governments need protection from increased liability with provincial funding for training.

As part of AMO's [Youth Engagement Strategy](#), this fellowship provides three young people the opportunity to connect with the Board, learn more about municipal government and policy, and receive mentorship. Closing date is November 1 - [apply today!](#)

AMO and the Continuous Improvement Fund (CIF) is hosting a series of in-person meetings in October and November on Blue Box. For details and to register for a session, [click here](#).

AMO is [partnering](#) with Frequency Foundry Inc. to offer members a digital citizen relationship management (CRM) solution that can improve customer service and efficiency. Stay tuned to AMO communications for further announcements about this new partnership.

4S offers training, support, and a digital management platform to ensure municipal governments comply with occupational health and safety requirements. Reach out to 4S, AMO's partner for health and safety management, for [more information](#) on how they can support your health and safety program for 2020 and beyond.

Enter promotion code 63647 when ordering and save 15% on [Deluxe Canada products](#) including

customizable forms, cheques, print marketing, promo & apparel, and more. This continues AMO's member discount with the company formerly known as NEBS.

### **Provincial Matters**

Following the welcome news from the Ministry of Long-Term Care about the extension of timelines for funding changes while exploring alternatives, the government is also opening up an application process for new long-term care bed expansion. The deadline for applications is January 17, 2020. Further information on the government website.

Calling all municipal governments - Ontario's Job Site Challenge is coming - Canada's first mega site program specifically created to attract large scale advanced manufacturing investment projects to the province. It is an important part of Ontario's auto and advanced manufacturing strategy. For more information, including criteria, contact [burdenreductionteam@ontario.ca](mailto:burdenreductionteam@ontario.ca).

### **Eye on Events**

We are less than three weeks away from our Forum Oct. 24/25 in London. Registration is filling up quickly, so to check out the program and register, [click here!](#)

Learn How, What and Why of investing in the municipal sector. Why municipalities need to invest? What are the different investment options available to your municipality? And how the release of the Prudent Investor Standard provides broader investment options. For registration and information [click here](#). Need help? Call us at 416.971.9856 x351.

### **LAS**

The Centre for Climate Change Management at Mohawk College is partnering with LAS/Stephen Dixon to offer a 3-day energy efficiency workshop for the BPS on Nov 5, 6 and 7. Learn how to build and apply fundamental energy management concepts in a work environment. [Register today](#) to attend one or more days!

### **Careers**

Policy Advisor AMO. As member of the policy team, the Policy Advisor provides professional policy advice to Senior Advisors, Director of Policy, Executive Director and the Board of Directors. Please apply in confidence by Monday, October 21, by email to: [careers@amo.on.ca](mailto:careers@amo.on.ca).

### **About AMO**

AMO is a non-profit organization representing almost all of Ontario's 444 municipal governments. AMO supports strong and effective municipal government in Ontario and promotes the value of municipal government as a vital and essential component of Ontario's and Canada's political system. Follow [@AMOPolicy](#) on Twitter!

### **AMO Contacts**

AMO Watch File Tel: 416.971.9856

Conferences/Events

Policy and Funding Programs

LAS Local Authority Services

MEPCO Municipal Employer Pension Centre of Ontario

ONE Investment

Media Inquiries Tel: 416.729.5425

Municipal Wire, Career/Employment and Council Resolution Distributions

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October 2, 2019

Hon Doug Ford  
Premier of Ontario  
Premier's Office - Room 281  
Legislative Building - Queen's Park  
Toronto, ON M7A 1A1

Delivered by Email to:  
doug.ford@pc.ola.org

**BY EMAIL ONLY**

Dear Premier;

**RE: Resolution from the Town of Penetanguishene – Municipal Amalgamation**

As you are aware, the Town of Penetanguishene, Township of Tay and Township of Tiny provided a [joint letter response on June 5, 2019](#) regarding the Regional Governance Review.

Please also be advised that the Council of the Town of Penetanguishene, during their September 25, 2019 Council meeting and at the request of the Township of McKellar, adopted the following resolution:

"WHEREAS there are 444 municipalities in Ontario that are very efficient and well governed, and who respond quickly to ratepayer's needs;

AND WHEREAS in the 1990's the Conservative Government forced many municipalities to amalgamate on the guise they would become more efficient, effective, save money, lower taxes and ultimately reduce the provincial deficit;

AND WHEREAS there has never been a valid evidence-based study that supported these outcomes;

AND WHEREAS forced amalgamation actually accomplished just the opposite: ill feelings, increased animosity and mistrust, job losses, rise in local taxes and an increase in the provincial deficit;

AND WHEREAS there are many positive examples of small rural and northern municipalities working together in a collaborate and cooperative manner via, shared agreements that responds to local needs without amalgamation and provincial interference;







AND WHEREAS the Provincial Government has a large deficit due to their own decision-making;

AND WHEREAS recently the same Conservative Government recently reduced one large regional municipal government by 50%, without "consultation";

AND WHEREAS this same Conservative Government is presently reviewing other provincial regional governments through a purported "consultative" approach with a view to reduce or eliminate them;

AND WHEREAS the Provincial Government should investigate all other internal ways of reducing their deficit and becoming more fiscally responsible over time rather than downloading to the one level of government that is the most efficient, has the lowest cost and is closest to the electorate which will not put a dent in the provincial deficit;

AND WHEREAS the Province could look at what other provinces have done to reduce the debt with one singular education system, organizing unorganized municipalities, controlling OPP costs, substantially increase fines, and find a way to collect millions and millions of dollars in unpaid fines and instead, invest in the north to create jobs and stimulate and enhance economic development;

NOW THEREFORE BE IT RESOLVED THAT before the Provincial Government forces amalgamation in any of the 444 municipalities in Ontario, our AMO organization go beyond requesting "consultation" and "demand" that the Provincial Government do the following:

1. Hold a local referendum letting the citizens decide to amalgamate or not.
2. Conduct an evidence-based study to show that amalgamation actually saves costs, jobs, lowers taxes and reduce the provincial deficit.
3. Allow those municipalities to work out their own local collaborative agreement that best suit their local needs and to be permitted to do so on their own time line and volition.
4. To ensure that there is absolutely no conflict of interest in this consultative process.
5. To emphasize the political reality of forcing amalgamation on the many rural and northern municipalities across Ontario.

AND FURTHER THAT a copy of this resolution be sent to Doug Ford, Premier of



Ontario; Christine Elliott, Deputy Premier; Steve Clark, Minister of Municipal Affairs; Andrea Horwath, Leader of the New Democratic Party; and all MPPs in the Province of Ontario;

AND FURTHER THAT a copy of this resolution be sent to the Association of Municipalities of Ontario (AMO), the Northwestern Ontario Municipal Association (NOMA), Rural Ontario Municipalities Association (ROMA), Federation of Northern Ontario Municipalities (FONOM), and all Ontario municipalities for their consideration."

Please let me know if you have any questions or concerns.

Sincerely,

Stacey Cooper, Clerk  
Town of Penetanguishene

- c. Hon. Christine Elliott, Deputy Premier  
Hon. Steve Clark, Minister of Municipal Affairs  
MPP's in the Province of Ontario  
Association of Municipalities of Ontario (AMO)  
Northwestern Ontario Municipal Association (NOMA)  
Rural Ontario Municipalities Association (ROMA)  
Federation of Northern Ontario Municipalities (FONOM)  
All Ontario Municipalities



OFFICE OF THE MAYOR  
CITY OF HAMILTON

September 30, 2019

The Right Honourable Justin Trudeau  
Prime Minister of Canada  
House of Commons  
Ottawa, ON K1A 0A6

Dear Prime Minister,

**Re: Correspondence from the City of Kitchener requesting support for their resolution respecting the lobbying of the Federal Government to review the regulations related to consumer packaging on single-use wipes to remove the word flushable.**

At the meeting of September 25, 2019, Hamilton City Council endorsed the City of Kitchener's resolution respecting the above matter as follows:

"WHEREAS in 2018 the City of Kitchener implemented a sustainable funding model Water Infrastructure Project (WIP) for the city's water, sanitary and stormwater infrastructure to ensure the safe delivery of these valued utilities;

WHEREAS in 2018 a multi-year initiative approved through the WIP has already improved several key measures of water quality, and proactive maintenance has reduced the risk of flooding in high-risk areas;

WHEREAS in 2018 the City has already seen a number of impacts due to the implementation of the WIP including: 48% decrease in complaints related to discoloured water; Storm main repairs increased by 27 per cent; 300 metric tonnes of sediment removed from catch basins; and, 2,200 properties protected against backflow and cross-connection contamination;

WHEREAS Single-use wipes are a \$6-billion industry and growing, and are now being advertised as the clean alternative to toilet paper and are safe to flush;

WHEREAS there is no one standard for what the word "flushable" means;

WHEREAS Single-use wipes are in fact not safe to flush as they are buoyant; are not biodegradable; and, are unable to break down into small pieces quickly;

.../2

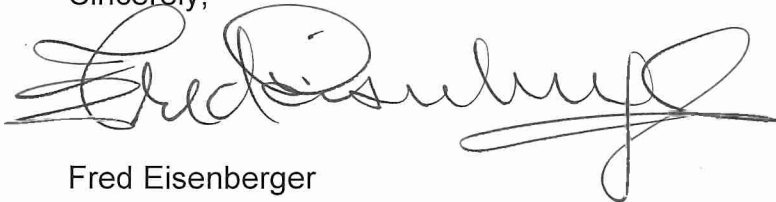
WHEREAS Single-use wipes accumulate in the sewer system and eventually clog the sanitary sewer system costing municipalities hundreds of millions of dollars in additional repairs and maintenance costs each year to municipal sewer systems across the country; and

WHEREAS there is a lack of public awareness of the impact caused by non-flushable wipes being flushed down toilets and consumer education and outreach could play a large part in reducing the impact;

THEREFORE BE IT RESOLVED; That the City of Kitchener lobby the Federal Government, to review regulations related to consumer packaging on single-use wipes to remove the word flushable; and

BE IT FINALLY RESOLVED that this resolution be forwarded to the Right Honourable Prime Minister of Canada; the Honourable Premier of Ontario; the Minister of the Environment, Conservation and Parks; the Minister of Municipal Affairs and Housing; the Association of Municipalities of Ontario; the Local Members of Provincial Parliament; the Region of Waterloo; and, all Municipalities within the Province of Ontario."

Sincerely,

A handwritten signature in black ink, appearing to read 'Fred Eisenberger', with a large, stylized flourish at the end.

Fred Eisenberger  
Mayor

Cc:

Minister Jeff Yurek, Minister of the Environment, Conservation and Parks  
Minister Steve Clark, Minister of Municipal Affairs and Housing  
The Association of Municipalities of Ontario  
Andrea Horwath, MPP  
Paul Miller, MPP  
Sandy Shaw, MPP  
Donna Skelly, MPP  
Monique Taylor, MPP  
The Region of Waterloo  
All Municipalities within the Province of Ontario

File C19-016  
(5.1)

## ONTARIO ENERGY BOARD

**IN THE MATTER OF** the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B;

**AND IN THE MATTER OF** an Application by Enbridge Gas Inc. for an Order or Orders approving a new firm transportation service for gas distributors under the rate M17 rate class, effective December 1, 2019;

**AND IN THE MATTER OF** an Application by Enbridge Gas Inc. for an Order or Orders modifying the applicability of the existing Rate M9 and Rate T3 rate schedules for existing gas distributors;

**AND IN THE MATTER OF** an Application by Enbridge Gas Inc. for an Order or Orders granting leave to construct natural gas pipelines and ancillary facilities in in the Municipality of West Grey and the Township of Chatsworth;

**AND IN THE MATTER OF** an Application by Enbridge Gas Inc. for an Order or Orders approving the form of various land agreements.

## APPLICATION

1. Enbridge Gas Distribution Inc. (“EGD”) and Union Gas Limited (“Union”) were Ontario corporations incorporated under the laws of the Province of Ontario carrying on the business of selling, distributing, transmitting, and storing natural gas within the meaning of the Ontario Energy Board Act, 1998 (the “Act”). EGD and Union amalgamated effective January 1, 2019 to become Enbridge Gas Inc. (“Enbridge Gas” or the “Applicant”)
2. Enbridge Gas is applying to the Ontario Energy Board (“the Board”) pursuant to section 36 of the Act for an Order or Orders granting approval of a new M17 firm transportation service for gas distributors. This application is in response to changes in the competition for natural gas distribution in Ontario as a result of the OEB’s Decision with Reasons in its Generic Community Expansion proceeding (EB-2016-0004).
3. Enbridge Gas is proposing the M17 service to EPCOR Southern Bruce Gas Inc. (“EPCOR”) in response to a request to provide transportation to the South Bruce expansion area. In addition to making this service available to other potential new

entrants, existing gas distributors will have the option to take the M17 service. As proposed, the M17 service is to be effective December 1, 2019.

4. To accommodate the new service, Enbridge Gas is seeking Board approval of the proposed M17 rate design and rate schedule found at Exhibit C, Tab 1, Schedule 1, inclusive of Schedule "A" (General Terms and Conditions), Schedule "B" (Nominations) and Schedule "C" (Receipt Locations).
5. Enbridge Gas is also seeking Board approval pursuant to Section 36 of the Act to modify the applicability of the existing Rate M9 and Rate T3 rate schedules for existing gas distributors. Enbridge Gas is proposing to limit the applicability of the Rate M9 and Rate T3 rate schedules to existing gas distributor customers.
6. Enbridge Gas also hereby applies to the Board, pursuant to Section 90 (1) of the Act, for an Order or Orders granting leave to construct approximately 34 kilometres of NPS 12 hydrocarbon natural gas pipeline ("the Project") in the Municipality of West Grey and the Township of Chatsworth, both of which are within the County of Grey.
7. Enbridge Gas also hereby applies to the Board, pursuant to Section 97 of the Act, for an Order approving the form of land agreements found at Exhibit E, Tab 6, Schedule 2.
8. Attached hereto as Exhibit E, Tab 1, Schedule 1, is a map showing the general location of the proposed Project, and associated facilities and the municipalities, and highways through, under, over, upon or across which the pipeline will pass.
9. Enbridge Gas also applies to the Board for such interim Order or Orders approving interim rates or other charges and accounting Orders as may from time to time appear appropriate or necessary. In particular, Enbridge Gas requests the Board hear its application for a new M17 service pursuant to Section 36 of the Act in an expedited fashion in Order to allow for an effective date of December 1, 2019. In the event the Board is not prepared to provide the foregoing, Enbridge Gas requests an interim Order or Orders approving interim rates to allow the M17 service an effective date of December 1, 2019.
10. Enbridge Gas requests approval of the full application, including its Section 90 (1) request specific to the Owen Sound Reinforcement Project, by February of 2020.
11. This application is supported by written evidence. This evidence is pre-filed and will be amended from time to time as required by the Board, or as circumstances may require.

12. The parties affected by this Application are the owners of lands, government agencies and municipalities over which the pipeline will be constructed, and Enbridge Gas's distribution customers. The persons affected by this Application are the customers resident or located in the Municipalities, the First Nation Reserves and Métis organizations served by Enbridge Gas, together with those to whom Enbridge Gas sells gas, or on whose behalf Enbridge Gas distributes, transmits or stores gas. It is impractical to set out in this Application the names and addresses of such persons because they are too numerous.

13. The address for service for Enbridge Gas is:

Enbridge Gas Inc.  
500 Consumers Road  
Toronto, Ontario M2J 1P8  
P.O. Box 650  
Scarborough, Ontario M1K 5E3

Attention: Brandon Ott, Technical Manager, Regulatory Applications  
Telephone: (416) 495-7468  
Email: [brandon.ott@enbridge.com](mailto:brandon.ott@enbridge.com)  
[egiregulatoryproceedings@enbridge.com](mailto:egiregulatoryproceedings@enbridge.com)

-and-

Enbridge Gas Inc.  
500 Consumers Road  
Toronto, Ontario M2J 1P8  
P.O. Box 650  
Scarborough, Ontario M1K 5E3

Attention: Guri Pannu, Legal Counsel  
Telephone: (416) 758-4761  
Fax: (416) 495-5994  
Email: [guri.pannu@enbridge.com](mailto:guri.pannu@enbridge.com)

-and-

Torys  
Suite 3000, TD South Tower  
Box 270  
Toronto, Ontario  
M5K 1N2

Attention: Charles Keizer  
Telephone: (416) 865-7512  
Fax: (416) 865-7380  
Email: [ckeizer@torys.com](mailto:ckeizer@torys.com)

Dated: August 29, 2019

Enbridge Gas Inc.

[original signed by]

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Brandon Ott  
Technical Manager, Regulatory Applications



# ONTARIO ENERGY BOARD NOTICE

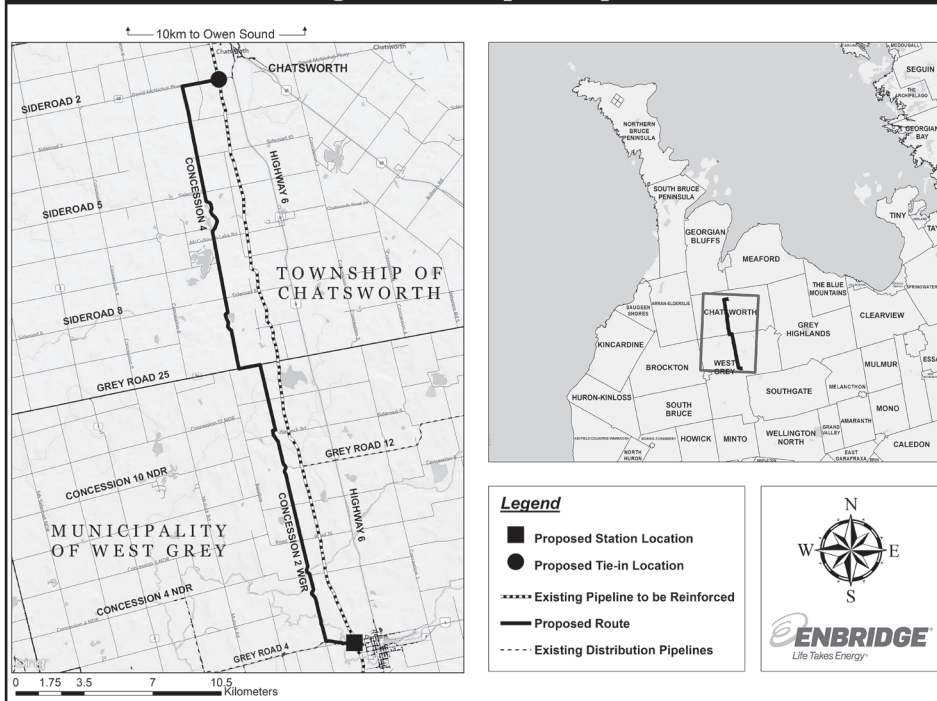
**Enbridge Gas Inc. has applied to the Ontario Energy Board for approval to construct approximately 34 kilometres of natural gas pipeline and associated facilities in the Municipality of West Grey and the Township of Chatsworth, both in the County of Grey.**

**Enbridge Gas Inc. has also applied to introduce a new firm transportation service for gas distributors under Rate M17.**

**Learn more. Have your say.**

If the application is approved as filed, Enbridge Gas Inc. proposes to construct approximately 34 kilometres of new 12-inch diameter natural gas pipeline and associated facilities. A map showing the location of the proposed pipeline is below:

**Enbridge Gas Inc. Proposed Pipeline**



**Enbridge Gas Inc. is also asking the Ontario Energy Board to approve the form of agreements it offers to landowners to use their land for routing or construction of the proposed pipeline and ancillary facilities.**

**Enbridge Gas Inc. says that the pipeline is needed to provide transportation services to the South Bruce expansion area and to respond to forecast growth along the Owen Sound pipeline system.**

**Enbridge Gas Inc. also proposes to introduce a new service for gas distributors effective December 1, 2019. This new service under Rate M17 is proposed to be a firm point-to-point transportation service for existing and new gas distributors in Ontario. Enbridge Gas Inc. is also proposing to modify and limit the applicability of the existing bundled delivery service under Rate M9 and the semi-unbundled storage and transportation service under Rate T3, to existing gas distributor customers.**

**Please review the application carefully for a complete list of approvals and to determine whether you will be affected.**

## THE ONTARIO ENERGY BOARD IS HOLDING A PUBLIC HEARING

The Ontario Energy Board (OEB) will hold a public hearing to consider the application filed by Enbridge Gas. During the hearing, we will question Enbridge Gas on the case. We will also hear questions and arguments from individual consumers, municipalities and others whose interests would be affected. At the end of this hearing, the OEB will decide whether to approve the application.

As part of its review of this application, the OEB will assess Enbridge Gas' compliance with the OEB's Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario.

**The OEB will also assess whether the duty to consult with Indigenous communities potentially affected by the proposed pipeline has been discharged with respect to the application.**

The OEB is an independent and impartial public agency. We make decisions that serve the public interest. Our goal is to promote a financially viable and efficient energy sector that provides you with reliable energy services at a reasonable cost.

## BE INFORMED AND HAVE YOUR SAY

You have the right to information regarding this application and to be involved in the process.

- You can review the application filed by Enbridge Gas on the OEB's website now.
- You can file a letter with your comments, which will be considered during the hearing.
- You can become an active participant (called an intervenor). Apply by **October 21, 2019** or the hearing will go ahead without you and you will not receive any further notice of the proceeding.
- At the end of the process, you can review the OEB's decision and its reasons on our website.

## LEARN MORE

Our file number for this case is **EB-2019-0183**. To learn more about this hearing, find instructions on how to file letters or become an intervenor, or to access any document related to this case, please select the file number **EB-2019-0183** from the list on the OEB website: <http://www.oeb.ca/noticeltc>. You can also phone our Consumer Relations Centre at 1-877-632-2727 with any questions.

## ORAL VS. WRITTEN HEARINGS

There are two types of OEB hearings – oral and written. Enbridge Gas has applied for a written hearing. The OEB is considering this request. If you think an oral hearing is needed, you can write to the OEB to explain why by **October 21, 2019**.

## PRIVACY

*If you write a letter of comment, your name and the content of your letter will be put on the public record and the OEB website. However, your personal telephone number, home address and email address will be removed. If you are a business, all your information will remain public. If you apply to become an intervenor, all information will be public.*

*This hearing will be held under sections 36, 90(1) and 97 of the Ontario Energy Board Act, 1998, S.O. 1998, c.15 (Schedule B).*



Ontario

Ontario Energy Board Commission de l'énergie de l'Ontario

**From:** AMO Communications <Communicate@amo.on.ca>  
**Sent:** Thursday, October 10, 2019 1:23 PM  
**To:** Courtenay Hoytfox  
**Subject:** Province Appoints Advisor for Public Health and Emergency Health Services Consultations

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October 10, 2019

## **Province Appoints Advisor for Public Health and Emergency Health Services Consultations**

The Minister of Health has [announced](#) that Jim Pine is the newly appointed Advisor to lead consultations on the future of Public Health and Emergency Health Services. The 2019 provincial Budget stated that the government is seeking to modernize municipal Public Health and Emergency Health Services. This generated much concern and discussion in the municipal sector.

At the AMO Conference in August, the Minister of Health, the Honourable Christine Elliott, said that a renewed consultation with partner municipalities would occur and that an expert advisor would support this engagement. The Advisor's role is to facilitate discussions between the Ministry of Health, AMO and public health, emergency health, and municipal stakeholders.

[Jim Pine](#) is the Chief Administrative Officer (CAO) of the County of Hastings. He is also a former member of the Board of Directors of the Association of Municipalities of Ontario. Given his extensive municipal background, AMO is pleased with Minister Elliott's choice. Jim is well-known and well-respected in the municipal sector. AMO looks forward to working with him in his new role along with the government to get this right.

Throughout the consultations, AMO will bring forward practical solutions that work best for municipal residents and municipal governments to fix what needs fixing and preserve what works well. We understand that the province is entering this consultative process openly, transparently and without pre-determined outcomes. They have committed to listening to municipal leaders, the public health and

emergency health services sectors, and others to inform the design and implementation of reform to public health and emergency health services.

AMO, with the assistance of our Public Health Technical Working Group, has examined the Auditor General's 2017 recommendations to seek to address the identified problems from her audit on chronic disease prevention. Regarding Emergency Health Services, it is our advice that dispatch communications improvements must be made first, before any discussion on potentially restructuring the paramedic services happens. We understand the government has heard our and our members' advice on these significant matters.

AMO is providing advice to the Advisor and the Ministry of Health on how best to proceed with constructive consultations. We are hopeful that we, our members and our partners will learn more about this consultation process shortly, starting with the official launch of the consultations.

**AMO Contact:**

Monika Turner, Director of Policy, [mturner@amo.on.ca](mailto:mturner@amo.on.ca), 416.971.9856 ext. 318.

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



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## **REPORT FIN-2019-031**

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TO: Mayor and Members of Council

FROM: Mary Hasan, Director of Finance/Treasurer

MEETING DATE: October 16, 2019

SUBJECT: 2020 User Fees and Charges By-law  
File No. C01 FEE

---

### **RECOMMENDATIONS**

**THAT Report FIN-2019-031 regarding the 2020 User Fees and Charges By-law be received; and**

**That Council enact a by-law to adopt the User Fees and Charges By-law in accordance with the By-law attached as Schedule A to Report FIN-2019-031.**

### **DISCUSSION**

#### **Purpose**

The purpose of this report is to:

- 1.) Report on the results of the Public Meeting held on September 12, 2019 as it relates to the 2020 Proposed User Fees and Charges.
- 2.) Provide updates to the User Fees and Charges By-law based on further information received after the Public Meeting.
- 3.) Seek approval from Council to enact the 2020 User Fees and Charges By-law.

#### **Background**

A Public Meeting was held on September 12, 2019 at 7:00 pm at the Municipal Office to obtain public input on the proposed 2020 User Fees and Charges By-law.

There were no comments raised at the public meeting regarding suggested updates to the by-law.

## Staff Recommendations

### Canadian Radiocommunications Information and Notification Services (CRINS-SINRC)

In accordance with Council Resolution No. 2019-314, it is recommended that a combined application fee of \$2,293 where \$543 is remitted to the Township to cover administration costs and \$1,750 is remitted to CRINS for telecommunication tower proposals. Exempt applications would not be subject to a Township administration fee of \$543 or CRINS fee of \$1,750.

### Property Standards Appeal Fee

In accordance with Report ADM-2018-032 and the proposed Property Standards By-law, an owner who has been served with an order made under the proposed Property Standards By-law and Building Code Act may appeal to the Planning Development Advisory Committee within 14 days after being served with the order.

Township staff recommend that a Property Standards Appeal Fee be established in the proposed User Fees and Charges By-law. Outlined below are the property standards appeal fees for comparator municipalities:

- Cambridge - \$200
- Guelph/Eramosa - \$200
- Hamilton - \$137.17
- Mapleton - \$150
- Minto - \$300
- Milton - \$565

It is recommended that the Township establish a fee of \$260.

### Planning Fees – Zoning By-law Amendment, Minor Variance, and Site Plan Approval

The County of Wellington conducted a full planning application fees review (through Watson & Associates) at the end of 2018 to alter the County's fees to move towards full cost recovery for the planning review services completed by the County for its member municipalities. The County's proposed fees will be reported to County Council on October 31, 2019. Outlined below are the proposed new County fees for specific review services effective January 1, 2020:

- Minor Variance - \$4,090
  - County staff are recommending that there be wording in the Planning User Fees and Charges By-law which provides the Director of Planning and Development with the discretion to reduce or eliminate minor variance application charges

where staff involvement is minimal based on the nature of the variance being requested.

- Site Plan Approval - \$2,280
- Zoning By-law Amendment - \$6,580
  - actual average County invoiced costs to the Township (for County staff time and meeting attendance) from 2014 to 2018 for 21 applications amounted to an average of \$893)

In 2019, the Township budgeted an amount of \$3,000 for the County's planning services related to Zoning By-law Amendment applications (ie. meeting attendance and report preparation).

Based on the general ledger module of Keystone, the number of applications that the Township received for the above planning matters in 2018 and 2019 are outlined below:

- Minor Variances
  - 2018 – 19
  - 2019 year to date - 23
- Site Plan Application and Agreement – Minor
  - 2018 - 2
  - 2019 year to date - 0
- Site Plan Application and Agreement – Standard
  - 2018 - 1
  - 2019 year to date - 1
- Zoning By-law Amendment – Minor
  - 2018 - 4
  - 2019 year to date – 2
- Zoning By-law Amendment – Standard
  - 2018 - 0
  - 2019 year to date - 2

Schedule B to Report FIN-2019-031 incorporates the comparator municipality data for minor variances, site plans, and zoning by-law amendments. In addition to the comparator municipalities noted in Schedule B, Oakville charges a rate of \$3,500 for minor variances and Richmond Hill charges a rate of \$4,118 for minor variances. Please note, the majority of the local municipalities within the County of Wellington were not included in the comparator data for zoning by-law amendments and site plans as these municipalities are currently invoicing applicants for third party disbursement and consultant costs.

The table below provides a comparison of the 2019 Township fee, 2020 proposed fee inclusive of the County's recommended fee, and the average fee noted in Schedule B to Report FIN-2019-031:

		2019 - Township	2020 - Township	2020 - County	2020 - Total	Average – Sch. B
Minor Variance	Flat Fee	\$706	\$721	\$4,090	\$4,811	\$1,594
Site Plan Application and Agreement - Minor	Flat Fee	\$10,850	\$11,067	\$2,280	\$13,347	\$9,712
Site Plan Application and Agreement – Standard	Flat Fee	\$20,600	\$21,012	\$2,280	\$23,292	\$18,818
Zoning By-Law Amendment - Minor	Flat Fee	\$5,000	\$5,100	\$6,580	\$11,680	\$9,588
Zoning By-Law Amendment - Standard	Flat Fee	\$11,200	\$11,424	\$6,580	\$18,004	\$16,403

The Township implemented a flat fee structure for Standard and Minor Zoning By-law Amendments in 2016. The Township implemented a flat fee structure for Standard and Minor Site Plan Application and Agreements in 2018. This structure provides applicants with an understanding of the total fees payable to the Township for the processing of these planning applications including administration of the agreement (applicable for site plans). The fees recommended were determined based on estimates of the actual costs incurred for processing these applications and agreements.

## Tents

A concern was expressed by a resident regarding the cost and inspection process associated with tent permits.

Tents and air-supported structures shall be in conformance with the Building Code and the Fire Code.

The Township's current practice is that 40% of the fee obtained is transferred to the Fire & Rescue Services department for the inspection work required to ensure that tents are in conformance with the Fire Code. The Fire Chief and the Chief Fire Prevention Officer have indicated that the department only inspects for fire related issues (ie. commercial cooking, open flames, combustible materials, etc.) and that the majority of tent inspections are completed by the Building Department.

Previously, a permit holder was required to call the Township office for an inspection to finalize the tent permit. The Customer Service area now proactively books the inspection for a tent permit on the Friday prior to the permit holder's event.

Outlined below are the comparator municipality fees for tents:

- Cambridge - \$172
- Centre Wellington - \$87 (per hour)
- Erin - \$200
- Guelph/Eramosa - \$350
- Guelph - \$210
- Hamilton - \$1.85/m<sup>2</sup> (maximum of \$393)

- Milton - \$234.60
- Minto - \$138
- Wellington North - \$130
- Average - \$213

It is recommended that the fee be reduced to \$213 and that the Township no longer allocate 40% of the fee to the Fire & Rescue Services department as the Building Department will be responsible for conducting the inspections and ensuring the fire code provisions are being met.

### **Puslinch Community Centre (PCC) – Non-Resident Rentals**

Report FIN-2019-027 – 2020 Proposed User Fees and Charges outlined the following:

*Of the Township's 1,210 customers within the Facility Scheduler Module of Keystone, 844 or 70% of the renters have a non-Puslinch mailing address.*

*It is recommended that the Township implement a surcharge of 10% for non-resident rentals at the PCC. This enables the Township to obtain a sustainable source of funding as it relates to required staffing resources, ongoing upkeep and maintenance of the facility, and future asset replacement/restoration.*

*Implementing a surcharge of 10% is more in line with comparator municipalities as outlined below:*

- *Milton – Surcharge of 10%*
- *Guelph – Surcharge of 15%*
- *Hamilton – Surcharges ranging from 50% to 67% for commercial and non-resident facility rentals*

At the Public Meeting for the Proposed 2020 User Fees and Charges By-law held on September 12 2019, Township staff recommended that the surcharge be a minimum of 10% and up to 25% upon consideration from Council. Township staff recommend a surcharge of 25% which is more in line with the average from the comparator municipalities as outlined above. The proposed by-law attached as Schedule A to this Report incorporates a surcharge of 25%.

### **PCC - Commercial Rentals**

Report FIN-2019-027 – 2020 Proposed User Fees and Charges outlined the following:



*It is recommended that the Township implement a surcharge of 10% on commercial rentals (ie. auctions, sale of merchandise) at the PCC. The previous user fee by-law incorporated a fee of \$781.85 (net of HST) for commercial rentals.*

*Implementing a surcharge of 10% is more in line with comparator municipalities as outlined below:*

- *Milton – Surcharge of 10%*
- *Guelph – Surcharge of 12.5%*
- *Hamilton – Surcharges ranging from 50% to 67%*

At the Public Meeting for the Proposed 2020 User Fees and Charges By-law held on September 12 2019, Township staff recommended that the surcharge be a minimum of 10% and up to 25% upon consideration from Council. Township staff recommend a surcharge of 25% which is more in line with the average from the comparator municipalities as outlined above. The proposed by-law attached as Schedule A to this Report incorporates a surcharge of 25%.

A concern was expressed by a resident regarding the commercial rental rate charged for a holiday sales event that the renter held selling home based business items (ie. knit hats, wreaths, bath bombs, etc.). The resident also expressed concern that the Aberfoyle Potters Market did not rent the PCC due to the commercial rental fee being charged.

With the proposed 25% surcharge, the full day commercial rental fee in the PCC during prime times (ie. Friday and Saturday) decreases to \$635.91 (net of HST) in 2020 (2019 - \$781.85).

### **Recreation Committee Recommendations**

The Recreation Committee received Report FIN-2019-027 – 2020 Proposed User Fees and Charges for information at its meeting held on September 24, 2019.

There were no comments raised regarding suggested updates to the by-law.

### **FINANCIAL IMPLICATIONS**

The fees approved as part of the User Fees and Charges By-law will be incorporated in the 2020 Operating Budget.

### **APPLICABLE LEGISLATION AND REQUIREMENTS**

Section 391(1) of the Municipal Act

Section 7(1) of the Building Code Act

Section 69 of the Planning Act

**ATTACHMENTS**

Schedule A: Proposed User Fees and Charges By-law

Schedule B: Planning and Development – Comparator Municipal Data Effective 2019

**THE CORPORATION OF THE TOWNSHIP OF PUSLINCH**

**BY-LAW NO XXX-2019**

A by-law to permit the Municipality to impose fees or charges with respect to services or activities provided, related costs payable, and for the use of its property, and to repeal By-law 056-2018.

**WHEREAS** Section 391(1) of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, a municipality may pass By-laws imposing fees or charges for services or activities provided or done by or on behalf of it, for costs payable by it for services or activities provided or done by or on behalf of any other municipality or any local board, and for the use of its property including property under its control; and

**WHEREAS** Section 7(1) of the Building Code Act, 1992, S.O. 1992, c. 23, as amended, provides that a municipality may pass By-laws imposing fees and charges; and

**WHEREAS** Section 69 of the Planning Act, R.S.O. 1990, c.P.13, as amended provides that the Council of a municipality may by By-law establish a tariff of fees for the processing of applications made in respect of planning matters; and

**WHEREAS** The Council of the Corporation of the Township of Puslinch deems it appropriate to update the Township's User Fees and Charges By-law.

**NOW THEREFORE** the Council of the Corporation of the Township of Puslinch enacts as follows:

1. For the purpose of this By-law:
  - a.) **"Cost(s)"** means any and all disbursements incurred by the municipality, and includes, but is not restricted to, any registration costs, title search costs, corporate search costs, survey costs, reference plan costs, advertising costs, outside counsel fees, paralegal fees, site inspection costs and any applicable taxes;
  - b.) **"Property Owner(s)"** include the registered owner(s) of property or any person, firm or corporation having control over or possession of the property or any portion thereof, including a property manager, mortgagee in possession, receiver and manager, trustee and trustee in bankruptcy;
  - c.) **"Township"** means the Corporation of the Township of Puslinch.
2. The fees, **costs** and charges, as outlined in the schedules attached hereto and forming part of this By-law shall be automatically adjusted annually based on the Consumer Price Index inflation rate as outlined in the Ontario Budget in accordance with Council Resolution No. 2019-298.
3. Any person requesting, applying or utilizing the services, applications or approvals listed in the attached schedules and forming part of this By-law shall pay the fees listed for that service, application or approval as set out in the attached schedules.
4. These fees, **costs**, and charges are applicable to residents and non-residents at the rates noted unless there is a specified exemption in the attached schedules.
5. No request by any person for a service, application or approval listed in the attached schedules shall be acknowledged or performed by the **Township** unless and until the person requesting the service, application or approval has paid the fees, **costs** or charges as set out in the attached schedules, unless noted otherwise.
6. All **Township** accounts and invoices are due and payable when rendered.
7. All unpaid fees, **costs** or charges imposed by this By-law on a person constitute

a debt of the person to the **Township**.

8. The Treasurer shall add the fees, **costs** and charges imposed pursuant to this By-law to the tax roll for any property in the **Township** for which all of the **property owners** are responsible for paying the fees, **costs** and charges under this By-law and collect them in the same manner as municipal taxes in accordance with Section 398 of the Municipal Act, 2001, S.O. 2001, c. 25 as amended.
9. If peer or legal review **costs** are incurred by the **Township** in the processing of an application or approval by the **Township**, the applicant is required to pay these **costs** to the **Township**.
10. The **Township** is not obligated to further process an application or approval until all outstanding third party **costs**, fees and other disbursements have been paid by the applicant.
11. The fees, **costs** and charges listed in the schedules to this By-law shall, where applicable, be subject to any applicable provincial and federal taxes.
12. Any fee, **cost** or charge:
  - a. authorized by a by-law that comes into effect on the same or a later date than this By-law; or
  - b. included in a valid agreement entered into by the **Township** and one or more other parties,
 shall be the approved and imposed fee, **cost** or charge for the service, activity or use of property specified.
13. The payment of any fee, **cost** or charge in this By-law shall be in Canadian currency.
14. The following Schedules form part of this By-law:

<b>Schedule</b>	<b>Department</b>
A	Administration
B	Finance
C	Corporate
D	Public Works
E	Fire and Rescue Services
F	Building
G	Planning and Development
H	By-law
I	Parks
J	Optimist Recreation Centre
K	Puslinch Community Centre

15. The fees, **costs** and charges, as outlined in the schedules attached hereto and forming part of this By-law, shall be implemented and take effect on January 1, 2020.

**Cancellation Terms – Parks, Optimist Recreation Centre, Puslinch Community Centre**

16. A refund of 80 percent will be provided where 30 days' notice of cancellation is given for Puslinch Community Centre rentals.
17. A full refund will be provided where 72 hours or 3 days' notice of cancellation is given for Parks and Optimist Recreation Centre rentals.

**Payment Terms – Parks, Optimist Recreation Centre, Puslinch Community Centre**

18. One-Time Rentals - Payment is required within seven days of contract creation.

19. Recurring Rentals Throughout the Year - Payment is required on a quarterly basis. The first payment is required within seven days of contract creation. Future payments are required quarterly.
20. Recurring Seasonal Bookings - Payment is required in two instalments. The first payment is required within seven days of contract creation. The second payment is required halfway through the season.

### **Exemptions, Fee Waivers, Fee Reductions**

21. Government organizations are exempt from the agreement fees imposed by this By-law.
22. The Optimist Club of Puslinch is exempt from the photocopy fees imposed by this By-law for **Township** Clean-up and Remembrance Day.
23. The following events are exempt from the rental fees imposed by this By-law:
- a. Fall Fair
  - b. Santa Claus Parade
  - c. Canada Day
  - d. Family Day
  - e. Remembrance Day
24. The Winter Classic Tournament held during the Family Day Long Weekend is exempt from the payment of rental fees with the exception of part-time staffing **costs** including bartenders.
25. The following requests are not eligible for a fee reduction or waiver:
- a. Religious services
  - b. Licences, development charges, cash in lieu of parkland, building permits, inspections, insurance, personnel costs
26. Eligible organizations can obtain one complimentary two-hour room rental for one meeting during non-prime times in the Meeting Room.
27. Usage of **Township** property must comply with the **Township's** requirements including necessary insurance, permits and approvals within the required timelines.
28. Reduced rates are not offered during prime-time for facilities or parks that have a prime-time and non-prime time rate.
29. A 75% reduced rate shall apply to organizations that meet the eligibility criteria.
30. A 90% reduced rate shall apply to Seniors' Events or Programs.
31. A 90% reduced rate shall apply to Whistle Stop Co-operative Pre-school and Guelph Community Health Centre (Playgroup).

### **Reduced Rate Eligibility Criteria**

32. Organizations applying for a reduced rate must meet the following eligibility criteria:
- a. Be in existence for at least one year; and
  - b. have its principal address in the **Township**; and
  - c. be a not-for-profit organization or an unincorporated community group; and
  - d. offer services that benefit the **Township** and its residents; and
  - e. be in good financial standing with the **Township** and not in litigation with the **Township**; and
  - f. be in compliance with any other **Township** by-laws and policies.

For the purposes of this By-law, Puslinch Minor Sports Organizations, Puslinch Religious Organizations, Guelph Community Health Centre (The Playgroup), YMCA/YWCA of Guelph, and the Aberfoyle Agricultural Society are deemed to meet the eligibility criteria.

33. For the purposes of this By-law, services that benefit the **Township** and its residents include:

- a. Charitable community services
- b. Artistic endeavours, including literature, dance, music, theatre, painting, sculpture, movies, photography and live performances
- c. Specific cultural and heritage activities
- d. Programs that improve the health and well-being of the community
- e. Programs that encourage participation in organized athletic activities
- f. Services or events directed for youth and older adults
- g. Public safety enhancement services

34. The following organizations are not eligible for a reduced rate:

- a. Adult sports organizations ie. Old Timers, Puslinch Kodiak's, Morriston Men's League, The Aberfoyle Dukes.
- b. County, Provincial and Federal organizations.
- c. Groups or organizations affiliated with any political party or event.
- d. Individuals, commercial organizations, and coalitions such as ratepayer associations.
- e. Hospitals, hospital foundations and hospital auxiliary groups or agencies.
- f. Educational institutions including universities, colleges, schools and associated auxiliary groups.

35. The following information will be required to review an organization's eligibility:

- a. A copy of the letters patent or articles of incorporation, if applicable.
- b. A copy of its Notification of Charitable Registration letter from the Canada Revenue Agency with any supporting documentation indicating the organization's status and terms of registration, if applicable.
- c. A copy of mandate, constitution and by-laws, as applicable.

36. Should any part of this By-law including any part of the schedules, be determined by a Court of competent jurisdiction to be invalid or of no force and effect, such invalid part of the By-law shall be severable and that the remainder of this By-law including the remainder of the Schedules, as applicable, shall continue to operate and to be in force and effect.

37. This By-law shall be known as the "User Fees and Charges By-law".

38. That By-law No. 056/18 is hereby repealed, effective January 1, 2020.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 5<sup>th</sup> DAY OF NOVEMBER 2019.**

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James Seeley, Mayor

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Patrick Moyle, CAO/Clerk

**SCHEDULE A: ADMINISTRATION REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Agreements - Major - Not Registered</b>	Flat Fee	\$500.00	<b>\$510.00</b>	\$0.00	\$510.00	2%	E	For recovery of the costs of facilitating and preparing agreements, ie. a lease agreement on Township lands.
<b>Agreements - Minor - Not Registered</b>	Flat Fee	\$250.00	<b>\$255.00</b>	\$0.00	\$255.00	2%	E	For recovery of the costs of facilitating and preparing agreements, ie. miscellaneous agreements.
<b>Agreements - Registered</b>	Flat Fee	\$765.00	<b>\$780.00</b>	\$0.00	\$780.00	2%	E	For recovery of the costs of facilitating and preparing agreements, ie. an encroachment agreement or a conditional building permit.
<b>Freedom of Information</b>	Charged at the rate permitted per the legislation.						E	Regulated by Statute - See Report FIN-2017-024.
<b>Signature of Commissioner</b>	Per Document	\$20.00	<b>\$20.40</b>	\$2.65	\$23.05	2%	T	

**SCHEDULE B: FINANCE REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
NSF Cheque	Per NSF	\$40.00	\$40.00	\$0.00	\$40.00	0%	E	
Tax Certificate	Per Certificate	\$60.00	\$60.00	\$0.00	\$60.00	0%	E	
Tax Sale Charges		Actual costs incurred	Actual costs incurred			0%	T	Cost recovery of fees and disbursements as charged by consultants and solicitors.
Tender Fees	Per Package	\$40.00	\$40.80	\$0.00	\$40.80	2%	E	Tender fees applicable for projects administered by the Township's consultants.
Service Fee - Debit Card Transactions - Online	Total Transaction Amount	0.75 Percent	0.75 Percent			0%	E	In accordance with Visa and Mastercard merchant rules.
Service Fee - Credit Card Transactions - Online	Total Transaction Amount	1.75 Percent	1.75 Percent			0%	E	In accordance with Visa and Mastercard merchant rules.
Tile Drainage Loan Application and Inspection Fee	Flat Fee	\$200.00	\$204.00	\$0.00	\$204.00	2%	E	See Report FIN-2018-028



**SCHEDULE C: CORPORATE REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

<b>TYPE OF REVENUE/USER</b>	<b>Unit/Descr</b>	<b>2019 RATE (NO TAX)</b>	<b>2020 RATE (NO TAX)</b>	<b>13% HST</b>	<b>RATE INCL HST</b>	<b>% CHANGE</b>	<b>HST STATUS</b>	<b>COMMENTS</b>
<b>Canadian Flag</b>	Per Flag	\$22.12	N/A					See Report FIN-2019-027
<b>Photocopy</b>	Per Page	\$0.25	<b>\$0.26</b>	\$0.03	\$0.29	4%	T	Photocopy fees are exempt for Township Clean-up and Remembrance Day in accordance with Council Resolution No. 2017-363.
<b>Township Flag</b>	Per Flag	\$44.25	N/A					See Report FIN-2019-027

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**SCHEDULE D: PUBLIC WORKS REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Entrance Permit - Commercial/Industrial</b>	Flat Fee	See below	<b>\$400.00</b>	\$0.00	\$400.00	67%		See Report FIN-2019-027
<b>Entrance Permit - Farm Field</b>	Flat Fee	See below	<b>\$200.00</b>	\$0.00	\$200.00	-17%		See Report FIN-2019-027
<b>Entrance Permit - Residential</b>	Flat Fee	\$235.00	<b>\$240.00</b>	\$0.00	\$240.00	2%	E	See Report FIN-2019-027
<b>Oversize-Overweight Load Permits</b>	Per Trip	\$100.00	<b>\$102.00</b>	\$0.00	\$102.00	2%	E	
<b>Third Party Cost Recovery</b>	Actual costs incurred + \$100.00 administration fee						T	Material, equipment, labour/benefits, and administration costs.

**SCHEDULE E: FIRE AND RESCUE SERVICES REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Boarding or Barricading Plus Materials</b>	Per Hour Per Truck	\$465.42	<b>\$477.00</b>	\$0.00	\$477.00	2%	E	Fee is in accordance with the Standard MTO Rate.
<b>Burning Permit Violations or Unauthorized Open Air Burning</b>	Per Hour Per Truck	\$465.42	<b>\$477.00</b>	\$0.00	\$477.00	2%	E	Emergency responses to illegal burning or burning without a permit. Fee is in accordance with the Standard MTO Rate.
<b>Carbon Monoxide Alarms</b>	Per Alarm	N/A	<b>\$19.75</b>	\$2.57	\$22.32	100%	T	See Report FIN-2019-027
<b>Daycare &amp; Home Daycare Inspections</b>	Per Inspection	\$100.00	<b>\$102.00</b>	\$13.26	\$115.26	2%	T	As mandated in the Fire Code.
<b>Emergency Responses to Incidents such as Collisions/Fires/Hazardous Material Releases on Roadways</b>	Per Hour Per Truck	\$465.42	<b>\$477.00</b>	\$0.00	\$477.00	2%	E	Township residents are exempt from payment of fee for emergency responses where emergency occurs on a Township of Puslinch or County of Wellington Road. Fee is in accordance with the Standard MTO Rate.
<b>Fire Alarm False Alarm Calls</b>	Per Hour Per Truck	\$465.42	<b>\$477.00</b>	\$0.00	\$477.00	2%	E	A false alarm call after the second false alarm in any calendar year. Fee is in accordance with the Standard MTO Rate.
<b>Fire Extinguisher Training</b>	Per Person	\$15.00	<b>\$15.30</b>	\$1.99	\$17.29	2%	T	
<b>Fire Safety Plan Review</b>	Per Plan	\$120.00	<b>\$122.00</b>	\$15.86	\$137.86	2%	T	
<b>Industrial/Commercial/Institutional/Assembly/Apartment</b>	Base Inspection	\$100.00	<b>\$102.00</b>	\$13.26	\$115.26	2%	T	Any inspections completed by the fire department that are new, complaint driven, requested or mandated.
<b>Industrial/Commercial/Institutional/Assembly/Apartment</b>	Plus each tenant/occupant/apartment unit	\$25.00	<b>\$25.50</b>	\$3.32	\$28.82	2%	T	Any inspections completed by the fire department that are new, complaint driven, requested or mandated.
<b>Information or Fire Reports</b>	Per Report	\$75.00	<b>\$76.50</b>	\$0.00	\$76.50	2%	E	Requested for emergency incidents.
<b>Key Boxes</b>	Per Box	\$100.00	<b>\$102.00</b>	\$13.26	\$115.26	2%	T	For rapid entry for firefighters.
<b>Occupancy Load</b>	Flat Fee	\$100.00	<b>\$102.00</b>	\$0.00	\$102.00	2%	E	
<b>Open Air Burning Permit Inspection Fee</b>	Per Inspection	\$40.00	<b>\$40.80</b>	\$5.30	\$46.10	2%	T	As a result of a request to modify the terms and conditions of the Open Air Burning Permit.
<b>Open Air Burning Permit</b>	Per Permit	\$20.00	<b>\$20.40</b>	\$0.00	\$20.40	2%	E	Permit must be renewed annually.
<b>Post Fire Watch</b>	Per Hour per Truck	\$465.42	<b>\$477.00</b>	\$0.00	\$477.00	2%	E	Fee is in accordance with the Standard MTO Rate.

**SCHEDULE E: FIRE AND RESCUE SERVICES REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Replacement of Equipment and Resources Used</b>	Actual costs incurred	Actual costs incurred	<b>Actual costs incurred</b>			0%	T	Materials used in emergency responses.
<b>Sale of Fireworks Permit</b>	Per Permit	\$100.00	<b>\$102.00</b>	\$0.00	\$102.00	2%	E	
<b>Setting Off or Discharge of High Hazard Fireworks Permit</b>	Per Permit	\$100.00	<b>\$102.00</b>	\$0.00	\$102.00	2%	E	
<b>Smoke Alarms</b>	Per Alarm	N/A	<b>\$7.30</b>	\$0.95	\$8.25	100%	T	See Report FIN-2019-027
<b>Water Tank Locks</b>	Per Lock	\$17.80	<b>\$18.16</b>	\$2.36	\$20.52	2%	T	For locking water tank lids closed.
<b>Special Events</b>	No fee at this time							Requests for Attendance.
<b>Authorized Requester Agreement - Search Fee</b>	No fee at this time							Standard information product per record search fee - See Report FIN-2017-024.

Draft

**SCHEDULE F: BUILDING REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
Minimum Permit Fee	Flat Fee	\$156.00	<b>\$159.00</b>	\$0.00	\$159.00	2%	E	For all work unless otherwise noted
<b><u>NEW BUILDING, ADDITIONS, MEZZANINES</u></b>								
<b><u>Group A &amp; B: Assembly &amp; Care and Detention Buildings</u></b>								
Shell	Per Sq. Foot	\$2.40	<b>\$2.45</b>	\$0.00	\$2.45	2%	E	See Report FIN-2017-024
Finished	Per Sq. Foot	\$2.71	<b>\$2.77</b>	\$0.00	\$2.77	2%	E	See Report FIN-2017-024
<b><u>Group C: Residential Buildings</u></b>								
Houses, Townhouses, and Apartments	Per Sq. Foot	\$1.92	<b>\$1.97</b>	\$0.00	\$1.97	2%	E	
Manufactured Home	Per Sq. Foot	\$1.46	<b>\$1.49</b>	\$0.00	\$1.49	2%	E	
Garage/carport/shed/boathouse	Per Sq. Foot	\$0.78	<b>\$0.79</b>	\$0.00	\$0.79	1%	E	See Report FIN-2018-028
Deck, porch, dock	Flat Fee	\$156.00	<b>\$159.00</b>	\$0.00	\$159.00	2%	E	
<b><u>Group D &amp; E: Business and Personal Service and Mercantile Buildings</u></b>								
Shell	Per Sq. Foot	\$1.85	<b>\$1.89</b>	\$0.00	\$1.89	2%	E	See Report FIN-2017-024
Finished	Per Sq. Foot	\$2.15	<b>\$2.20</b>	\$0.00	\$2.20	2%	E	See Report FIN-2017-024
<b><u>Group F: Industrial Buildings</u></b>								
Shell	Per Sq. Foot	\$0.75	<b>\$0.76</b>	\$0.00	\$0.76	1%	E	See Report FIN-2017-024
Finished	Per Sq. Foot	\$0.95	<b>\$0.97</b>	\$0.00	\$0.97	2%	E	See Report FIN-2017-024
<b><u>Farm Buildings</u></b>								
New Building	Per Sq. Foot	\$0.30	<b>\$0.31</b>	\$0.00	\$0.31	3%	E	See Report FIN-2017-024
<b><u>INTERIOR FINISHES AND ALTERATIONS - ALL CLASSIFICATIONS</u></b>								
Finishes to all areas	Per Sq. Foot	\$0.52	<b>\$0.53</b>	\$0.00	\$0.53	2%	E	
<b><u>SEWAGE SYSTEMS</u></b>								
New Installation	Flat Fee	\$624.00	<b>\$636.00</b>	\$0.00	\$636.00	2%	E	
Replacement or alteration	Flat Fee	\$468.00	<b>\$477.00</b>	\$0.00	\$477.00	2%	E	
<b><u>ALTERNATIVE SOLUTIONS</u></b>								
All buildings/systems within scope of Part 9	Flat Fee	\$500.00	<b>\$510.00</b>	\$0.00	\$510.00	2%	E	See Report FIN-2017-024
All buildings/systems within scope of Part 3	Flat Fee	\$1,000.00	<b>\$1,020.00</b>	\$0.00	\$1,020.00	2%	E	See Report FIN-2017-024
<b><u>SPECIAL CATEGORIES AND MISCELLANEOUS</u></b>								
Change of Use Permit (No Construction)	Flat Fee	\$200.00	<b>\$204.00</b>	\$0.00	\$204.00	2%	E	See Report FIN-2017-024
Construction prior to issuance of a permit	100% of permit fee	100% of permit fee	<b>100% of permit fee</b>			0%	E	Fee is in addition to all other required permit fees.
Conditional Permits	20% of permit fee	20% of permit fee	<b>20% of permit fee</b>			0%	E	Fee is in addition to all other required permit fees.
Demolition Permit	Flat Fee	\$156.00	<b>\$159.00</b>	\$0.00	\$159.00	2%	E	
Designated Structure Permit	Flat Fee	\$416.00	<b>\$424.00</b>	\$0.00	\$424.00	2%	E	Listed per Div.A, 1.3.1.1 Solar installation
Fireplace/Woodstove	Flat Fee	\$156.00	<b>\$159.00</b>	\$0.00	\$159.00	2%	E	

**SCHEDULE F: BUILDING REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
Inspection of works not ready	Flat Fee	\$156.00	<b>\$159.00</b>	\$0.00	\$159.00	2%	E	At the discretion of the Chief Building Official. Includes code violations and deficiencies.
Occupancy Permit	Flat Fee	\$156.00	<b>\$159.00</b>	\$0.00	\$159.00	2%	E	
Occupancy without an Occupancy Permit	Flat Fee	\$250.00	<b>\$255.00</b>	\$0.00	\$255.00	2%	E	At the discretion of the Chief Building Official. This fee is not imposed as it relates to the current initiative of closing old open building permits as approved by Council in the 2018 Budget.
Portables	Flat Fee	\$200.00	<b>\$204.00</b>	\$0.00	\$204.00	2%	E	
Reproduction of Drawings	Flat Fee	\$50.00	<b>\$51.00</b>	\$6.63	\$57.63	2%	T	Current rate covers costs for the reproduction of black and white drawings.
Revision to Approved Plans	Flat Fee	\$312.00	<b>\$318.00</b>	\$0.00	\$318.00	2%	E	Before or after a permit is issued - significant changes to approved plans requiring further review. Minor revisions which result in no fee include eliminating a closet, finishing a three-piece bathroom, cosmetic changes, layout changes, removing non-load bearing walls, etc.
Sign Permits	Flat Fee	\$260.00	<b>\$265.00</b>	\$0.00	\$265.00	2%	E	With building permit
Storefront replacement	Flat Fee	\$200.00	<b>\$204.00</b>	\$0.00	\$204.00	2%	E	
Tents	Flat Fee	\$260.00	<b>\$213.00</b>	\$0.00	\$213.00	-18%	E	Tents and air-supported structures shall be in conformance with the Building Code and Section 2.9 of the Fire Code. Report FIN-2019-031
Transfer of Permit	Flat Fee	\$156.00	<b>\$159.00</b>	\$0.00	\$159.00	2%	E	

**INTERPRETATION**

The following requirements are to be applied in the calculation of permit fees:

- Floor area of the proposed work is to be measured to the outer face of exterior walls and to the centre line of party walls or demising walls.
- Unfinished loft space, habitable attics, mezzanines and interior balconies are to be included in all floor area calculations.
- Unfinished basement space and attached residential garages are not included in floor area calculations.
- The occupancy categories in this Schedule correspond with the major occupancy classifications in the Ontario Building Code. For multiple occupancy floor areas, the permit fees for each of the applicable occupancy categories may be used.
- In the case of interior alterations or renovations, area of proposed work is the actual space receiving the work, e.g. tenant suite.
- Additional permit fees are not required for an attached deck to a residential dwelling, when the deck is shown on the approved residential building plans.
- For classes of permits not described in this Schedule, a reasonable permit fee shall be determined by the Chief Building Official.

**SCHEDULE G: PLANNING AND DEVELOPMENT REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Agreements - Minor - Not Registered</b>	Flat Fee	\$250.00	<b>\$255.00</b>	\$0.00	\$255.00	2%	E	For recovery of the costs of facilitating and preparing agreements, ie. permission to have a second dwelling while another is being built.
<b>Agreements - Registered</b>	Flat Fee	\$765.00	<b>\$780.00</b>	\$0.00	\$780.00	2%	E	For recovery of the costs of facilitating and preparing agreements, ie. garden suite agreements, maintenance and operations agreement, an amendment to a site plan or subdivision or condominium agreement. Excludes new site plan, subdivision or condominium agreements.
<b>Compliance Letter</b>	Flat Fee	\$75.00	<b>\$76.50</b>	\$0.00	\$76.50	2%	E	Fee charged is consistent for all Township departments.
<b>Consent Review and Condition Clearance *</b>	Flat Fee	\$134.00	<b>\$137.00</b>	\$0.00	\$137.00	2%	E	
<b>Lifting of Holding Designation (Zoning)</b>	Flat Fee	\$586.00	<b>\$598.00</b>	\$0.00	\$598.00	2%	E	
<b>Minor Variance - Township of Puslinch</b>	Flat Fee	\$706.00	<b>\$721.00</b>	\$0.00	\$721.00	2%	E	
<b>Minor Variance - County of Wellington</b>	Flat Fee	N/A	<b>\$4,090.00</b>	\$0.00	\$4,090.00	100%	E	Report FIN-2019-031
<b>Ownership List Confirmation</b>	Flat Fee	N/A	<b>\$70.00</b>	\$0.00	\$70.00	100%	E	See Report FIN-2019-027
<b>Part Lot Control Exemption By-law</b>	Flat Fee	\$585.00	<b>\$597.00</b>	\$0.00	\$597.00	2%	E	
<b>Plan of Subdivision or Condominium Agreement or Pre-Servicing Agreement *</b>	Administration fee	\$765.00	<b>\$780.00</b>	\$0.00	\$780.00	2%	E	For recovery of the costs of facilitating and preparing agreements.
<b>Pre-Consultation Fee</b>	Flat Fee	N/A	<b>\$615.00</b>	\$0.00	\$615.00	100%	E	This fee will be credited from the future application fee (ie. when a formal complete application is submitted) for a Zoning By-law Amendment, Site Plan, or Plan of Subdivision or Condominium.
<b>Site Plan Application and Agreement - Minor</b>	Flat Fee	\$10,850.00	<b>\$11,067.00</b>	\$0.00	\$11,067.00	2%	E	Note 1
<b>Site Plan Application and Agreement - Standard</b>	Flat Fee	\$20,600.00	<b>\$21,012.00</b>	\$0.00	\$21,012.00	2%	E	Note 2
<b>Site Plan Application and Agreement - County of Wellington</b>	Flat Fee	N/A	<b>\$2,280.00</b>	\$0.00	\$2,280.00	100%	E	Report FIN-2019-031
<b>Telecommunication Tower Proposals</b>	Flat Fee	\$532.00	<b>\$2,293.00</b>	\$0.00	\$2,293.00	331%	E	Report FIN-2019-031 Township Administration Fee - \$543 Canadian Radiocommunications Information and Notification Services - \$1,750
<b>Zoning By-law - Copy</b>	Flat Fee	\$40.00	<b>\$40.80</b>	\$5.30	\$46.10	2%	T	

**SCHEDULE G: PLANNING AND DEVELOPMENT REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
Zoning By-Law Amendment - Aggregate *	Administration fee	\$15,000.00	<b>\$15,300.00</b>	\$0.00	\$15,300.00	2%	E	
Zoning By-Law Amendment - Minor	Flat Fee	\$5,000.00	<b>\$5,100.00</b>	\$0.00	\$5,100.00	2%	E	Note 3
Zoning By-Law Amendment - Standard	Flat Fee	\$11,200.00	<b>\$11,424.00</b>	\$0.00	\$11,424.00	2%	E	Note 4
Zoning By-Law Amendment - County of Wellington	Flat Fee	N/A	<b>\$6,580.00</b>	\$0.00	\$6,580.00	100%	E	Report FIN-2019-031

**INTERPRETATION**

\* the fees denoted with an asterisk are also subject to the Township's disbursements and third party consultant fees incurred for the processing of the application.

**Note 1: Minor Site Plan**

A Minor Site Plan may include, but is not limited, to the following:

- Site works associated with the change of use of an existing building;
- Parking lot modifications, outdoor patios, landscape works and the placement of accessory buildings and structures;
- Minor revisions or building additions to existing commercial, industrial or residential developments

Township staff have the discretion to determine whether a site plan application is classified as minor.

**Note 2: Standard Site Plan**

A Standard Site Plan may include, but is not limited, to the following:

- Requirement of technical studies (ie. storm water management, geotechnical, hydrological, environmental impact assessment, etc.)
- Relates to a new development or major additions/alterations to an existing development or site design

**Note 3: Minor Zoning By-law Amendment**

A Minor Zoning By-law Amendment may include, but is not limited, to the following:

- The change in use is compatible with the current zoning designation and does not require the submission of any technical studies;
- Adding a low impact use to an existing zone;
- Temporary use;
- Low impact zone changes involving single or semi-detached dwellings;
- No change in zoning category

Township staff have the discretion to determine whether a zoning by-law amendment application is classified as minor.

**Note 4: Standard Zoning By-law Amendment**

A Standard Zoning By-law Amendment may include, but is not limited, to the following:

- Change in zoning category;
- Larger commercial/industrial/residential applications;
- A major change of use to an existing building or structure;



**SCHEDULE G: PLANNING AND DEVELOPMENT REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
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- Requirement of technical studies (ie. storm water management, geotechnical, hydrological, environmental impact assessment, etc.)

**Refund of Application Fees**

In the case of a withdrawal or abandonment of an application, staff shall determine the amount of paid fees that may be refunded to the applicant, if any, in accordance with the following:

- a.) 80 percent (80%) if administrative functions have only been performed;
- b.) 70 percent (70%) if administrative and zoning functions have only been performed;
- c.) 45 percent (45%) if administrative, zoning, and a completed application has been circulated with comments;
- d.) 35 percent (35%) if application has been sent for second submission and comments have been received;
- e.) no refund shall be made if the application has been approved by Committee and/or Council

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**SCHEDULE H: BY-LAW REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Dog Tags</b>	Per Tag	\$25.00	<b>\$25.50</b>	\$0.00	\$25.50	2%	E	Maximum of 3 dogs
<b>Fence Viewer's Application</b>	Per Application	\$300.00	<b>\$306.00</b>	\$0.00	\$306.00	2%	E	
<b>Filming Permit Fee</b>	Flat Fee	\$500.00	<b>\$510.00</b>	\$0.00	\$510.00	2%	E	Filming of special events on Township lands/roads.
<b>Kennel Licence</b>	Per Licence	\$187.00	<b>\$190.00</b>	\$0.00	\$190.00	2%	E	More than 3 dogs
<b>Liquor License Letter</b>	Per Inspection	\$156.00	<b>\$159.00</b>	\$0.00	\$159.00	2%	E	Requested or required inspection of licensed sales establishments (as defined by the Liquor Licence Establishment Board of Ontario) that requires an inspection and/or a letter.
<b>Lottery Licence</b>	3% of prize value	3% of prize value	<b>3% of prize value</b>	\$0.00	3% of prize value	0%	E	Fee regulated by AGCO (Nevada, Raffle, Bazaar, etc.).
<b>Municipal Addressing Sign</b>	Flat Fee	\$20.00	<b>\$20.40</b>	\$2.65	\$23.05	2%	T	
<b>Municipal Addressing Post</b>	Flat Fee	\$20.00	<b>\$20.40</b>	\$2.65	\$23.05	2%	T	
<b>Property Standards Appeal Fee</b>	Flat Fee	\$0.00	<b>\$260.00</b>	\$0.00	\$260.00	100%	E	Report FIN-2019-031
<b>Septic Compliance Letter</b>	Flat Fee	\$75.00	<b>\$76.50</b>	\$0.00	\$76.50	2%	E	Fee charged is consistent for all Township departments.
<b>Sign Permits</b>	Flat Fee	\$100.00	<b>\$102.00</b>	\$0.00	\$102.00	2%	E	Without building permit.
<b>Site Alteration Permit Application *</b>	Administration fee	\$1,800 plus \$75 per hectare (rounded to the greater whole aggregate).	<b>\$1,800 plus \$75 per hectare (rounded to the greater whole aggregate).</b>	\$0.00	\$1,800 plus \$75 per hectare (rounded to the greater whole aggregate).	0%	E	
<b>Site Alteration Permit Service Fee</b>	Per m <sup>3</sup>	\$0.06	<b>\$0.06</b>	\$0.00	\$0.06	0%	E	Paid at time of application.
<b>Special Occasion Permit</b>	Per Letter	\$75.00	<b>\$76.50</b>	\$0.00	\$76.50	2%	E	
<b>Swimming Pool Enclosure Permit</b>	Flat Fee	\$215.00	<b>\$219.00</b>	\$0.00	\$219.00	2%	E	
* the fees denoted with an asterisk are also subject to the Township's disbursements and third party consultant fees incurred for the processing of the application.								

**SCHEDULE I: PARKS REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Ball Diamonds - No Lights</b>	Per Hour	\$20.85	<b>\$21.27</b>	\$2.77	\$24.04	2%	T	
<b>75% Reduced Rate - Ball Diamonds - No Lights</b>	Per Hour	\$5.20	<b>\$5.31</b>	\$0.69	\$6.00	2%	T	
<b>Ball Diamonds - Lights</b>	Per Hour	\$31.25	<b>\$31.88</b>	\$4.14	\$36.02	2%	T	after 8:30 p.m.
<b>75% Reduced Rate - Ball Diamonds - Lights</b>	Per Hour	\$7.80	<b>\$7.96</b>	\$1.03	\$8.99	2%	T	after 8:30 p.m.
<b>All Ball Diamonds</b>	Per Day	\$156.35	<b>\$159.48</b>	\$20.73	\$180.21	2%	T	
<b>75% Reduced Rate - All Ball Diamonds</b>	Per Day	\$39.10	<b>\$39.88</b>	\$5.18	\$45.06	2%	T	
<b>Ball Diamonds - Dragging</b>	Per Occurrence	\$40.00	<b>\$40.80</b>	\$5.30	\$46.10	2%	T	Upon request and approval - June 15, 2016 Special Council Meeting.
<b>Soccer Field</b>	Per Hour	\$26.55	<b>\$27.09</b>	\$3.52	\$30.61	2%	T	Development of a fee - Report FIN-2017-012
<b>75% Reduced Rate - Soccer Field</b>	Per Hour	\$6.65	<b>\$6.79</b>	\$0.88	\$7.67	2%		
<b>Soccer Field</b>	Per Day	\$269.80	<b>\$275.20</b>	\$35.78	\$310.98	2%	T	Development of a fee - Report FIN-2017-012
<b>75% Reduced Rate - Soccer Field</b>	Per Day	\$67.45	<b>\$68.80</b>	\$8.94	\$77.74	2%		
<b>Ball Diamond Advertising</b>	Per Season	\$175.00	<b>\$178.50</b>	\$23.21	\$201.71	2%	T	Available from May to October
<b>75% Reduced Rate - Ball Diamond Advertising</b>	Per Season	\$43.75	<b>\$44.63</b>	\$5.80	\$50.43	2%	T	
<b>Horse Paddock</b>	Per Day	\$200.00	<b>\$204.00</b>	\$26.52	\$230.52	2%	T	Rental restricted to horse paddock and tractor pull area.
<b>75% Reduced Rate - Horse Paddock</b>	Per Day	\$50.00	<b>\$51.00</b>	\$6.63	\$57.63	2%	T	
<b>Picnic Shelter</b>	Per Hour	\$20.00	<b>\$20.40</b>	\$2.65	\$23.05	2%	T	
<b>Picnic Shelter</b>	Per Day	\$80.00	<b>\$81.60</b>	\$10.61	\$92.21	2%	T	
<b>Sports Facility User Fees - Tennis</b>	Per Resident	\$10.00	<b>\$10.00</b>	\$0.00	\$10.00	0%	E	Staff to bring forward a use/cost sharing agreement with the Puslinch Tennis Club in 2019.
<b>Sports Facility User Fees - Tennis</b>	Per Non-Resident	\$25.00	<b>\$25.00</b>	\$0.00	\$25.00	0%	E	Staff to bring forward a use/cost sharing agreement with the Puslinch Tennis Club in 2019.
<b>Fireworks Security Deposit</b>	Per Display	\$500.00	<b>\$500.00</b>	\$0.00	\$500.00	0%	E	Clean up of Township lands after fireworks display.
<b>Baseball Equipment and Lights Security Deposit</b>	Per Season	\$50.00	<b>\$50.00</b>	\$0.00	\$50.00	0%	E	Lights key provided to ball diamond rentals with light use. Equipment key provided to leagues with a minimum of an eight week rental commitment.
<b>Picnic Shelter Washroom Key Security Deposit</b>	Per Rental	\$50.00	<b>\$50.00</b>	\$0.00	\$50.00	0%	E	
<b>Horse Paddock Security Deposit</b>	Per Rental	\$300.00	<b>\$300.00</b>	\$0.00	\$300.00	0%	E	
<b>Note 1:</b> Booking availability of Township fields are dependent on field conditions.								

**SCHEDULE J: OPTIMIST RECREATION CENTRE REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Arena Floor</b>	Per Hour	\$67.45	<b>\$68.81</b>	\$8.95	\$77.76	2%	T	Includes use of change rooms
<b>75% Reduced Rate - Arena Floor</b>	Per Hour	\$16.85	<b>\$17.20</b>	\$2.24	\$19.44	2%	T	
<b>Ice - Non - Prime</b>	Per Hour	\$56.20	<b>\$57.33</b>	\$7.45	\$64.78	2%	T	
<b>75% Reduced Rate - Ice - Non-Prime</b>	Per Hour	\$14.05	<b>\$14.34</b>	\$1.86	\$16.20	2%	T	
<b>Ice - Prime</b>	Per Hour	\$161.50	<b>\$164.73</b>	\$21.41	\$186.14	2%	T	
<b>Gymnasium</b>	Per Hour	\$30.65	<b>\$31.27</b>	\$4.07	\$35.34	2%	T	
<b>75% Reduced Rate - Gymnasium</b>	Per Hour	\$7.65	<b>\$7.81</b>	\$1.02	\$8.83	2%	T	
<b>90% Reduced Rate - Gymnasium</b>	Per Hour	\$3.05	<b>\$3.11</b>	\$0.40	\$3.51	2%	T	Applicable for Seniors' Events/Programs, Whistle Stop Co-operative Pre-school and Guelph Community Health Centre (Playgroup).
<b>Rink Board Advertising</b>	Per Year	\$350.00	<b>\$357.00</b>	\$46.41	\$403.41	2%	T	
<b>75% Reduced Rate - Rink Board Advertising</b>	Per Year	\$87.50	<b>\$89.25</b>	\$11.60	\$100.85	2%	T	

**Note 1:**

- Ice - Non-Prime: Weekdays from 9:00 am to 5:00 pm
- Ice - Prime: Weekdays from 5:00 pm to 10:00 pm, Saturdays, Sundays

**SCHEDULE K: PUSLINCH COMMUNITY CENTRE REVIEW OF MUNICIPAL RATES AND SERVICE CHARGES  
EFFECTIVE 2020**

Schedule A to Report FIN-2019-031

TYPE OF REVENUE/USER	Unit/Descr	2019 RATE (NO TAX)	2020 RATE (NO TAX)	13% HST	RATE INCL HST	% CHANGE	HST STATUS	COMMENTS
<b>Meeting Room</b>	Per Hour	\$26.05	<b>\$26.58</b>	\$3.46	\$30.04	2%	T	
<b>75% Reduced Rate - Meeting Room</b>	Per Hour	\$6.50	<b>\$6.64</b>	\$0.86	\$7.50	2%	T	
<b>90% Reduced Rate - Meeting Room</b>	Per Hour	\$2.60	<b>\$2.65</b>	\$0.34	\$2.99	2%	T	Applicable for Seniors' Events/Programs, Whistle Stop Co-operative Pre-school and Guelph Community Health Centre (Playgroup).
<b>Hall - Non-Prime</b>	Per Hour	\$55.95	<b>\$57.08</b>	\$7.42	\$64.50	2%	T	Minimum of a 3 hour booking required.
<b>75% Reduced Rate - Hall - Non-Prime</b>	Per Hour	\$14.00	<b>\$14.28</b>	\$1.86	\$16.14	2%	T	Minimum of a 3 hour booking required.
<b>90% Reduced Rate - Hall - Non-Prime</b>	Per Hour	\$5.60	<b>\$5.71</b>	\$0.74	\$6.45	2%	T	Minimum of a 3 hour booking required. Applicable for Seniors' Events/Programs, Whistle Stop Co-operative Pre-school and Guelph Community Health Centre (Playgroup).
<b>Hall - Non-Prime</b>	Full Day Rental	\$380.20	<b>\$387.81</b>	\$50.42	\$438.23	2%	T	
<b>75% Reduced Rate - Hall - Non-Prime</b>	Full Day Rental	\$95.05	<b>\$96.96</b>	\$12.60	\$109.56	2%	T	
<b>90% Reduced Rate - Hall - Non-Prime</b>	Full Day Rental	\$38.00	<b>\$38.77</b>	\$5.04	\$43.81	2%	T	Applicable for Seniors' Events/Programs, Whistle Stop Co-operative Pre-school and Guelph Community Health Centre (Playgroup).
<b>Hall - Prime</b>	Full Day Rental	\$498.75	<b>\$508.73</b>	\$66.13	\$574.86	2%	T	
<b>Commercial Rental</b>	Surcharge	\$781.85	<b>25% Surcharge</b>				T	Example - Auctions, Sale of Merchandise See Report FIN-2019-031
<b>Non Resident Rental</b>	Surcharge	N/A	<b>25% Surcharge</b>				T	See Report FIN-2019-031
<b>Hall - Set-up Fee</b>	Per Hour	\$55.95	<b>\$57.08</b>	\$7.42	\$64.50	2%	T	Set-up is after 5:00 p.m. on Friday only and must include a Saturday rental. This service is only available if the hall is not booked 7 days prior to the event date.
<b>Use of Kitchen Facilities - Non Prime</b>	Per Hour	\$27.35	<b>\$27.90</b>	\$3.63	\$31.53	2%	T	Minimum of a 3 hour booking required.
<b>Licensed Events Using Patio</b>	Flat Rate	\$57.25	<b>\$58.40</b>	\$7.59	\$65.99	2%	T	Patio Fencing
<b>Microphone</b>	Flat Rate	\$25.00	<b>\$25.50</b>	\$3.32	\$28.82	2%	T	See Report FIN-2018-030
<b>Projector</b>	Flat Rate	\$25.00	<b>\$25.50</b>	\$3.32	\$28.82	2%	T	See Report FIN-2016-029
<b>Facility Rental Security Deposit</b>	Per Booking	\$365.00	<b>\$365.00</b>	\$0.00	\$365.00	0%	E	Deposit is fully refundable after function if there are no damages and key is returned.
<b>Bartenders</b>	Per Bartender	\$130.00	<b>\$132.60</b>	\$17.24	\$149.84	2%	T	Smart Serve Certified
<b>Electronic Sign Advertising</b>	Per Week	\$33.35	<b>\$34.02</b>	\$4.42	\$38.44	2%	T	No charge for Puslinch Community Centre rentals.
<b>75% Reduced Rate - Electronic Sign Advertising</b>	Per Week	\$8.35	<b>\$8.52</b>	\$1.11	\$9.63	2%	T	
<b>90% Reduced Rate - Electronic Sign Advertising</b>	Per Week	\$3.33	<b>\$3.41</b>	\$0.44	\$3.85	2%	T	Applicable for Seniors' Events/Programs, Whistle Stop Co-operative Pre-school and Guelph Community Health Centre (Playgroup).

**Note 1:** Hall rentals include the use of the kitchen facility (dishes, silverware, cooking utensils, dishwasher, coffee maker, etc. included)

**Note 2:** Hall - Non-Prime: Monday to Thursday and Sunday Rentals; Hall - Prime: Friday and Saturday

**PLANNING AND DEVELOPMENT  
COMPARATOR MUNICIPAL DATA EFFECTIVE 2019**

TYPE OF REVENUE/USER FEE	Cambridge	Centre Wellington	Erin	Guelph	Guelph/Eramosa	Hamilton	Mapleton	Milton	Minto	Wellington North	Average	2019 Township Flat Fee	2020 Township Proposed Flat Fee	2020 County Proposed Flat Fee	2020 Total Flat Fee
<b>Minor Variance</b>															
Standard Fee	\$ 1,200	\$ 799	\$ 600	\$ 989	\$ 2,577	\$ 3,302	\$ 1,500	\$ 1,877	\$ 1,600	\$ 1,000					
Commercial		\$ 979													
Single/Semi-Detached/On-Street Townhouse				\$ 826											
Routine (pools, decks, access buildings, porches)						\$ 595									
Third party fees							\$ 500								
<b>Total</b>	<b>\$ 1,200</b>	<b>\$ 799</b>	<b>\$ 600</b>	<b>\$ 989</b>	<b>\$ 2,577</b>	<b>\$ 3,302</b>	<b>\$ 2,000</b>	<b>\$ 1,877</b>	<b>\$ 1,600</b>	<b>\$ 1,000</b>	<b>\$ 1,594</b>	<b>\$ 706</b>	<b>\$ 721</b>	<b>\$ 4,090</b>	<b>\$ 4,811</b>
<b>Standard Zoning By-Law Amendment Application</b>															
Base Fee	\$ 10,000	\$ 11,557		\$ 14,333		\$ 24,109		\$ 13,648							
Development Approval Fee	N/A	N/A		\$ 795		N/A		N/A							
Revision/Amendment	N/A	N/A		\$ 2,500		\$ 2,026		N/A							
Preconsultation	\$ 500	\$ 615		N/A - deducted		N/A - deducted		N/A							
Advertising Fee	N/A	N/A		N/A		\$ 1,465		\$ 468							
<b>Total</b>	<b>\$ 10,500</b>	<b>\$ 12,172</b>	<b>Note A</b>	<b>\$ 17,628</b>	<b>Note A</b>	<b>\$ 27,600</b>	<b>Note A</b>	<b>\$ 14,116</b>	<b>Note A</b>	<b>Note A</b>	<b>\$ 16,403</b>	<b>\$ 11,200</b>	<b>\$ 11,424</b>	<b>\$ 6,580</b>	<b>\$ 18,004</b>
<b>Minor Zoning By-Law Amendment Application</b>															
Base Fee	\$ 6,200	\$ 2,896		\$ 11,800		\$ 6,027		\$ 13,648							
Development Approval Fee	N/A	N/A		\$ 795		N/A		N/A							
Revision/Amendment	N/A	N/A		\$ 1,500		\$ 2,026		N/A							
Preconsultation	\$ 500	\$ 615		N/A - deducted		N/A - deducted		N/A							
Advertising Fee	N/A	N/A		N/A		\$ 1,465		\$ 468							
<b>Total</b>	<b>\$ 6,700</b>	<b>\$ 3,511</b>	<b>Note A</b>	<b>\$ 14,095</b>	<b>Note A</b>	<b>\$ 9,518</b>	<b>Note A</b>	<b>\$ 14,116</b>	<b>Note A</b>	<b>Note A</b>	<b>\$ 9,588</b>	<b>\$ 5,000</b>	<b>\$ 5,100</b>	<b>\$ 6,580</b>	<b>\$ 11,680</b>
<b>Standard Site Plan Application and Agreement</b>															
Base Fee	\$ 10,080	\$ 13,843		\$ 9,961		\$ 24,137		\$ 5,775							
Plus - per hectare fee	N/A	N/A		N/A		N/A		\$ 3,914							
Lot Grading and Drainage Plan	N/A	\$ 1,087		N/A		N/A		N/A							
Agreement Fee	\$ 603	\$ 1,087		\$ 1,000		N/A		\$ 2,132							
Inspection/Engineering Fee	\$ 530	\$ 717		\$ 500		\$ 3,330		\$ 760							
Security Reduction Fee	\$ 530	N/A		N/A		\$ 325		N/A							
Preliminary Review/Preconsultation	\$ 500	\$ 615		N/A - deducted		N/A - deducted		N/A							
Revision/Amendment	\$ 3,185	\$ 1,742		\$ 1,500		N/A		N/A							
<b>Total</b>	<b>\$ 15,428</b>	<b>\$ 19,091</b>	<b>Note A</b>	<b>\$ 12,961</b>	<b>Note A</b>	<b>\$ 27,792</b>	<b>Note A</b>	<b>Per hect.</b>	<b>Note A</b>	<b>Note A</b>	<b>\$ 18,818</b>	<b>\$ 20,600</b>	<b>\$ 21,012</b>	<b>\$ 2,280</b>	<b>\$ 23,292</b>
<b>Minor Site Plan Application and Agreement</b>															
Base Fee	\$ 5,835	\$ 6,652		\$ 3,480		\$ 13,406		\$ 866.25							
Plus - per hectare fee	N/A	N/A		N/A		N/A		\$ 587.10							
Lot Grading and Drainage Plan	N/A	\$ 1,087		N/A		N/A		N/A							
Agreement Fee	\$ 603	\$ 1,087		\$ 1,000		N/A		\$ 2,132							

**PLANNING AND DEVELOPMENT  
COMPARATOR MUNICIPAL DATA EFFECTIVE 2019**

TYPE OF REVENUE/USER FEE	Cambridge	Centre Wellington	Erin	Guelph	Guelph/Eramosa	Hamilton	Mapleton	Milton	Minto	Wellington North	Average	2019 Township Flat Fee	2020 Township Proposed Flat Fee	2020 County Proposed Flat Fee	2020 Total Flat Fee
Inspection/Engineering Fee	\$ 530	\$ 236		\$ 500		\$ 315		\$ 760							
Security Reduction Fee	\$ 530	N/A		N/A		\$ 325		N/A							
Preliminary Review/Preconsultation	\$ 500	\$ 615		N/A - deducted		N/A - deducted		N/A							
Revision/Amendment	\$ 1,060	\$ 1,087		N/A		N/A		N/A							
<b>Total</b>	<b>\$ 9,058</b>	<b>\$ 10,764</b>	<b>Note A</b>	<b>\$ 4,980</b>	<b>Note A</b>	<b>\$ 14,046</b>	<b>Note A</b>	<b>Per hect.</b>	<b>Note A</b>	<b>Note A</b>	<b>\$ 9,712</b>	<b>\$ 10,850</b>	<b>\$ 11,067</b>	<b>\$ 2,280</b>	<b>\$ 13,347</b>

**Note A - these municipalities currently invoice applicants for third party disbursement and consultant costs**



## **REPORT ADM-2019-024**

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TO: Mayor and Members of Council

FROM: Patrick Moyle, CAO/Clerk

MEETING DATE: October 16, 2019

SUBJECT: The Aggregate Resources Act  
File: L11-MIN

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### **RECOMMENDATION**

**That Report ADM-2019-024 regarding The Proposed Amendments to the Aggregate Resources Act (ARA) be received; and**

**That Council authorize a copy of the report, inclusive of all Attachments, to be forwarded to the Ministry of Natural Resources and Forestry.**

#### Purpose

To provide Council an update on the proposed changes to the Aggregate Resources Act.

#### Background

The Aggregate Resources Act (ARA) is the foundation piece of provincial legislation which governs the mining of sand, gravel and rock in Ontario. While the Act governs the extraction and rehabilitation of material, municipalities have a shared jurisdiction to manage the local impacts of aggregate activities through the land use planning process.

Puslinch Township has a considerable supply of aggregate, is close to the market and therefore has an interest in ensuring that the appropriate processes are in place to guide the planning and implementation of aggregate operations.



The Ministry of Natural Resources and Forestry have proposed a number of changes to the current legislation which are intended to “reduce burdens for business while maintaining strong protection for the environment and managing impacts on communities”

The proposed changes have been developed by the Ministry and posted on the Environmental Registry of Ontario for a 45 day period.

### **Implications for Puslinch**

Many of the proposed changes rely on subsequent Regulations which have not been made public at this time. This is a concern because some of the proposed legislative changes regarding additional measures to strengthen water resource protection, increased public engagement and the ability for parties to object to applications to the Local Planning Appeal Tribunal are all significant changes to current practices. It would be useful for the Province to engage all stakeholders on the how these measures will be actually implemented. In this way the complete impact of these legislative changes can be full understood and evaluated.

Puslinch has used the Zoning bylaw to regulate the depth of extraction when considering the planning merits of an application. The new Act appears to remove the municipality’s right to use zoning to regulate a component of the extraction activities and in its place have assigned this as an exclusive provincial responsibility. Again it is unclear as to how this will be implemented and any municipal concern could be eliminated if there was a better understanding of any proposed regulation relating to this matter.

In its report to County Council, planning staff have identified concerns relating to vertical zoning as well as appropriateness of using holding provisions of the zoning bylaw to regulate below water table extraction. It would appear that the Province wants to maintain exclusive jurisdiction and hopefully introduce a public notification and engagement process that at a minimum, replicates the municipal

zoning process. However, it is unclear that this is the intent and in a worse case scenario, a public process with appeal rights may be compromised.

The summary of the proposed changes (see Attachment B) contains further information regarding the forthcoming regulations. One such proposed regulation is intended to “clarify requirements for site plan amendments”. This could mean many things and more clarity is required as to what specifically is being proposed.

Another proposed regulation is being contemplated to “review application requirements for new sites, including notification and consultation requirements”

Again it would be more helpful if there was greater clarity around how and who will be reviewing applications for new aggregate uses in the Township

When considering any planning application the matter of access and traffic impacts are critical components of an approval process. An approved and enforceable haul route plan is an important element of an aggregate operation and that plan is typically codified in an agreement between the road authority and the aggregate company. It would appear that the proposed amendment would prohibit this requirement unless the operator volunteers to enter into an agreement. It is recommended that the road authority be permitted to require a haul route agreement and if the proponent does not agree, they should have the right to appeal to the Municipality and failing that have right of appeal to LPAT.

A highly regulated industry requires an appropriate level of enforcement. A great deal of work goes into a land use planning decision, a licence and a site plan. In order to retain confidence in the process of establishing and monitoring a mining operation which in many cases is in close proximity to non industrial uses, a robust monitoring and enforcement program is essential. The proposed changes do not appear to strengthen the role of the Ministry as the regulator. It is therefore critical that the Ministry be provided with additional resources for greater inspection and enforcement.

This amendment does not contemplate any changes to the property assessment and the resulting tax property tax contributions of aggregate operations. The

County has retained experts to develop the case for a fairer contribution to the tax base which presumably reflects the current value (CVA) of aggregate operations in the Township. The Township should continue to support the efforts of the County to realize a fairer tax treatment for this industrial use.

The dormant aggregate pits and quarries and the rehabilitation of these interim uses has been not been addressed in these amendments. There have been several examples of rehabilitation plans which have been successfully implemented throughout the Province and unfortunately there have been some which have not. One means of ensuring that there is the necessary incentive to rehabilitate to a final use would involve the establishment of a closure date to be part of a license and a firm deadline for rehabilitation. A more stringent financial penalty for lack of compliance is also necessary in much the same way as municipalities require the posting of securities as part of a site plan agreement under the Planning Act.

### **Conclusion**

The amendments to the ARA either fall short of addressing the land use planning interests of community or there is a lack of information on how these proposed amendments will be implemented through the yet to be released regulations. In some instances the changes may in fact be better than the current state but it is impossible to assess given the lack of information.

### **Attachments**

Attachment A – Comments from John McNie, Puslinch resident and member of Mill Creek Stewards

Attachment B – Proposed Amendments to the Aggregate Resources Act

October 16, 2019  
Township of Puslinch  
Council  
7404 Wellington Rd. 34  
Guelph, ON, N1H-6H9



6927 Concession 2, RR#22  
Cambridge, ONT  
Canada, N3C-2V4

**Re: The Provincial Request for Comments on Proposed Changes to the Public Policy Statement and the Aggregate Resources Act.**

**Attn: Mr. James Seely, Mayor  
Councillors: Bulmer, Goyda, Roth and Sepulis**

In July of this year our Mill Creek Stewards group had the opportunity to make a presentation to Puslinch Council; specifically over concerns for a potential rezoning of a significant piece of wetland/floodplain for aggregate extraction and broadly over concerns for what we perceived as an underlying factor, the Province's erosion of Township rights.

The recent proposed changes to the Province of Ontario's Aggregate Resource Act (ARA) and the Public Policy Statement (PPS), addressed by this written presentation and illustrated in our attachment, validate and unfortunately exacerbate these concerns.

Our attachment demonstrates on Page One, the land area encompassed by the Township of Puslinch. On Page Two, we see the presently established aggregate bearing land\* (in Puslinch; Burford, Donnybrook, Gilford and Brisbane Loam). On Page Three, we add in, as required by the proposed changes, the Province's potential aggregate bearing land\*\* (in Puslinch; Dumfries Loam). On Page Four, we add in the buffer required by the Province's proposed changes, to protect those lands, and on Page Five, the Township land that to all intents and purposes, remains under Council jurisdiction.

We say remains under Council jurisdiction because although Page Five presents at first glance a ridiculous scenario, on second glance it presents a frightening reality. That reality reflects the following, very real proposed changes to the ARA and the PPS, which would seriously undermine the already precarious relationship between the Province and its Municipalities including Puslinch Township.

- restricting development or activities that would preclude or hinder expansion or continued use of existing aggregate extraction sites (PPS 2.5.2.4)
- identifying prospective sites for aggregate extraction and restricting development and activities that would preclude or hinder their development (PPS 2.5.1)
- defining lands adjacent to identified deposits of mineral aggregate resources and restricting their development (PPS 2.5.2.5)
- eliminating the requirement to show need for expansion or new site development for mineral aggregate resources (PPS 2.5.2.1)

In general, proposed changes to the PPS and ARA, give to the municipalities with the provincial right hand and take away with the provincial left. The giving and taking however are so vague that the end result could easily be *all taking* as confirmed in the following example.

**Right hand:** Strengthen protection of water resources by creating a more robust application process if the proposed extraction will involve the water table. This will allow municipalities to officially object and to have their concerns heard by the local LPAT.

**Left hand:** Clarify that depth and expansion of areas of extraction are managed under the ARA not municipal zoning by-laws. Clarify that haul routes are managed under the ARA, not under municipalities or LPAT.

**Result:** *All taking*, as the municipalities lose any meaningful opportunity for input into their local protection of water resources and roads.

Other proposed change details include permitting aggregate extraction in fish habitats (PPS 2.1.6, 2.5.2.2), endangered species habitats (PPS 2.1.7, 2.5.2.2), natural heritage systems (PPS 2.1.2, 2.5.2.2), prime agricultural land (PPS.2.5.4) and natural features (PPS 2.1.1, 2.5.2.2), as aggregate extraction use of the land is "interim". Even "interim" is irrelevant if "substantial" amounts of mineral aggregate resources are present below the water table or if "other alternatives" have been considered by the applicant and found "unsuitable" (PPS 2.5.4). After

“interim” use, rehabilitation of exhausted aggregate areas is proposed as a “long-term requirement” with the goal of “mitigating” negative impacts to the “extent possible” (PPS 2.5.3).

Mr. Mayor and Councillors, these are just a few of the many proposed changes that not only seriously imbalance the Provincial-Municipal relationship but also disrespect it and any disrespectful, imbalanced relationship is bound to fail, in turn betraying the public our governments are elected to serve.

It is critical at this time that Puslinch and Ontario’s other municipalities, ensure their voices are heard loud and clear at Queen’s Park, in strong opposition to these proposals and in strong support of a more equitable future relationship.

For the Mill Creek Stewards  
John McNie

\* Example: -pits on north and south sides of Conc. 2, east of Sideroad 20S.

-pit on south side Laird Rd at Sideroad 10.

\*\* Example: -pit on south side of Con 2 at intersection with Conc. 7.

-pit on County Rd 34, east of Townline Rd.

\*&\*\* Example: -pit on Concession 7, east of County Rd 34.

Attachment re: Proposed changes to the  
Provincial Policy Statement and Aggregate Resources  
Act



PUSLINCH  
TOWNSHIP

2.5.1:

Mineral Aggregate Resources shall be protected for long-term use..





2.5.1:

..... deposits of mineral aggregate resources shall be identified.



#### 2.5.2.4

Lands adjacent to deposits of mineral aggregate resources shall be protected from development or activities that would preclude or hinder expansion or continued use of aggregate operations...



The amount of Puslinch Township remaining under  
the jurisdiction of Puslinch Council.

ZERO

# Proposed amendments to the Aggregate Resources Act

<u>ERO (Environmental Registry of Ontario) number</u>	019-0556
Notice type	Act
Act	Aggregate Resources Act, R.S.O. 1990
Posted by	Ministry of Natural Resources and Forestry
Notice stage	Proposal
Proposal posted	September 20, 2019
Comment period	September 20, 2019 - November 4, 2019 (45 days) Open
Last updated	September 20, 2019

This consultation closes at

11:59 p.m. on:

**November 4, 2019**

## Proposal summary

Changes are proposed to the *Aggregate Resources Act* to reduce burdens for business while maintaining strong protection for the environment and managing impacts to communities.

## Proposal details

### *Aggregate Resources Act*

The Ministry of Natural Resources and Forestry (MNR) is responsible for managing Ontario's aggregate resources, regulated under the *Aggregate Resources Act* (ARA). Aggregate resources are non-renewable resources like sand, gravel and rock that are needed for infrastructure that supports the quality of life that Ontarians enjoy today. They are used to construct the buildings we live and work in, the roads, the airports and subways we use to get from place to place, and for many other necessary services like

sewers and power generating stations. Most of the aggregate produced in Ontario comes from private land in the southern region of the province where most Ontarians live.

Ontario requires a continued supply of aggregate resources.

Approximately 160 million tonnes of aggregate are needed in Ontario each year. Yet, it is equally important to manage and minimize the impact extraction operations may have on the environment and on the communities that surround them. These operations are located across our diverse province, and the regulatory framework that manages them must be fair and predictable and flexible enough to be effective.

In March of 2019, the Ministry hosted an Aggregates Summit. The Summit was an opportunity for industry, municipal and Indigenous leaders to share their ideas for cutting red tape, creating jobs and promoting environmental stewardship and economic growth within the aggregate industry. We also gathered further input through an online survey, ending May 31.

### **Key themes heard:**

- reducing duplication, inefficiency, and inconsistency in application and approval processes
- improving access to aggregate resources
- protecting agricultural lands and water resources
- enhancing rehabilitation
- continue public engagement and outreach on any proposed changes to the ARA (Aggregate Resources Act) framework.

As a result of this input, the Ministry is proposing changes to the aggregate resources framework to reduce burdens for business while also ensuring the environment is protected and Ontarians continue to have an opportunity to participate in processes that may impact them.

### **Summary of proposed changes**

**We are proposing to make amendments to the *Aggregate Resources Act*, while continuing to ensure operators are meeting high standards for aggregate extraction, that would:**

- strengthen protection of water resources by creating a more robust application process for existing operators that want to expand to

extract aggregate within the water table, allowing for increased public engagement on applications that may impact water resources. This would allow municipalities and others to officially object to an application and provide the opportunity to have their concerns heard by the Local Planning Appeal Tribunal.

- clarify that depth of extraction of pits and quarries is managed under the *Aggregate Resources Act* and that duplicative municipal zoning by-laws relating to the depth of aggregate extraction would not apply
- clarify the application of municipal zoning on Crown land does not apply to aggregate extraction
- clarify how haul routes are considered under the *Aggregate Resources Act* so that the Local Planning Appeal Tribunal and the Minister, when making a decision about issuing or refusing a licence, cannot impose conditions requiring agreements between municipalities and aggregate producers regarding aggregate haulage. This change is proposed to apply to all applications in progress where a decision by the Local Planning Appeal Tribunal or the Minister has not yet been made. Municipalities and aggregate producers may continue to enter into agreements on a voluntary basis.
- improve access to aggregates in adjacent municipal road allowances through a simpler application process (i.e. amendment vs a new application) for an existing license holder, if supported by the municipality
- provide more flexibility for regulations to permit self-filing of routine site plan amendments, as long as regulatory conditions are met.

**We are also considering some regulatory changes, including:**

- enhanced reporting on rehabilitation by requiring more context and detail on where, when and how rehabilitation is or has been undertaken.
- allowing operators to self-file changes to existing site plans for some routine activities, subject to conditions set out in regulation. For example, re-location of some structures or fencing, as long as setbacks are respected

- allowing some low-risk activities to occur without a licence if conditions specified in regulation are followed. For example, extraction of small amounts of aggregate if material is for personal use and does not leave the property
- clarifying requirements for site plan amendment applications
- streamlining compliance reporting requirements, while maintaining the annual requirement
- reviewing application requirements for new sites, including notification and consultation requirements

While no changes to aggregates fees are being proposed at this time, the Ministry is also interested in hearing your feedback on this matter.

We are committed to consult further on more specific details related to the regulatory proposals, including any proposed changes to aggregate fees at a later date.

## **Public consultation opportunities**

### **Ontario Government's Summit on Aggregate Reform (March 2019):**

- provided an opportunity for industry, municipal and Indigenous leaders to share their ideas for cutting red tape, creating jobs and promoting economic growth within the aggregate industry
- input was also received via email and through an online survey, which closed May 31, 2019. A total of 378 aggregate reform comments were received from the following groups:
  - Members of the public
  - Industry, industry associations, consultants
  - Municipalities, municipal associations
  - Non-governmental organizations (NGOs)
  - Academia, and
  - Indigenous communities

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**Supporting  
materials**

### **Related links**

**[Aggregate Resources Act](https://www.ontario.ca/laws/statute/90a08)**  
**(<https://www.ontario.ca/laws/statute/90a08>)**

Ontario Regulation 244/97 (Aggregate Resources Act)  
([https://www.ontario.ca/laws/regulation/970244?](https://www.ontario.ca/laws/regulation/970244?search=aggregate)  
[search=aggregate](https://www.ontario.ca/laws/regulation/970244?search=aggregate))

## View materials in person

Some supporting materials may not be available online. If this is the case, you can request to view the materials in person.

Get in touch with the office listed below to find out if materials are available.

Natural Resources Conservation Policy Branch  
300 Water Street  
Peterborough , ON  
K9J 8M5  
Canada

 [705-755-1222](tel:705-755-1222)

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## Comment

Let us know what you think of our proposal.

Have questions? Get in touch with the contact person below. Please include the ERO (Environmental Registry of Ontario) number for this notice in your email or letter to the contact.

[Read our commenting and privacy policies. \(/page/commenting-privacy\)](/page/commenting-privacy)

## Submit by mail


Andrew MacDonald  
Natural Resources Conservation  
Policy Branch  
300 Water Street  
Peterborough , ON  
K9J 8M5  
Canada



# Connect with us

## Contact

Andrew MacDonald

 [705-755-1222](tel:705-755-1222)

 [aggregates@ontario.ca](mailto:aggregates@ontario.ca)



# COUNTY OF WELLINGTON

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## COMMITTEE REPORT

**To:** Chair and Members of the Planning Committee  
**From:** Sarah Wilhelm, Manager of Policy Planning  
**Date:** Thursday, September 12, 2019  
**Subject:** **2019 Provincial Policy Statement Review**

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### 1.0 Background

To further support its Housing Supply Action Plan and other priorities, the Ministry of Municipal Affairs and Housing is consulting on proposed changes to the Provincial Policy Statement (PPS). Comments are requested prior to October 20, 2019 (EBR Registry Number #019-0279).

The current PPS, which came into effect April 30, 2014, provides overall policy direction on matters of provincial interest related to land use planning and development across Ontario. Where provincial plans are in effect (such as the Growth Plan for the Greater Golden Horseshoe and the Greenbelt Plan in Wellington), such plans:

- provide additional, and in some cases, more specific land use planning policies
- take precedence over the policies of the PPS in the event of a conflict

Where policies in the PPS do not overlap with policies in provincial plans, the policies of the PPS must be independently satisfied.

This report provides an overview of the key policy changes and responds briefly to questions posed by the province in the consultation documents.

### 2.0 Key Changes to the Provincial Policy Statement

Many of the proposed changes appear to have little impact on the County as they:

1. harmonize the PPS with the 2019 Growth Plan for the Greater Golden Horseshoe (“Growth Plan”) which already applies to Wellington; or
2. the Growth Plan policies are more specific/restrictive than the draft PPS.

In other respects, staff have identified the following key areas with the greatest impact on land use planning in Wellington County.

#### Agriculture

Current PPS policies allow for planning authorities to permit non-agricultural uses in prime agricultural areas subject to meeting specific criteria. Some examples of non-agricultural uses include manufacturing, automobile sales, golf courses, and campgrounds. The draft policies remove the criterion that the proposed use “complies with the minimum distance separation formulae” (MDS). Instead, impacts on surrounding agricultural operations and lands are to be “informed by provincial guidelines”. This is more permissive when compared to language used elsewhere in the PPS, such as “in accordance with provincial guidelines”. While the wording would allow for consideration of guidelines in addition to MDS, such as the “Guidelines on Permitted Uses in

Ontario's Prime Agricultural Areas" we have questions about what these changes mean for MDS implementation.

### **Mineral Aggregates**

Changes to subsection 2.5.2.4 include additional policy direction that depth of extraction be addressed through processes under the Aggregate Resources Act. The intent of the new wording is unclear and we are concerned that it may be meant to remove the ability of municipalities to continue to use vertical zoning to regulate extraction below the water table.

For gravel pits outside of the Greenbelt area and subject to satisfactory long-term rehabilitation, draft policies allow consideration of extraction in provincially significant wetlands (applies to areas outside of the County), woodlands, valleylands, wildlife habitat, areas of natural and scientific interest; fish habitat; and habitat of endangered species and threatened species. The Growth Plan is more restrictive for some features, but overall, the more permissive draft policies would appear to allow interim negative impacts to features and areas in favour of potential long-term environmental benefits through rehabilitation.

### **Indigenous Consultation**

New requirement for planning authorities to:

- engage with Indigenous communities and coordinate on land use planning matters; and
- engage with Indigenous communities and consider their interests when identifying, protecting and managing cultural heritage and archaeological resources.

### **Extension of Planning Horizon**

The planning horizon is extended from 20 to 25 years. We do not know whether the province intends to address this change in the Growth Plan for the Greater Golden Horseshoe, which provides a growth forecast to 2041.

### **Housing**

The province has changed housing policies and related terms in an effort to encourage a greater mix and supply of housing. For example, a new term "housing options" provides more specific policy direction about housing types. The draft policies increase the required supply of land for residential growth from ten years to twelve years. Municipalities are also given the option to maintain land with servicing capacity to provide a five-year supply of residential units (up from three). Overall, these changes appear to be positive, but we will continue to assess as more information becomes available.

### **Servicing Hierarchy and Private Communal Services**

The draft PPS clarifies that the servicing hierarchy supports protecting the environment, human health and safety. With that in mind, upper-tier municipalities are required to work with lower-tier municipalities to assess long-term impacts of individual services on environmental health and character of rural settlement areas and the feasibility of full municipal services or private communal services. Policies specify that communal services are preferred for development of multiple residential units/lots where municipal services are not available, planned or feasible.

### **Land Use Compatibility**

Stronger protection is provided for existing or planned major facilities (including industries, manufacturing uses, other facilities and infrastructure) from proposed sensitive lands uses (such as residences, day care centres, etc.).

### 3.0 Comments

Questions from Ministry	Response
<p>1. Do the proposed policies effectively support goals related to increasing housing supply, creating and maintaining jobs, and red tape reduction while continuing to protect the environment, farmland, and public health and safety?</p>	<p>The PPS has become much less relevant to Wellington because of the more specific, more restrictive, same or similar policies of the Growth Plan for the Greater Golden Horseshoe.</p> <p>The Province should consider fully implementing the PPS in the Greater Golden Horseshoe through one policy document - the provincial Growth Plan. This would reduce red tape by eliminating policy duplication and streamline the review of development applications.</p>
<p>2. Do the proposed policies strike the right balance? Why or why not?</p>	<p>The policy changes for mineral aggregate resources do not effectively balance the need:</p> <ul style="list-style-type: none"> <li>• for local Council input regarding depth of extraction as below water table extraction is a permanent change to the landscape</li> <li>• to protect the environment by allowing extraction to be considered within natural heritage features and areas</li> </ul> <p>We do not support these permissive aggregate policies in the draft PPS, particularly in areas of the County where there is a high concentration of gravel pits.</p>
<p>3. How do these policies take into consideration the views of Ontario communities?</p>	<p>See response to question 1.</p>
<p>4. Are there any other policy changes that are needed to support key priorities for housing, job creation, and streamlining of development approvals?</p>	<p>See response to question 1.</p>
<p>5. Are there other tools that are needed to help implement the proposed policies?</p>	<p>The province should support municipalities and housing developers by researching and sharing best practices to facilitate a greater mix of housing options and increase the supply of affordable rental accommodations.</p>

We have reported on the PPS review at this time to ensure that County Council may consider these comments prior to the October 20, 2019 deadline. We will be attending an information session with the province September 9 and the Association of Municipalities of Ontario (AMO) is working on a response. Planning staff may augment this report if we become aware of new information of relevance to Wellington.

## **Recommendation**

That the report “2019 Provincial Policy Statement Review” be forwarded to the Ministry of Municipal Affairs and Housing and be circulated to member municipalities in Wellington County.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Sarah Wilhelm', with a long horizontal flourish extending to the right.

Sarah Wilhelm, BES, MCIP, RPP  
Manager of Policy Planning



# COUNTY OF WELLINGTON

## COMMITTEE REPORT

**To:** Chair and Members of the Planning Committee  
**From:** Sarah Wilhelm, Manager of Policy Planning  
**Date:** Thursday, September 12, 2019  
**Subject:** County Official Plan Review - Process and Key Phases

### 1.0 Purpose

The purpose of this report is to:

1. introduce County and local Councils to the process for the County Official Plan Review, which will address the requirements for a municipal comprehensive review (“MCR”) and a five-year review; and
2. provide an outline of key work plan phases.

### 2.0 Background

Since amalgamation in 1999, the County Official Plan has been the core-planning document that guides decision-making on long-term growth and development for the County and our member municipalities. The County Official Plan provides policies to ensure that:

- existing and future residents have an adequate supply and variety of jobs, homes, shopping, services, leisure activities, educational opportunities and cultural facilities; and
- people of the County enjoy clean air, clean water, healthy communities, natural heritage, cultural heritage, public health and public safety.

The Plan establishes the County’s goals and directions for land use planning and development based on a broad structure of urban, rural and greenlands systems. The urban system is the focus for growth, the rural system is the focus for resource activities, and the greenlands system is the focus for protection of the natural environment.

### 2.1 Keeping the Official Plan Current

The basic framework of the Official Plan has been in place for 20 years and Council has revised the Plan regularly to respond to changing needs and policy directions. Figure 1 identifies the three key ways for the County to review and amend the Official Plan to incorporate policy updates.

**Figure 1 Approaches for County-Initiated Policy Updates**



The Planning Act requires municipalities to keep their official plans up to date every five years to ensure that the Plan:

- conforms, or does not conflict with provincial plans (the Growth Plan for the Greater Golden Horseshoe and Greenbelt Plan in Wellington);
- has regard to the matters of provincial interest listed in section 2 of the Act; and
- is consistent with the provincial policy statement.

The County completed the last 5-year review in 2014.

The Province has also defined a process for bringing an official plan into conformity with aspects of the Growth Plan termed a “municipal comprehensive review” (“MCR”). This is unique to the Growth Plan and is associated with its own deadline.

It is also possible for the County to update official plans to address specific policy matters through a 5-year review or as standalone official plan amendments. Some recent examples of standalone amendments in Wellington include updated policies for Community Improvement Areas, Source Protection Plans and second units.

The top priority for the County is to move forward with the MCR, however, the Plan is also out of date with the 2014 PPS, 2017 Greenbelt Plan and other amendments to the Planning Act. Under subsection 26(2) of the Act, Council has discretion to complete the MCR as a separate exercise, or combine it with a 5-year review.

## **2.2 Municipal Comprehensive Review**

Staff reported to Planning Committee in June about the new Growth Plan for the Greater Golden Horseshoe (“Growth Plan”) released by the Province. The 2019 Growth Plan carried over the requirement to complete a municipal comprehensive review by mid-2022 to bring Official Plans into conformity with the Growth Plan. The Growth Plan defines a municipal comprehensive review as:

“A new official plan, or an official plan amendment, initiated by an upper- or single-tier municipality under section 26 of the Planning Act that comprehensively applies the policies and schedules of this Plan.”

County Staff will approach the MCR in a collaborative manner with municipal input.

The County Official Plan is currently up to date with June 2013 amendments made by the Province to its growth forecasts and to extend the forecasts to 2041 in the Growth Plan. To do so, the County retained Watson & Associates to extend the County forecasts to 2036 and 2041, and allocate the updated Growth Plan forecast to local municipalities and then to urban centres for residential growth. In May 2015, County Council received the growth forecast update report from Watson & Associates, and directed staff to circulate the amendment to local municipalities for comment. Staff revised the draft Official Plan Amendment to reflect a number of comments received.

In 2016, County Council adopted the current County Official Plan forecasts and they came into effect in 2017 (by Ontario Municipal Board settlement). This Official Plan Amendment (OPA 99) brought the Plan into conformity with and allocated the forecasts in the Growth Plan. By 2041, the County is forecast to accommodate a population of 140,000 residents and 61,000 jobs. This represents an almost 50% increase of the County’s 2016 population of 95,805 and a 50% increase of the County’s 40,070 jobs. Since the approval of OPA 99, Statistics Canada released

the 2016 Census, and the Province released an updated Growth Plan in 2017 and a series of guidance documents for implementation (Figure 2). These documents present information, technical criteria and approaches.

**Figure 2 Current Status of Provincial Guidance Documents**

Final Documents	Draft Documents
Land Needs Assessment methodology	Municipal Comprehensive Review process
Agricultural System implementation	Application of the Intensification and Density Targets
Natural Heritage System implementation	Agricultural Impact Assessment

It is our understanding that the Province intends to update some of the guidance documents to align with the 2019 Growth Plan and staff will monitor the status of these documents as we move forward with the MCR.

The Growth Plan also requires municipalities to complete various background studies and analysis through the MCR process in order to demonstrate conformity with provincial policies, including (but not limited to) the following:

- A hierarchy of settlement areas and of strategic growth areas within them, across the County
- Servicing
- Land needs assessment
- Strategies to address intensification, employment, housing, excess lands, climate change, Indigenous consultation, etc.
- Transportation
- Agricultural System and Natural Heritage System mapping and policy direction

We have been told by Ministry of Municipal Affairs and Housing staff that the growth allocations made through OPA 99 will be subject to further review through the MCR (as they were not subject to the standardized land needs assessment methodology at that time). The Planning and Development Department maintains employment and residential land inventories in a geographic information system. As these inventories are an important input to land needs assessment, planning staff started work to update the inventories in June 2019.

The MCR will be a complex undertaking and staff anticipates the process will take at least two years to complete.

### 2.3 5-Year Review

There have been a number of significant provincial policy initiatives and other matters that will directly affect the 5-year review exercise, including:

- Greenbelt Plan, 2017
- Provincial Policy Statement, 2014 (currently under review)
- Significant amendments to the Planning Act through:
  - Bill 73, the Smart Growth for Our Communities Act, 2015
  - Bill 139, the Building Better Communities and Conserving Watersheds Act, 2017
  - Bill 34, Green Energy Repeal Act, 2018
  - Bill 108, the More Homes, More Choice Act, 2019
- Updates to Source Water Protection Plans



There are also County initiatives that will help inform the 5-year review, including the following:

- Active Transportation Plan (2012)
- A Place to Call Home: 10 Year Housing and Homelessness Plan for Guelph Wellington (5-year update awaiting provincial approval)
- Climate Mitigation Strategy (in process)
- Economic Development Strategic Plan (2012)
- Energy Management Plan (2014)
- Strategic Action Plan (2019)
- Transportation Master Plan (pending)

The 5-year review process will seek to incorporate the relevant policies and directions from these and other documents from the standpoint of land use planning and development policy.

## **2.4 Approval Process**

The MCR and 5-year review will lead to the preparation of an Official Plan Amendment in accordance with section 26 of the Planning Act.

Once a final draft of the County Official Plan Amendment is completed, the Province requires it to be forwarded to them not less than 90 days prior to notice being given for the statutory public meeting. Once County Council adopts the Amendment, the Province will have 210 days to render its decision.

The MCR and 5-year review have two important differences from other amendments to the Official Plan as they both require the following:

- provincial approval; and
- an open house/special meeting of Council.

The decision of the Province is non-appealable.

## **3.0 Work Plan**

The County will:

- manage the overall project in-house
- hire consultants to undertake specific components of the review
- work in consultation with local municipalities, Indigenous communities, members of the public, agencies and other key stakeholders
- prepare an overall communications and engagement plan including a dedicated page on the County's website and provide required updates to the content
- follow the required Planning Act process of consultation after the MCR and 5-year review has concluded

County planning staff will report to County Council periodically and seek direction at key decision-making points to scope further work. The timeline below identifies the broad phases and components of the MCR and 5-year review process (Figure 3).

**Figure 3 County Official Plan Review Phasing**  
 Joint MCR and 5-year Review

Consultation Throughout 	<b>PHASE 1</b>	<b>Setting the Stage</b> Fall 2019 – Spring 2020	<ul style="list-style-type: none"> <li>▪ Background review*</li> <li>▪ Initiate key MCR background studies</li> <li>▪ Prepare communications and engagement plan</li> <li>▪ Official project launch</li> <li>▪ Develop key themes</li> </ul>
	<b>PHASE 2</b>	<b>Technical Analysis, Issues and Opportunities</b> 2020	<ul style="list-style-type: none"> <li>▪ Continue work on MCR background studies</li> <li>▪ Provincial Policy Statement review</li> <li>▪ Greenbelt Plan Review</li> <li>▪ Identify other county and/or local policy priorities</li> </ul>
	<b>PHASE 3</b>	<b>Options</b> 2020 - 2021	<ul style="list-style-type: none"> <li>▪ Prepare policy option discussion papers on key theme areas based on MCR background studies, community engagement and Council input</li> <li>▪ Report on Provincial Policy Statement consistency, Greenbelt Plan conformity and other policy priorities</li> <li>▪ Prepare Draft Official Plan Amendment</li> </ul>
	<b>PHASE 4</b>	<b>Final Draft Official Plan Review</b> 2021 – early 2022	<ul style="list-style-type: none"> <li>▪ Prepare final Draft Official Plan Amendment</li> <li>▪ Follow Planning Act requirements for Official Plan Amendment</li> </ul>

\*NOTE: County staff has commenced work to update employment and residential land inventory updates

Staff are considering a combined MCR and 5-year Review process to complete the Official Plan Review. The Planning Act also allows municipalities to implement new policies through standalone amendments. The main advantage of the combined process is to engage the public, Council and other stakeholders more efficiently and effectively. We will monitor our approach (phasing) in light of any shifting provincial, County and local priorities and make changes as necessary.

### Recommendations

That the report “County Official Plan Review – Process and Key Phases” be received for information and forwarded to member municipalities.

That the Director of Planning and Development be authorized to proceed with the County Official Plan Review.

Respectfully submitted,



Sarah Wilhelm, BES, MCIP, RPP  
 Manager of Policy Planning



## REPORT PD-2019-014

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TO: Mayor and Members of Council

FROM: Lynne Banks, Development and Legislative Coordinator

MEETING DATE: October 16, 2019

SUBJECT: Township Wells on GRCA Lands  
File No. L04/GRC

---

### **RECOMMENDATIONS**

That Report PD-2019-014 regarding the Township wells located on GRCA lands know as the Former Russian Olive Grove at McCormick's Point (the "Lands"), be received for information; and

That a decision should be considered as to whether or not the remaining wells should be decommissioned or kept as part of the Township's monitoring program.

### **DISCUSSION**

#### Background

In January, 2010, the Township entered into an agreement with the Grand River Conservation Authority (the "GRCA") for the purpose of installing monitoring wells on GRCA lands. The purpose of the wells was to assist with an environmental assessment for the ongoing storage of dredge material from Puslinch Lake and the main wells are identified as SW1-S and SW1-D. The term of the agreement was for one year and the Township was required to decommission the wells upon expiry of the agreement.

As well, there are also 17 monitoring wells, located on the surrounding GRCA property and specifically McCormick's Point. Attachment "1" to this Report indicates the locations of the remaining wells is attached to this report and it should be noted that the existing wells have not been maintained.

### Purpose

Two of the wells are located on a portion of the GRCA lands that the GRCA is selling and the Township has had the wells decommissioned by Harden Environmental Services Ltd., the contractor overseeing the project, which was completed May 31, 2019 in preparation of the sale of the land. Copies of the decommissioning reports are shown on Attachment "2" for Council's reference.

The other wells have not been decommissioned to date and there are several that cannot be located. It should further be noted that in speaking with the GRCA, they have advised that the GRCA would be unable to take on the maintenance and decommissioning of the wells, however, the GRCA property staff would be willing to work with the Township to prepare an updated licence agreement.

The remaining wells have not been maintained and Harden Environmental Services Ltd. was contacted regarding the cost to decommission the remaining wells and have advised that it will cost approximately \$8,000.00.

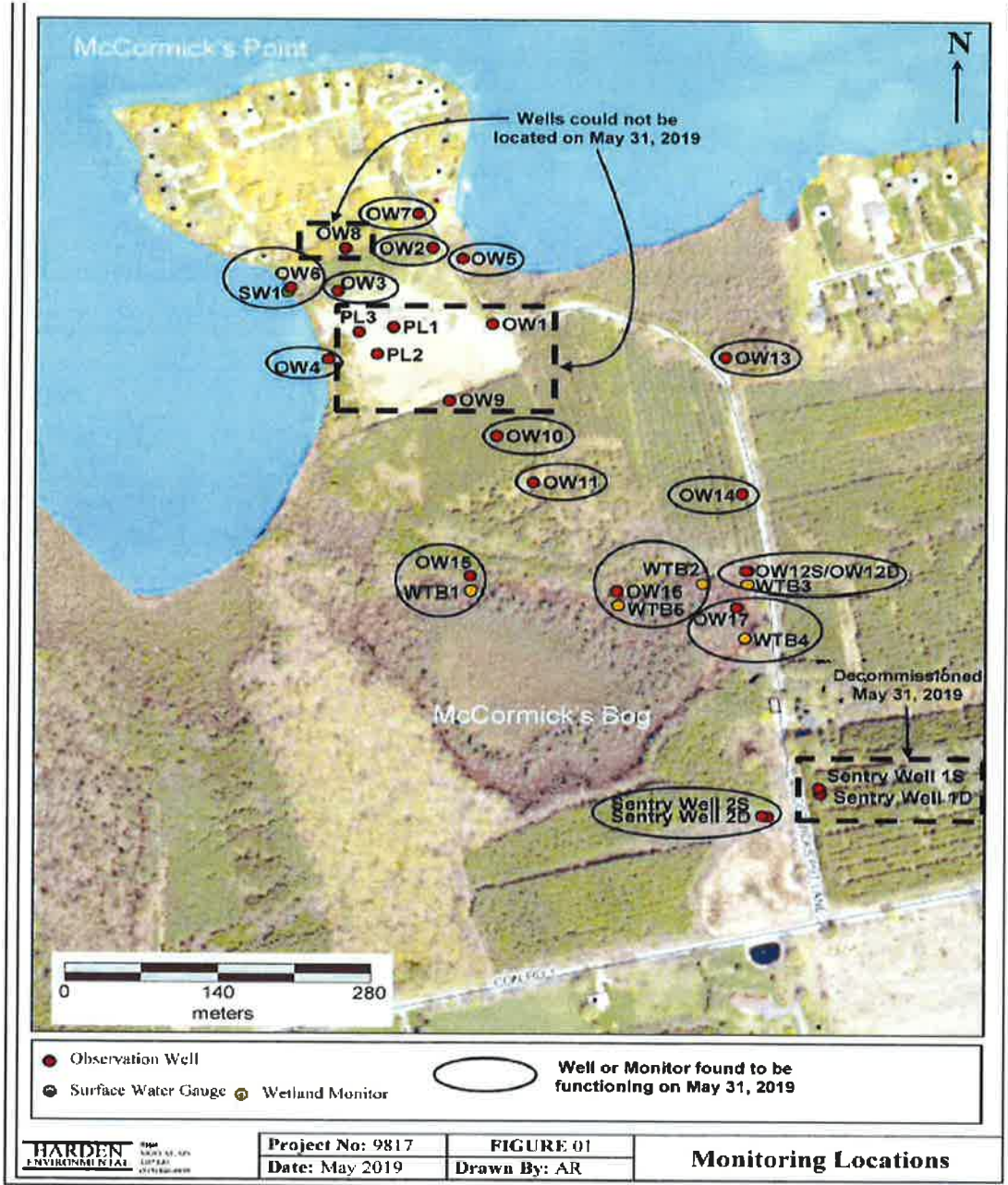
### **Financial Implications**

\$8,000.00 for costs to decommission the remaining wells, to be drawn on account # 01-0010-4305 (professional fees – engineering and environmental) from the 2018 budget.

### **Attachments**

1. Map showing monitoring locations/wells
2. Decommissioning reports for Wells\_SW1-S and SW1-D

**Attachment "1"**





Well Tag No. (Place Sticker and/or Print Below)

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in:  Metric  Imperial

Page 1 of 1

Well Owner's Information

First Name, Last Name / Organization, E-mail Address, Mailing Address (Street Number/Name), Municipality, Province, Postal Code, Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name), Township, Lot, Concession, County/District/Municipality, City/Town/Village, Province Ontario, Postal Code, UTM Coordinates Zone, Easting, Northing, Municipal Plan and Sublot Number, Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

Table with columns: General Colour, Most Common Material, Other Materials, General Description, Depth (m/ft) From, To. Includes handwritten 'ABANDONMENT'.

Annular Space: Depth Set at (m/ft) From, To; Type of Sealant Used (Material and Type); Volume Placed (m³/ft³)

Results of Well Yield Testing: After test of well yield, water was:  Clear and sand free;  Other, specify. Draw Down table with Time (min), Water Level (m/ft), Recovery Time (min), Water Level (m/ft).

Method of Construction:  Cable Tool,  Rotary (Conventional),  Rotary (Reverse),  Boring,  Air percussion,  Other, specify. Well Use:  Public,  Domestic,  Livestock,  Irrigation,  Industrial,  Other, specify.

Construction Record - Casing: Inside Diameter (cm/in), Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel), Wall Thickness (cm/in), Depth (m/ft) From, To, Status of Well (Water Supply, Replacement Well, Test Hole, Recharge Well, Dewatering Well, Observation and/or Monitoring Hole, Alteration (Construction), Abandoned, Insufficient Supply, Abandoned, Poor Water Quality, Abandoned, other, specify, Other, specify)

Construction Record - Screen: Outside Diameter (cm/in), Material (Plastic, Galvanized, Steel), Slot No., Depth (m/ft) From, To.

Map of Well Location: Please provide a map below following instructions on the back. See Attached

Water Details: Water found at Depth (m/ft), Kind of Water:  Fresh  Untested  Gas  Other, specify. Hole Diameter: Depth (m/ft) From, To, Diameter (cm/in)

Well Contractor and Well Technician Information: Business Name of Well Contractor (GEO-ENVIRONMENTAL DRILLING), Well Contractor's Licence No. (66017), Business Address (Street Number/Name) (1 MANSEWIC COURT), Municipality (Halton Hills), Business E-mail Address (estimates@geo-environmentaldrilling.com), Name of Well Technician (Last Name, First Name) (J O A), Date Submitted (8/17/14)

Ministry Use Only: Audit No. (282712), Date Package Delivered (Y|Y|Y|M|M|D|D), Date Work Completed (Y|Y|Y|M|M|D|D)

## The Ontario Water Resources Act and Regulation 903

Certain Sections of the *Ontario Water Resources Act* are of interest to well owners, parts of these are described below for your information.

- Under Section 30 (1) No person shall discharge or deposit any material directly into any well or place that may impair the quality of any water.
- Under Section 34 (3) No person shall take more than 50,000 litres of water in a day for purposes other than domestic, farm, or fire fighting without a permit issued by the Ministry.
- Under Section 34 (7) The Ministry may require the owner of a flowing well to stop the flow of water from the well.
- Under Section 39, 43 Well Contractors and Well Technicians operating in the Province are required to obtain the appropriate licences from the Ministry to carry on the business of constructing wells and to work at the construction of water wells.

Regulation 903 under the *Ontario Water Resources Act* prescribes the minimum construction (including abandonment) requirements as well as outlines the licensing requirements, conditions, and the roles and responsibilities required of licensed well contractors, well technicians, and well owners in supporting the regulation in Ontario. The owner of a well is required to maintain the well at all times after completion in such manner as to prevent the entry of surface water or foreign materials into the well. The well owner is required to abandon (plug) a well that is not used or maintained. The owner may be required to abandon the well in a manner sufficient to prevent impairment of the quality of ground water if salty, sulphurous, or other non-potable water is encountered in the well. For further information on well construction, well maintenance, and well abandonment, and applicable exemptions, please refer to the *Ontario Water Resources Act* and Regulation 903, available at [www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca).

### Instructions and Explanations for completing a Well Record

1. For use in the **Province of Ontario** only. This document is a permanent legal document. All **APPLICABLE** sections/fields **MUST** be completed in full and ALL COPIES **MUST** be LEGIBLE to avoid delays in processing and to comply with the Regulation 903. Please **PRINT** if completing by hand.
2. The Ministry's copy (top, WHITE) of the Well Record shall be returned to the Wells Help Desk, Ministry of the Environment and Climate Change, 125 Resources Road, Toronto ON M9P 3V6 within thirty (30) days after the date on which the well's structural stage is complete. The PINK copy shall be submitted to the Well Owner within fourteen (14) days after the date on which the well's structural stage is complete. The YELLOW copy is for the Well Contractor. The Well Contractor must retain a copy of the Well Record for a minimum of 2 years for future reference.
3. Not shaded fields are COMMON FIELDS and must be completed for all types of work, including abandonment, as applicable. Fields shaded in YELLOW must be completed for construction and alteration work, as applicable.
4. All measurements **MUST** be recorded in the specified unit, metric or imperial. To indicate the unit used, check off the applicable box on the top of the form. Measurements must be reported to 1/10th of a metre if the unit is a metre. All measurements of depth **MUST** be referenced to ground surface.
5. Well Owner's Information: If the well owner is not an individual, circle the word Organization and print the Organization/Company Name in "Last Name/Organization" field.
6. Well Location: Street Number/Name and City/Town/Village must be provided, if available. Geographic Township, Concession and Lot must be reported if the well is located in an area where such information exists. Current Municipality or Township, if reported, should be entered under "County/District/Municipality." UTM Coordinates must be recorded each time a Well Record is completed. Municipal Plan and Sublot Number may be provided, if available.
7. Abandonment details must be recorded in the "Overburden and Bedrock Materials/Abandonment Sealing Record" section. Indicate type of sealant used in "General Description" column and complete the "Depth" column.
8. Overburden and Bedrock Materials/Abandonment Sealing Record: For each formation encountered during construction, choose words from the lists below that best describe the formation on the basis of general colour, most common material, other materials, and general description of the formation. Print neatly in the correct columns.

General Colours		Materials					General Descriptions		
White	Yellow	Fill	Silt	Top Soil	Coarse Sand	Slate	Loose	Cemented	Previously Dug or Bored
Grey	Brown	Muck	Gravel	Limestone	Dolomite	Quartzite	Porous	Layered	Previously Drilled
Blue	Red	Peat	Stones	Fine Sand	Shale	Granite	Dense	Soft	Wood Fragments
Green	Black	Clay	Boulders	Medium Sand	Sandstone	Greenstone	Packed	Hard	

- Clay: Composed of very fine particles. Forms dense hard lumps or clods when dry and a very elastic putty-like mass when wet. It can be rolled between fingers to form a long, flexible ribbon.
- Silt: Grain size, midway between sand and clay. It may form clods which, when broken, feel soft and floury. When moist, it will form a cast that can be handled freely without breaking. Rolled between thumb and finger, it will not "ribbon" but will give a broken appearance.
- Sand: Grains are loose and granular and may be seen and felt readily. Squeezed in the hand when dry, it falls apart when the pressure is released. Squeezed when moist, it will form a cast that will crumble when touched. Should be listed as fine, medium or coarse.
- Gravel: Rock fragments greater than 0.3 cm in diameter.

Example: Overburden and Bedrock Materials Record for construction (measurements recorded in metric)

General Colours	Most Common Material	Other Materials	General Descriptions	Depth	
				From	To
Brown	Top Soil			0	0.6
Grey	Course Sand	Gravel, Silt	Loose, Wood Fragments	0.6	13.0
Blue	Clay	Silt, Stones	Dense	13.0	25.0
Brown	Fine Sand	Clay		25.0	31.0
Grey	Limestone		Porous, Hard	31.0	34.0

9. Water Level measurements in Results of Well Yield Testing: Distance between the surface of the ground and the top of the water in the well.
10. Water Details: Depth(s) at which water is found. The distance from the surface of the ground to the water bearing formation, or horizon, where water is found. There may be more than one water bearing formation.
11. Map of Well Location: Provide a map showing all property boundaries, and measurements sufficient to locate the well in relations to fixed points including an arrow indicating the North direction. In rural areas, one distance should be taken from a road and the other from either a road or a township lot line (Fig. 1). In a village, town or city, both distances should be taken from named streets (Fig 2). In areas where it is difficult to obtain lot and concession numbers, sufficient information should be supplied in the diagram so that the well can be related to a known unit such as a main highway, railway, or municipality (Figs. 3 & 4). Detailed drawings can be provided as attachments not larger than legal size (8.5" by 14").



Fig. 1

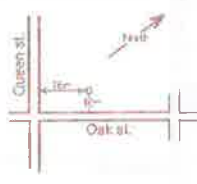


Fig. 2

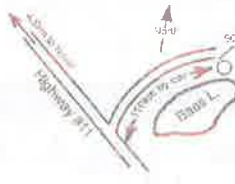


Fig. 3



Fig. 4

Personal information contained on this form is collected pursuant to sections 35-50 and ss. 75(2) of the *Ontario Water Resources Act, R.S.O. 1990, c.o. 40* and will be used for the purpose of registering your well (and any other public record purpose). Questions about this collection should be directed to the Wells Help Desk, Ministry of the Environment and Climate Change, 125 Resources Road, Toronto ON M9P 3V6 or 1 888-396-9355.

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Maps © 2018 OpenStreetMap CC-BY-SA - Image may be subject to copyright. 100 m Terms of Use





Well Tag No. (Place Sticker and/or Print Below)

A023569

Well Record

Regulation 903 Ontario Water Resources Act

Page 1 of 1

Measurements recorded in:  Metric  Imperial

Well Owner's Information

First Name, Last Name / Organization, E-mail Address, Mailing Address (Street Number/Name), Municipality, Province, Postal Code, Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name), Township, Lot, Concession, County/District/Municipality, City/Town/Village, Province Ontario, Postal Code, UTM Coordinates Zone, Easting, Northing, Municipal Plan and Sublot Number, Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

Table with columns: General Colour, Most Common Material, Other Materials, General Description, Depth (m/ft) From, To. Includes handwritten 'ABANDONMENT' in the material column.

Annular Space table with columns: Depth Set at (m/ft) From, To; Type of Sealant Used (Material and Type); Volume Placed (m³/ft³)

Method of Construction and Well Use tables with checkboxes for Cable Tool, Rotary, Boring, etc.

Construction Record - Casing table with columns: Inside Diameter (cm/in), Open Hole OR Material, Wall Thickness (cm/in), Depth (m/ft) From, To, Status of Well

Construction Record - Screen table with columns: Outside Diameter (cm/in), Material, Slot No., Depth (m/ft) From, To

Water Details and Hole Diameter tables with columns for water found at depth, kind of water, depth, diameter

Well Contractor and Well Technician Information section including Business Name (GEO - ENVIRONMENTAL DRILLING), Business Address (1 MANSEWOOD COURT), Business E-mail Address, Well Contractor's Licence No. (6607), Well Technician's Licence No. (9058763388)

Results of Well Yield Testing table with columns: Draw Down (Time, Water Level), Recovery (Time, Water Level), Pumping rate, Duration of pumping, Final water level end of pumping, If flowing give rate, Recommended pump depth, Recommended pump rate, Well production, Disinfected?

Map of Well Location section with text: Please provide a map below, following instructions on the back. See Attached

Comments section and Ministry Use Only section with Audit No. 282113, Date Package Delivered, Date Work Completed

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4. All measurements **MUST** be recorded in the specified unit, metric or imperial. To indicate the unit used, check off the applicable box on the top of the form. Measurements must be reported to 1/10th of a metre if the unit is a metre. All measurements of depth **MUST** be referenced to ground surface.
5. Well Owner's Information: If the well owner is not an individual, circle the word Organization and print the Organization/Company Name in "Last Name/ Organization" field.
6. Well Location: Street Number/Name and City/Town/Village must be provided, if available. Geographic Township, Concession and Lot must be reported if the well is located in an area where such information exists. Current Municipality or Township, if reported, should be entered under "County/District/Municipality." UTM Coordinates must be recorded each time a Well Record is completed. Municipal Plan and Sublot Number may be provided, if available.
7. Abandonment details must be recorded in the "Overburden and Bedrock Materials/Abandonment Sealing Record" section. Indicate type of sealant used in "General Description" column and complete the "Depth" column.
8. Overburden and Bedrock Materials/Abandonment Sealing Record: For each formation encountered during construction, choose words from the lists below that best describe the formation on the basis of general colour, most common material, other materials, and general description of the formation. Print neatly in the correct columns.

General Colours		Materials					General Descriptions		
White	Yellow	Fill	Silt	Top Soil	Coarse Sand	Slate	Loose	Cemented	Previously Dug or Bred
Grey	Brown	Muck	Gravel	Limestone	Dolomite	Quartzite	Porous	Layered	Previously Drilled
Blue	Red	Peat	Stones	Fine Sand	Shale	Granite	Dense	Soft	Wood Fragments
Green	Black	Clay	Boulders	Medium Sand	Sandstone	Greenstone	Packed	Hard	

- Clay: Composed of very fine particles. Forms dense hard lumps or clods when dry and a very elastic putty-like mass when wet. It can be rolled between fingers to form a long, flexible ribbon.
- Silt: Grain size, midway between sand and clay. It may form clods which, when broken, feel soft and floury. When moist, it will form a cast that can be handled freely without breaking. Rolled between thumb and finger, it will not "ribbon" but will give a broken appearance.
- Sand: Grains are loose and granular and may be seen and felt readily. Squeezed in the hand when dry, it falls apart when the pressure is released. Squeezed when moist, it will form a cast that will crumble when touched. Should be listed as fine, medium or coarse.
- Gravel: Rock fragments greater than 0.3 cm in diameter.

Example: Overburden and Bedrock Materials Record for construction (measurements recorded in metric)

General Colours	Most Common Material	Other Materials	General Descriptions	Depth	
				From	To
Brown	Top Soil			0	0.6
Grey	Coarse Sand	Gravel, Silt	Loose, Wood Fragments	0.6	13.0
Blue	Clay	Silt, Stones	Dense	13.0	25.0
Brown	Fine Sand	Clay		25.0	31.0
Grey	Limestone		Porous, Hard	31.0	34.0

9. Water Level measurements in Results of Well Yield Testing: Distance between the surface of the ground and the top of the water in the well.
10. Water Details: Depth(s) at which water is found. The distance from the surface of the ground to the water bearing formation, or horizon, where water is found. There may be more than one water bearing formation.
11. Map of Well Location: Provide a map showing all property boundaries, and measurements sufficient to locate the well in relations to fixed points including an arrow indicating the North direction. In rural areas, one distance should be taken from a road and the other from either a road or a township lot line (Fig. 1). In a village, town or city, both distances should be taken from named streets (Fig 2). In areas where it is difficult to obtain lot and concession numbers, sufficient information should be supplied in the diagram so that the well can be related to a known unit such as a main highway, railway, or municipality (Figs. 3 & 4). Detailed drawings can be provided as attachments not larger than legal size (8.5" by 14").

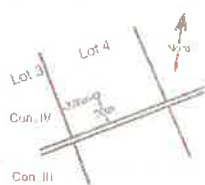


Fig. 1



Fig. 2

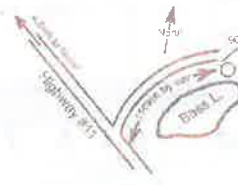


Fig. 3

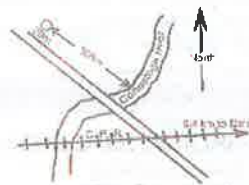


Fig. 4

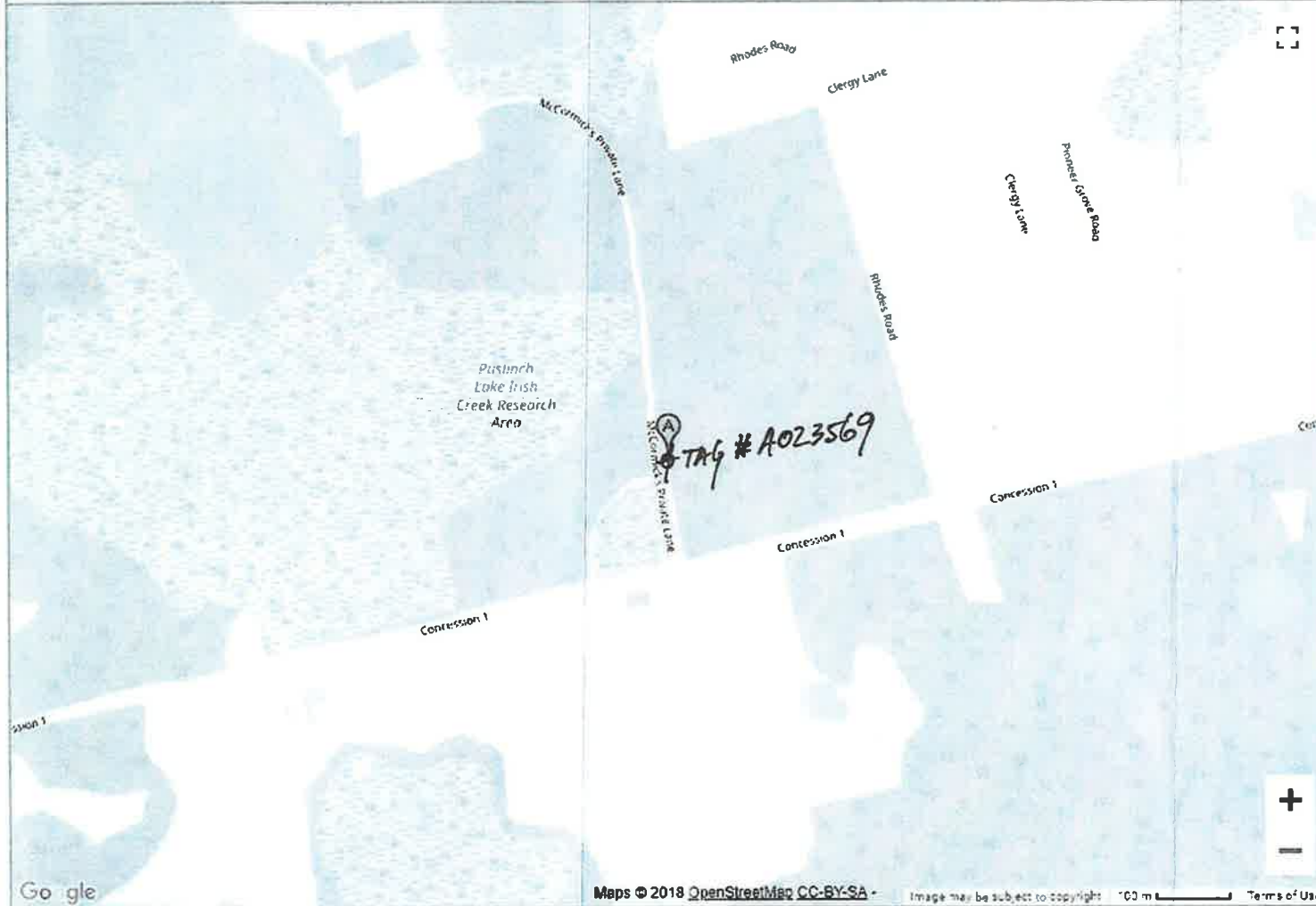
Personal information contained on this form is collected pursuant to sections 35-50 and ss. 75(2) of the *Ontario Water Resources Act, R.S.O. 1990, c.o. 40* and will be used for the purpose of registering your well (and any other public record purpose). Questions about this collection should be directed to the Wells Help Desk, Ministry of the Environment and Climate Change, 125 Resources Road, Toronto ON M9P 3V6 or 1 888-396-9355.

UTM N ▾ Hemis. 17 T 559856 x-aa 4806284 y-no <input type="button" value="ok"/>	dd.ddddd° Latitude: 43 40705 'N Longitude: -80 26075 'E <input type="button" value="ok"/>	dd° mm.mmm' 43 ° 24 423 ' N ▾ 80 ° 15.645 ' W ▾ <input type="button" value="ok"/>	dd° mm' ss.s" 43 ° 24 ' 25.4 " N ▾ 80 ° 15 ' 38.7 " W ▾ <input type="button" value="ok"/>
postal address or point of interest (poi) → McCormick's Private Lane, Puslinch, ON Canada <input type="button" value="ok"/>	elevation in m ▾ - <input type="button" value="ok"/>	WP01-A edit <input type="button" value="←"/> <input type="button" value="01-A"/> <input type="button" value="→"/> <input type="button" value="↔"/>	

POI / WPT / Waypoints

\*01-A "WP01-A" added  
 17 T 559856 4806284  
 43.40705°N -80 26075°E  
 Elevation= (quota exceeded)

\*\*all waypoints removed ...



No file chosen



## **REPORT BLDG-2019-010**

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TO: Mayor and Members of Council

FROM: Gerald Moore, Chief Building Official

MEETING DATE: October 16, 2019

SUBJECT: Building Department Monthly Update - September 2019

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### **RECOMMENDATION**

**That Report BLDG-2019-010 with respect to the Building Department Monthly Update – September 2019 be received for information.**

### **DISCUSSION**

#### **Purpose**

The purpose of this report is to provide Council with an update of the activities in the Building Department for September 2019.

#### **Background**

The purpose of this report is to provide Council with a summary of the Building Department's activities for the month of September 2019.

#### **Financial Implications**

The Building Code Act requires that the total amount of building permit fees meets the total costs for the municipality to administer and enforce the Building Code Act and Regulations. Building permit fees were established to fully recover the Township's cost of providing building permit services, including an allocation of administrative overhead/indirect costs. Any surplus revenue from building permit fees is transferred to a restricted reserve, to be drawn upon in years of declining building activity.

### **APPLICABLE LEGISLATION AND REQUIREMENTS**

Building Code Act, 1992, S.O. 1992, c. 23

### **ATTACHMENTS**

Schedule A – September 2019 Monthly report

**Permit Comparison Summary**

Issued For Period SEP 1,2019 To SEP 30,2019

	<u>Previous Year</u>			<u>Current Year</u>		
	<u>Permit Count</u>	<u>Fees</u>	<u>Value</u>	<u>Permit Count</u>	<u>Fees</u>	<u>Value</u>
<b>Agricultural Farm Building</b>						
Agricultural Farm Building	0	0.00	0.00	1	720.00	145,000.00
<b>Bylaw</b>						
Pool Enclosure Permit	2	420.00	101,600.00	1	215.00	10,000.00
<b>Commercial/Industrial</b>						
Commercial - No Occupancy Required	1	156.00	393,741.00	3	12,844.50	1,250,000.00
<b>Demolition</b>						
Demolition Permit	2	312.00	10,000.00	2	312.00	8,000.00
<b>New Residence</b>						
Residential - Occupancy Required	2	24,296.28	800,000.00	7	45,989.28	8,010,500.00
<b>Other</b>						
Tent Permit	1	260.00	20,000.00	3	780.00	11,500.00
<b>Other Residential</b>						
Accessory/Farm Buildings	5	4,593.60	250,500.00	4	4,725.91	385,000.00
Deck Permit	1	312.00	10,000.00	1	156.00	5,000.00
Detached Garage	2	747.24	105,000.00	2	1,350.96	69,800.00
Residential - No Occupancy Required	4	624.00	73,500.00	4	5,764.03	424,000.00
<b>Septic</b>						
Sewage Disposal System Permit	3	1,872.00	56,000.00	8	4,992.00	170,800.00

	<u>Previous Year</u>	<u>Current Year</u>
Total Permits Issued	23	36
Total Dwelling Units Created	2	6
Total Permit Value	1,820,341.00	10,489,600.00
Total Permit Fees	33,593.12	77,849.68
Total Compliance Letters Issued	6	1
Total Compliance Letter Fees	375.00	75.00

**Inspection Summary**

<u>Ward</u>	<u>Permit Inspections</u>	<u>Other Roll Inspections</u>
000	481	0
Total	481	0

<u>Permit Charge</u>	<u>Amount</u>
Accessory/Farm Buildings	4,725.91
Agricultural Farm Building	720.00
Commercial - No Occupancy Req	12,844.50
Deck Permit	156.00
Demolition Permit	312.00

**Permit Comparison Summary**

Issued For Period SEP 1,2019 To SEP 30,2019

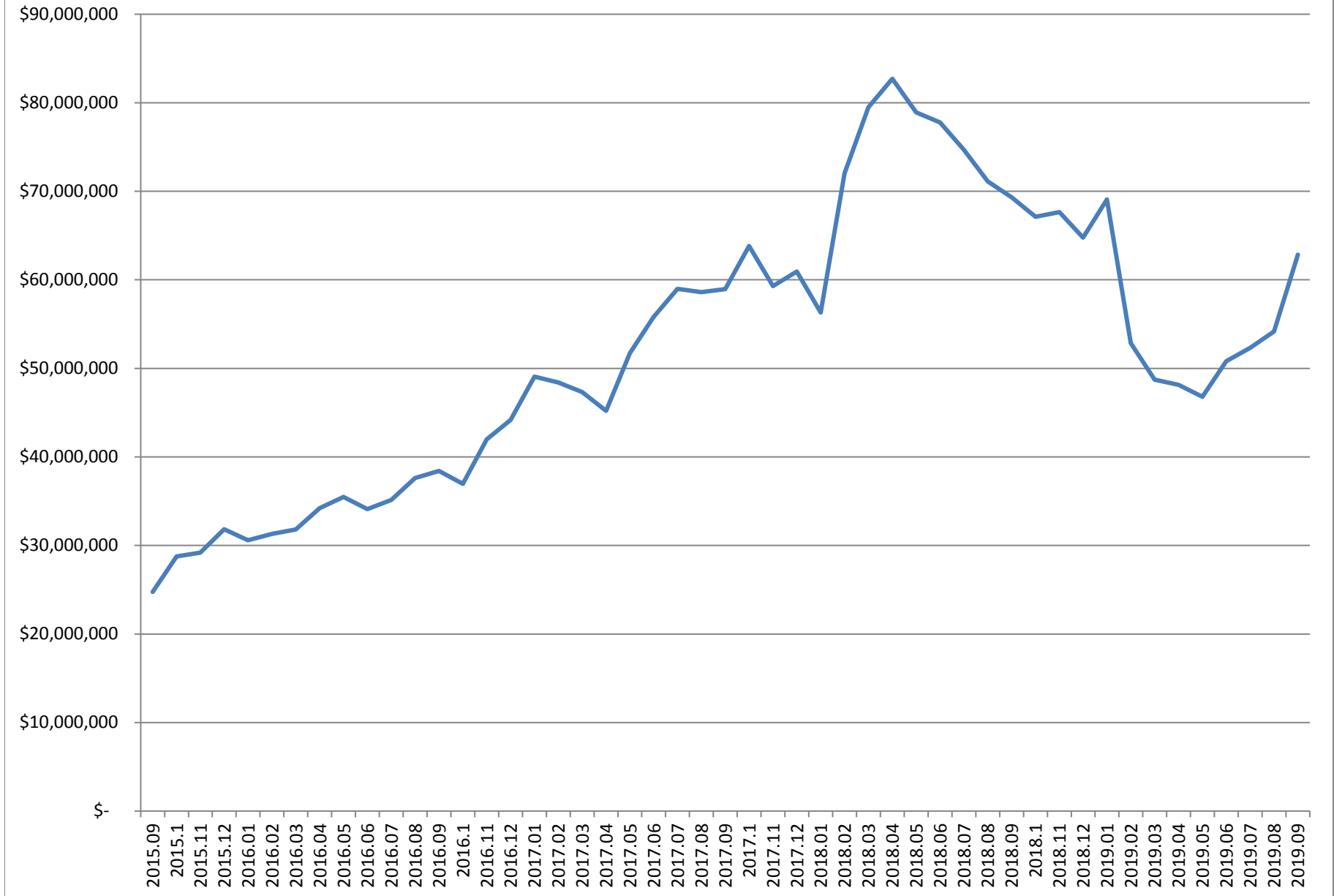
Detached Garage	1,350.96
Pool Enclosure Permit	215.00
Residential - No Occupancy Req	5,764.03
Residential - Occupancy Requir	45,989.28
Sewage Disposal System Permit	4,992.00
Tent Permit	780.00

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Total 77,849.68

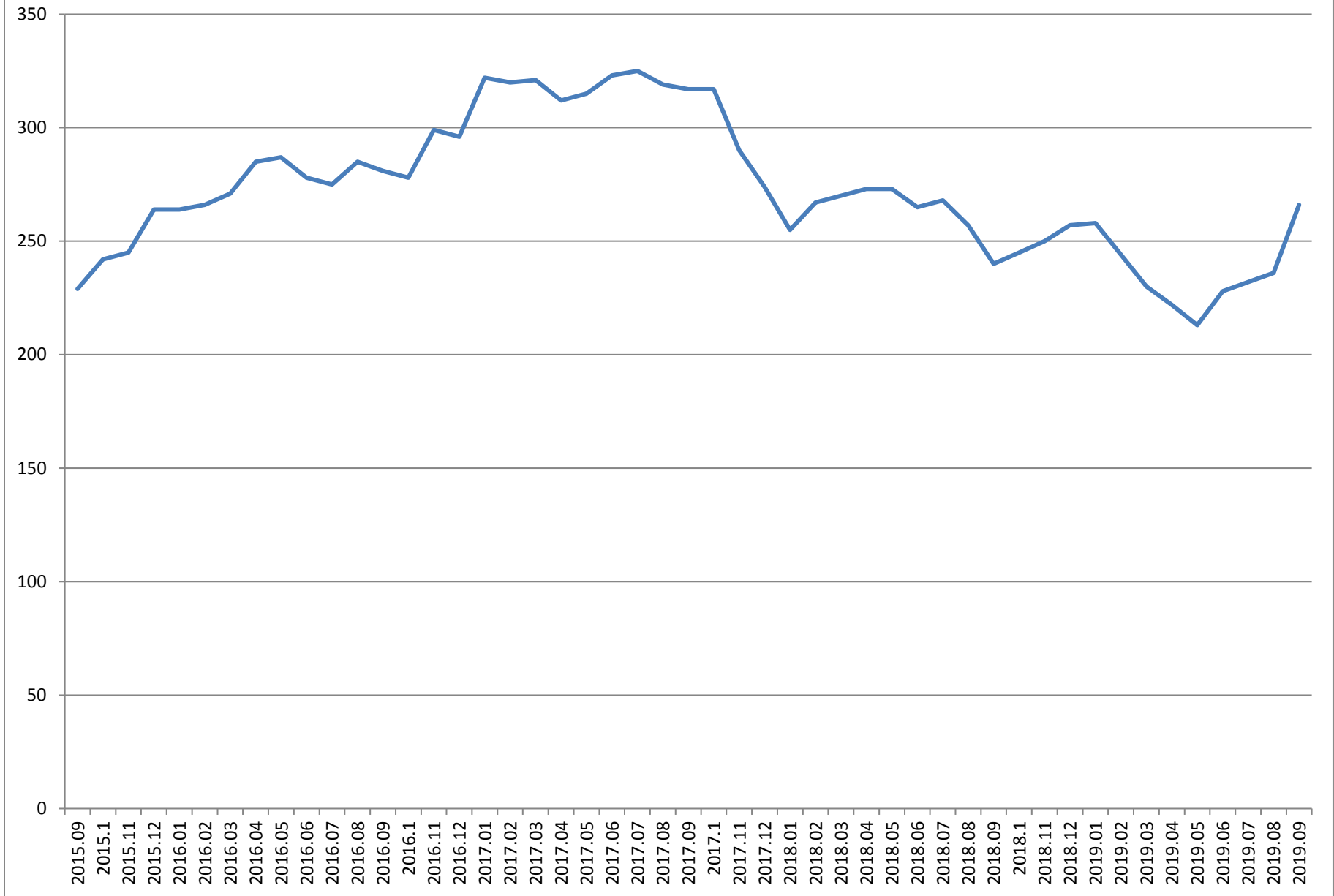
Note: The Graphs Below only Include Septic Permits in 2012 and beyond

### Total Value of Permits 12 Month Rolling Total



Note: The Graphs Below only Include Septic Permits in 2012 and beyond

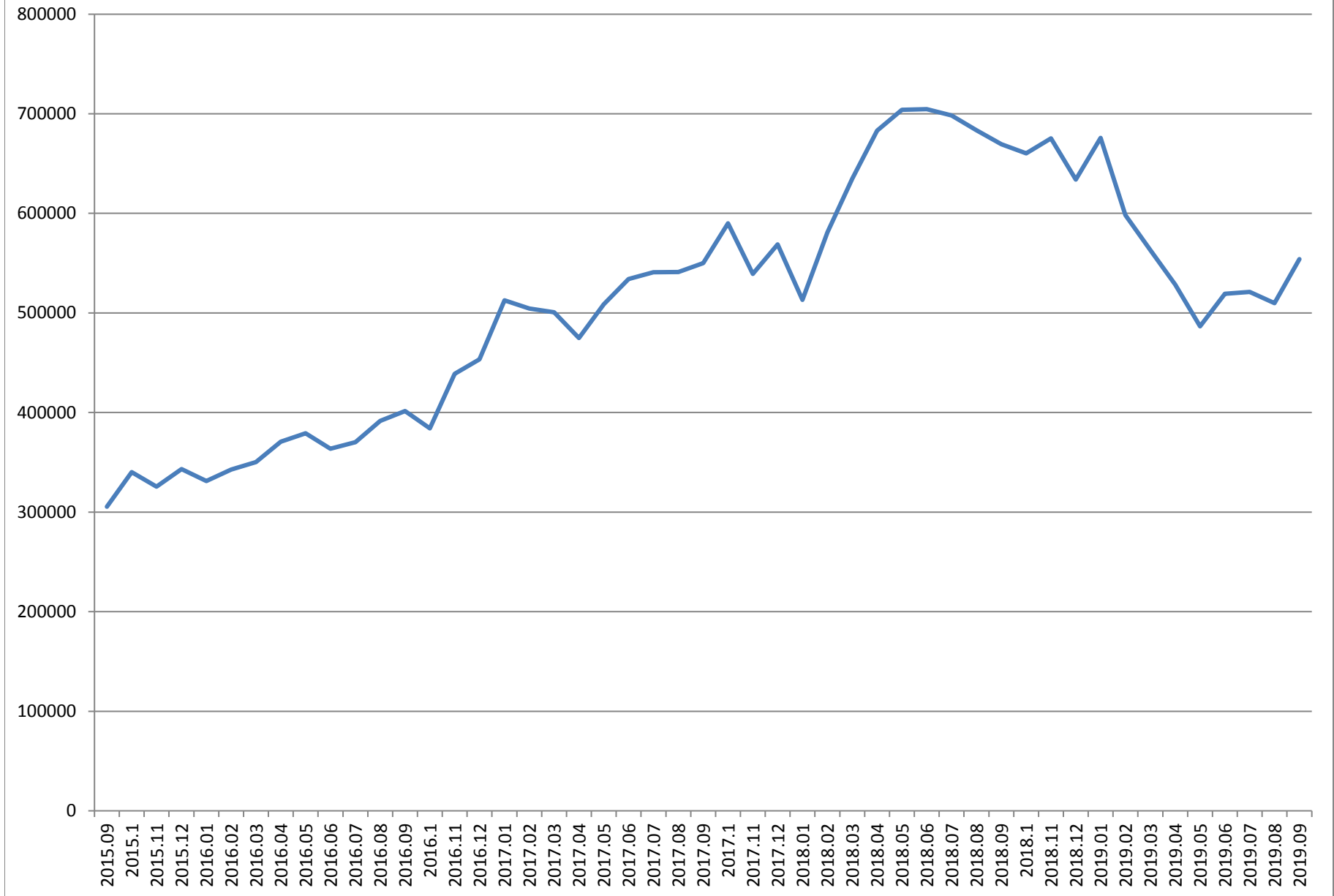
### # of Permits 12 Month Rolling Total





Note: The Graphs Below only Include Septic Permits in 2012 and beyond

### Permit Fees Collected 12 Month Rolling Total





## **REPORT REC-2019-002**

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TO: Mayor and Members of Council

FROM: Mike Fowler, Supervisor, Public Works and Parks  
Courtenay Hoytfox, Development and Legislative Coordinator

MEETING DATE: October 16, 2019

SUBJECT: Puslinch Community Centre – Audio System Update  
File No. A20 PUS

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### **RECOMMENDATIONS**

**THAT Staff Report REC-2019-002, regarding the Puslinch Community Centre – Audio System Update, be received.**

#### Purpose

The purpose of this report is for Council to consider the recommendations made by staff with respect to the audio equipment at the Puslinch Community Centre.

#### Background

The Township has traditionally provided microphones to renters when renting the large hall at the Puslinch Community Centre. New microphones were purchased in 2018 and a fee was implemented for the rental of equipment as repeated damage to the microphones and ancillary equipment was noted. The fee to rent a microphone from the Township is \$25.00 net of HST.

Some of the challenges for both staff and renters include the reliability of the audio system, ensuring the equipment is in working order for each rental, and accommodating requests for multiple microphones.

Staff recommends that the current system be utilized for renters when the microphone rental fee is paid. This is a service the Township has previously provided and should continue to provide. Renters must come into the Township office on the day of their rental to pick up the

microphone during business hours. For Saturday and Sunday rentals, renters must come into the office during business hours on Friday and pick up their equipment from Customer Service staff. Microphones must then be returned to Customer Service staff the following business day during business hours.

To address the issue of damage to both the audio equipment and the hall, Facility staff have implemented a Facility Maintenance Checklist (Attachment A). The checklist is to be completed after each rental. If damage is noted, the applicable amount is deducted from the renter's damage deposit cheque.

Occasionally, there are renters that require additional equipment that the Township does not provide. For example, the use of multiple microphones. The current system only has the capacity for one wireless receiver and so only one wireless microphone can be used. For past Township events, staff has rented equipment when required. It is recommended that a list of vendors be supplied as part of the Rental Package for renters to arrange for their own rentals. Below is a list of vendors that can be included:

- Long and McQuade (Guelph, Cambridge, Waterloo)
- Angus Audio (Cambridge)
- Sherwood (Kitchener)

The cost ranges from \$100.00-\$150.00 depending on the vendor and equipment required.

### **Financial Implications**

2019 User Fees and Charges By-law includes the fee of \$25.00 net of HST for microphone use at the Puslinch Community Centre with any damages to microphones being deducted from the renter's damage deposit cheque, similar to the process for the rental of the Township's projection equipment.

### **ATTACHMENTS**

Attachment A – Facility Maintenance Checklist



**Facility Maintenance Checklist**

**Event Date:** \_\_\_\_\_

Parking Lot and Exterior Entrance Areas	Damage		Description
	Yes	No	
1) Patio			
2) Garbage bins/mezzanine			
3) Parking lot			
4) Front entrance			
Archie Mac Robbie Hall	Damage		Description
	Yes	No	
1) Kitchen			
2) Main hall			
3) Stage			
4) Audio equipment			
Alf Hales Room	Damage		Description
	Yes	No	
1) Sink			
2) cupboards			
3) projector screen			
Washrooms	Damage		Description
	Yes	No	
1) Men's			
2) Women's			
3) Family			
Coat Room	Damage		Description
	Yes	No	

I hope this update finds everyone well. Recently the Province of Ontario has proposed changes to the Aggregate Resource Act. These proposed changes have been posted on the Province's Environmental Registry website also known as "ERO" (Environmental Registry of Ontario). Any time the Province proposes changes to legislation, those proposals are posted on the ERO for public comment including from your local municipality.

According to the ERO posting, the purpose of the proposed changes are "to reduce burdens for business while maintaining strong protection for the environment and managing impacts to communities". After a review of the initial posting, Council expressed some concerns with the proposed changes to the Aggregate Resource Act (referred to the ARA going forward) and has asked staff to prepare a report for their review.

One example is the proposed cutting of red tape by confirming that a local zoning bylaw can not be used to limit the depth of extraction. Some municipalities, including Puslinch, have tried to use elevation based vertical zoning to permit extraction above the water table but not into the water table. Your Council will be discussing the value of vertical zoning in relation to aggregate extraction as part of our comments regarding this change. It is in our best interest that the local community has the decision capabilities to protect our environment, water and community. Responsible aggregate extraction should include a prohibition on below the water table extraction. It is so very important that individuals like yourselves comment on the Environmental Registry that local control over extraction of aggregate **BEGINS** to be in control of the local stakeholders, you and I. Puslinch has provided more than its fair share to supporting growth.

Another proposed change is to stop providing copies of approved Site Plans to the local municipality when a new pit is approved. These Site Plans are the "blueprints" for how a licensed pit will be operated and rehabilitated. This is a concern since this is the information that the rezoning decision was based on as part of the planning process. Also, the industry has a track record in our Township of not following site plans with no repercussion. So this change would make it harder for our residents to know if a particular operator is actually following the approved site plans.

Another significant proposal is the first bullet on the ERO, that speaks about the strengthening of source Water protection through a more robust application process that would allow Municipalities and others to officially object to licensed operators that want to expand extraction to below the water table and have their concerns heard by the Local Planning Appeal Tribunal.

To open a new pit or quarry an operator needs two approvals. Proper zoning under the local municipal bylaw and a License issued by the Ministry of Natural Resources and Forests (MNR) which includes the approved Site Plans associated with that licence. . As I was recently told these are the two rails the train rides on. Once a site has been rezoned and licensed the process of

applying for below the water table extraction only requires an amendment to the Licence and Site Plans with little if no recourse for the municipality since the zoning approval is considered to be to an undefined depth. Based on the proposed amendments the only real change from the current process would be that a Licensee would not be able to appeal a condition added to a licence relating to Source Water Protection that was added by the Minister. Operators would still be able to appeal any conditions added to the Site Plans by the Minister even if they were added to improve Source Water Protection. Its very important to point out the affect on our community on the below the water table extraction. The most significant impact is the loss of land. Aggregate companies are being subsidized by Puslinch taxpayers. If an aggregate company rehabilitates a pit/quarry, which rarely happens as they pay less tax on a pit vrs farmland or any other use other than gravel.

We are left with an open body of water that pays very little in tax for the end of time affecting all generations to come and tax payers. Across Ontario there is designation that Prime Agricultural land essentially a protected asset.....except if you can truck it away as gravel!!

Your Council and staff along with local levels of Government are reviewing the proposed changes. We are very concerned with the vagueness along with the difficulty with correlating the proposed changes directly to the relevant legislation or policy.

I understand that this is a mountain of information to understand and I am no different. What I do know is that these proposed changes take what was little influence, I will not use control as an adjective as we have never had control over the future of our community in regards to aggregate extraction, and lessons the influence we currently have. The future of the entire west side of our wonderful community is at risk. As a community we all need to comment on the Environmental Registry and express that **below the water table extraction** needs to be prohibited for the mast majority of circumstances and put our Water and agricultural as a priority in this Province.

In summary:

1. Specifically mentioning that vertical zoning by-laws will not be permitted is terribly worrisome. As a Community we deserve the right to decide if its safe to extract below the water table.
2. All amendments to aggregate site plans regardless if they are Minor or Major should be sent to the municipality for review.
3. A system of self reporting of any kind in regards to aggregate industry can not be effective. if approved Site Plans are not provided to the local municipality since. the MNRF) has been ineffective at overseeing aggregate operations.
4. Aggregate haul routes need to be defined as the Municipalities cannot maintain all route options to standards sufficient to support heavy truck traffic.
5. Ministry of Natural Resources held a summit on these proposed regulation changes excluding Municipalities. The information these proposed changes represents a flawed study.
6. Aggregate levy's need to be increased to support Municipalities infrastructure funding deficits

7. The proposed changes on the Environmental Registry are not reflected in the proposed changes to the ARA. Residents should be able to see what changes are being proposed to specific components of all Provincial legislation, regulation, standard or policies that will achieve the stated outcomes. .

I encourage you comment to the Province the proposed amendments. The listed items above do not represent an all inclusive set of concerns, however with the short amount of time they represent our serious concerns.

Here is a link to the proposed changes <https://ero.ontario.ca/notice/019-0556>

Submission must be made by November 4<sup>th</sup> 2019 on the Environmental Registry of Ontario or contact

**Andrew MacDonald**

**Phone number**

**705-755-1222**

**Email address**

**[aggregates@ontario.ca](mailto:aggregates@ontario.ca)**

James Seeley

Mayor of Puslinch

519-400-7984



## MINUTES

### **MEMBERS PRESENT**

Councillor John Sepulis, Chair  
Deep Basi  
Dan Kennedy  
Dennis O'Connor  
Paul Sadhra

### **MEMBERS ABSENT**

None

### **OTHERS IN ATTENDANCE**

Lynne Banks, Development and Legislative Coordinator  
Claire Collinson, Legislative Assistant  
Meagan Ferris, Sr. Planner, County of Wellington  
Matthieu Daoust, Junior Planner, County of Wellington  
Jeff Buisman, Van Harten Surveying Inc.  
Ed and Johanna Dokter  
Bev Wozniak  
David Doughty  
Jen Seagar  
Shawn Marsh  
Rob and Erica Roy

### **1. OPENING REMARKS**

The meeting was called to order at 7:00 pm. The Chair welcomed the gallery to the Committee of Adjustment and informed the gallery that Township Staff would present the application, then the applicant would have the opportunity to present the purpose and details of the application and provide any further relevant information. Following this, the public can obtain clarification, ask questions and express their views on the proposal. The members of the Committee can then obtain clarification, ask questions and express their views on the proposal. All application decisions are subject to a 20 day appeal period.

### **2. DISCLOSURE OF PECUNIARY INTEREST**

- None

### **3. APPROVAL OF MINUTES**

Moved by: Dan Kennedy

Seconded by: Paul Sadhra

That the Minutes of the Committee of Adjustment meetings held Tuesday, August 13, 2019 be adopted.

CARRIED

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

#### **4a.) Minor Variance Application D13/DOK – Edward & Johanna Dokter**

Property described as Part of Lot 16, Concession 7, 110 Maltby Road West, Township of Puslinch.

Requesting relief from provisions of Zoning By-Law #19/85, as amended, to permit an accessory building be located in the left front side yard.

- Ed Dokter, owner, provided an overview of the application.



- There were no questions or comments from the public.
- There were no questions or comments from the committee.

Moved by: Dennis O'Connor

Seconded by: Dan Kennedy

The Committee voted on the motion with all in favour.

That Application D13/DOK requesting relief from provisions of Zoning By-Law #19/85, as amended, to permit an accessory building to be located in the left front side yard.

The request is hereby **Approved with no conditions.**

#### **4(b) Minor Variance Application D13/DOU – David Doughty**

Property described as Part of Lots 24 and 25, Concession 2, Smith Road, Township of Puslinch.

Requesting relief from provisions of Zoning By-Law #19/85, as amended, to permit a proposed purchaser for the land to build their preference to style of home, ie. 2 storey.

- David Doughty, applicant and Jennifer Seager, agent for the applicant both provided an overview of the application.
- Bev Wozniak stated that the map on the public notice did not show the property clearly, and that she has no objections to a 2 storey dwelling.
- There were no questions or comments from the committee.

Moved by: Dan Kennedy

Seconded by: Paul Sadhra

The Committee voted on the motion with all in favour.

That Application D13/DOU requesting relief from provisions of Zoning By-Law #19/85, as amended, to permit a proposed purchaser for the land to build their preference to style of home, ie. 2 storey

The request is hereby **Approved with the following conditions:**

1. That a permit will be required from the GRCA prior to development.
2. That a noise study be completed at building permit submission to ensure that the design of the house will mitigate noise to an acceptable MOEE standard per the current acoustic report.

#### **4(c) Minor Variance Application D13/ROY – Robert & Erica Roy**

Property described as Front Part Lot 23, Concession 7, 4427 Concession 7, Township of Puslinch.

Requesting relief from provisions of Zoning By-Law #19/85, as amended, to permit a reduced front yard setback for an attached garage of 3.0 metres.

Moved by: Dennis O'Connor

Seconded by: Deep Basi

The Committee voted on the motion with all in favour.

That Application D13/ROY requesting relief from provisions of Zoning By-Law #19/85, as amended, to permit a reduced front yard setback for an attached garage of 3.0 metres.

- Rob Roy, owner, provided an overview of the application.
- There were no comments or objections from the public.
- John Sepulis asked if the garage could be located behind the house.
- The owner advised that the GRCA required that the garage be located in the front of the house and not in the back.

The request is hereby **Approved with the following conditions:**

1. That a permit will be required from the GRCA prior to development.

**4(d) Minor Variance Application D13/TIM (117) – Timberworx Custom Homes Inc.**

Property described Level 1 Unit 70, 117 Heritage Lake Drive PV, Township of Puslinch.

Requesting relief from provisions of Zoning By-Law #19/85, as amended, that the total lot coverage be increased to 21.3 percent.

- Jeff Buisman provided an overview of the application and advised that building permits were issued in June however the footprint of the dwelling had been increased.
- There were no questions or objections from the public.
- Dan Kennedy asked if the condominium corporation has ownership of the land behind the lot.
- Jeff Buisman advised that the condominium corporation is the owner and is the only one that has use of the land behind the lot.
- Dan Kennedy asked if the public has any use of it.
- Jeff Buisman advised that they do not.

Moved by: Dennis O'Connor

Seconded by: Deep Basi

The Committee voted on the motion with all in favour.

That Application D13/TIM (117) requesting relief from provisions of Zoning By-Law #19/85, as amended, That the total lot coverage be increased to 21.3 percent.

The request is hereby **Approved with the following conditions:**

1. That a detailed septic design will have to be submitted as part of the building permit process and will have to address any impacts of the larger swelling and increased lot coverage.
2. A permit will be required from the GRCA prior to development.

**4(e) Minor Variance Application D13/TIM (125) – Timberworx Custom Homes Inc.**

Property described as Level 1 Unit 68, 125 Heritage Lake Drive PV, Township of Puslinch.

Requesting relief from provisions of Zoning By-Law #19/85, as amended, that the total lot coverage be increased to 22.0 percent.

- Jeff Buisman provided an overview of the application.
- There were no public comments or objections.
- There were no comments or objections from the committee.

Moved by: Dan Kennedy

Seconded by: Paul Sadhra

The Committee voted on the motion with all in favour.

That Application D13/TIM 125) requesting relief from provisions of Zoning By-Law #19/85, as amended, that the total lot coverage be increased to 22.0 percent.

The request is hereby **Approved with the following conditions:**

3. That a detailed septic design will have to be submitted as part of the building permit process and will have to address any impacts of the larger swelling and increased lot coverage.
4. A permit will be required from the GRCA prior to development.



**5. OTHER MATTERS**

- None.

**6. ADJOURNMENT**

Moved by: Dan Kennedy

Seconded by: Paul Sadhra

The Committee of Adjustment meeting adjourned at 7:48 p.m.

CARRIED

## MINUTES

### **MEMBERS PRESENT**

Councillor John Sepulis, Chair  
Deep Basi  
Dan Kennedy  
Dennis O'Connor  
Paul Sadhra

### **MEMBERS ABSENT**

None

### **OTHERS IN ATTENDANCE**

Lynne Banks, Development and Legislative Coordinator  
Claire Collinson, Legislative Assistant  
Meagan Ferris, Sr. Planner, County of Wellington  
Matthieu Daoust, Jr. Planner, County of Wellington  
Jeff Buisman, Van Harten Surveying Inc.

### **1 - 6. COMMITTEE OF ADJUSTMENT**

- See September 10, 2019 Committee of Adjustment minutes.

### **7. OPENING REMARKS**

The meeting was called to order at 7:39 p.m. The Chair advised that the following portion of the Committee meeting will be reviewing and commenting on development planning applications.

### **8. DISCLOSURE OF PECUNIARY INTEREST**

- None

### **9. APPROVAL OF MINUTES**

Moved by: Dennis O'Connor

Seconded by: Deep Basi

That the Minutes of the Planning & Development Advisory Committee Meeting held Tuesday, August 13, 2019, be adopted.

CARRIED

### **10. APPLICATION FOR SITE PLAN URBAN DESIGN REVIEW**

- None

### **11. ZONING BY-LAW AMENDMENT**

- None

### **12. LAND DIVISION**

**12(a) Severance Application B50/19 (D10/DAY)** – Andrew and Ann Day, Part Lot 26, Concession Gore, municipally known as 4071 Sideroad South RR#2, Puslinch.

Proposed severance is 65m frontage x 65m = 0.4 hectares existing agricultural land for proposed rural residential use.

Retained parcel is 34 hectares with 196m frontage, existing and proposed agricultural and residential use with existing dwelling, shed, driveshed, old barn, office building and garage.

- Jeff Buisman provided an overview of the application and advised that MDS was calculated by the County for the barn across the road from the property and stated that the minimum distance requirement is 113 metres and that the MDS was calculated to be 173 metres.



- There were no comments or questions from the public.
- Dennis O'Connor asked why the proposed driveway is situated close to the corner of the property to be severed.
- Jeff Buisman advised that its proposed location is due to the sightlines.
- John Sepulis asked the County Planner if the way the property is situated could be "flipped" to the other side of the property to allow the driveway closer to the corner.
- Meagan Ferris advised that if there were no sightline concerns, then it would make sense, however the County has no objections to the location of the proposed lot to be severed.
- Dennis O'Connor noted that it would make more sense to relocation the proposed lot to be severed to the northwest corner of the property and will also increase the MDS from the barn.

The committee supports the application with the **following conditions** imposed:

1. That the Owner satisfy all the requirements of the Township of Puslinch, financial and otherwise (including taxes paid in full and Consent Review/Condition Clearance fee) which the Township may deem to be necessary at the time of issuance of the Certificate of Consent for the property and orderly development of the subject lands; and further that the Township of Puslinch file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition..
2. That the Owner obtain an approved Entrance Permit verifying safe access and site lines on the severed parcel from the Township of Puslinch; and further that the Township file with the Secretary-Treasurer of the Planning and Land Division Committee a letter of clearance of this condition.
3. That consideration be given to relocating the severed lot to the corner of the property to facilitate agricultural operations and improved sightlines.
4. That the retained lot be rezoned from Secondary Agricultural to return it to its original zoning to Agricultural.

Moved by: Dennis O'Connor

Seconded by: Deep Basi

CARRIED

## 12. OTHER MATTERS

- None

## 13. CLOSED MEETING

- None

## 14. NEXT MEETING

- Next Regular Meeting Tuesday, October 8, 2019 @ 7:00 p.m.

## 15. ADJOURNMENT

Moved by: Dan Kennedy

Seconded by: Paul Sadhra

That the Planning & Development Advisory Committee is adjourned at 7:48 p.m.

CARRIED

**THE CORPORATION OF THE TOWNSHIP OF PUSLINCH**

**BY-LAW NUMBER 059-2019**

Being a by-law to confirm the proceedings of the Council of the Corporation of the Township of Puslinch at its Regular Council meeting held on October 16, 2019.

**WHEREAS** by Section 5 of the *Municipal Act, 2001, S.O. 2001, c.25* the powers of a municipal corporation are to be exercised by its Council;

**AND WHEREAS** by Section 5, Subsection (3) of the *Municipal Act*, a municipal power including a municipality's capacity, rights, powers and privileges under section 8, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

**AND WHEREAS** it is deemed expedient that the proceedings of the Council of the Corporation of the Township of Puslinch at its Regular Council meeting held on October 16, 2019 be confirmed and adopted by By-law;

**NOW THEREFORE** the Council of the Corporation of the Township of Puslinch hereby enacts as follows:

- 1) The action of the Council of the Corporation of the Township of Puslinch, in respect of each recommendation contained in the reports of the Committees and each motion and resolution passed and other action taken by the Council at said meeting are hereby adopted and confirmed.
- 2) The Head of Council and proper official of the Corporation are hereby authorized and directed to do all things necessary to give effect to the said action of the Council.
- 3) The Head of Council and the Clerk are hereby authorized and directed to execute all documents required by statute to be executed by them, as may be necessary in that behalf and the Clerk authorized and directed to affix the seal of the said Corporation to all such documents.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 16<sup>th</sup> DAY OF OCTOBER, 2019.**

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James Seeley, Mayor

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Patrick Moyle, Clerk/CAO