

# Planning Report & Aggregate Resources Act Summary Statement

CBM Aggregates, a Division of  
St. Marys Cement Inc. (Canada)  
Proposed Aberfoyle South Pit  
Expansion

Part of Lots 18-20, Concession 1  
Township of Puslinch, County of Wellington

Date: **November 2023**

Prepared for:



Prepared by:

**MacNaughton Hermsen Britton Clarkson Planning Limited (MHBC)**  
540 Bingemans Centre Drive, Suite 200  
Kitchener, ON N2B 3X9  
T: 519.576.3650

Our File Y321AB

# Table of Contents

1.0	EXECUTIVE SUMMARY .....	3
2.0	PROPOSAL.....	4
2.1	CBM Aggregates.....	4
2.2	Subject Lands.....	4
2.3	Project Description and Existing Pit.....	4
2.4	Required Applications .....	5
3.0	BACKGROUND .....	7
3.1	Surrounding Land Uses and Features .....	7
3.2	Aggregate Resources.....	8
3.3	Natural Heritage Features .....	8
3.4	Water Resources & Mill Creek Watershed .....	9
3.5	Agricultural Resources.....	11
3.6	Transportation System .....	11
4.0	POLICY REVIEW.....	13
4.1	Provincial Policy Statement (2020).....	13
4.2	Growth Plan (2020).....	16
4.3	County of Wellington Official Plan (1999).....	20
4.3.1	Impact Assessment (Section 4.6).....	20
4.3.2	Paris and Galt Moraine Policy Area (Section 4.9.7) .....	21
4.3.3	Mill Creek Watershed (Section 4.10.1) .....	21
4.3.4	Greenlands System (Section 5).....	22
4.3.4.1	Core Greenlands (Section 5.4).....	22
4.3.4.2	Greenlands (Section 5.5) .....	23
4.3.4.3	Development Control in Core Greenlands & Greenlands (Section 5.6).....	24
4.3.4.4	Restoration and Enhancement (Section 5.7).....	25
4.3.5	Mineral Aggregate Areas (Section 6.6).....	25
4.3.5.1	Mineral Aggregate Resource Overlay (Section 6.6.1) .....	25
4.3.5.2	New Mineral Aggregate Operations (Section 6.6.5).....	26
4.3.5.3	Public Information (Section 6.6.6) .....	28
4.3.5.4	Ancillary Uses (Section 6.6.7).....	28
4.3.5.5	Rehabilitation (Section 6.6.8) .....	29
4.3.5.6	Mining Below Water Table (Section 6.6.9) .....	29
4.4	Township of Puslinch Zoning By-law 23/2018 .....	30
5.0	AGGREGATE RESOURCES ACT SUMMARY STATEMENT .....	31
5.1	Agricultural Classification of the Site - Standard 1.1 .....	31
5.2	Applicable Planning and Land Use Considerations - Standard 1.2 .....	31
5.3	Source Protection Area Considerations -Standard 1.3 .....	32
5.4	Quality and Quantity of Aggregate On Site Standard 1.4.....	32
5.5	Main Haulage Routes - Standard 1.5 .....	33
5.6	Progressive and Final Rehabilitation - Standard 1.6.....	33
6.0	CONCLUSIONS .....	34

# FIGURES

- Figure 1 – Site Context**
- Figure 2 – Proposed Haul Route**
- Figure 3 – ARIP 162**
- Figure 4 – MNRF Natural Heritage Areas**
- Figure 5 – CLI Soils Mapping**
- Figure 6 – Provincial Prime Agricultural Area Mapping**
- Figure 7 – GRCA Floodplain Mapping**
- Figure 8 – A Place to Grow Concept**
- Figure 9 – County of Wellington OP Schedule B7**
- Figure 10 – County of Wellington OP Schedule C7**
- Figure 11 – County of Wellington OP Schedule D**
- Figure 12 – Grand River Source Protection Plan**
- Figure 13 – Township of Puslinch Zoning By-law**

# APPENDICES

- Appendix A - Draft County of Wellington Official Plan Amendment**
- Appendix B – Draft Township of Puslinch Zoning By-Law Amendment**
- Appendix C – Curriculum Vitae of Report Authors**

# 1.0 EXECUTIVE SUMMARY

CBM Aggregates, a division of St. Marys Cement Inc. (Canada) ('CBM') is applying for a Class 'A' Licence under the Aggregate Resources Act (ARA), a Township of Puslinch Zoning By-law Amendment and County of Wellington Official Plan Amendment to permit aggregate extraction on lands located at 6947 Concession Road 2, legally described as Part of Lots 18, 19, and 20, Concession 1, geographic Township of Puslinch (the "subject lands"). The proposed aggregate extraction operation is referred to as the "Aberfoyle South Pit Expansion". In this Report, "subject lands" refers to the area proposed to be licenced under the Aggregate Resources Act.

The proposed Aberfoyle South Pit Expansion lands are located approximately 2 kilometres to the west of the CBM Aberfoyle South Main Pit (Licence #5497) which is located at the northwest corner of the Concession #2 and Concession Road #7 intersection in the Township of Puslinch. The proposed pit expansion will serve as the next phase of extraction to supply the processing plant at the Aberfoyle South Main Pit.

The area proposed to be licenced is approximately 44.8ha, with 27.5ha proposed for extraction. The pit is proposed to operate above and below the water table.

The Subject Lands are currently used for farming, and the dwelling located on the property is outside of the proposed licensed boundary. The dwelling is currently used as a farm office and is not currently inhabited.

There are several licensed pits located east of the subject lands, including CBM's: Aberfoyle South Pit, McMillan Pit, Linci Pit, Neubauer Pit and PQA Pit. Lafarge's McMillan Pit and Dufferin's Mill Creek Pit are also located to the east of the Subject Lands. Environmental areas, rural residential, and agricultural uses are located west of the Subject Lands. There are environmental areas and rural residential and institutional uses located south of the subject lands. Highway 401 is located approximately 1 km north of the subject lands.

The subject lands are surrounded by the Mill Creek Provincially Significant Wetland (PSW) Complex which corresponds with the wooded area surrounding the area that is in active agricultural production. Mill Creek runs to the south and east of the subject lands, and is located outside of the proposed licensed area. No extraction or disturbance is proposed in any portion of the Provincially Significant Wetland and adjacent 30m setback. Potential impacts of the proposed pit on the Mill Creek PSW complex have been thoroughly examined through the technical studies undertaken with the application.

The subject lands are not located within the Greenbelt Area but are identified within the Natural Heritage System for the Growth Plan. Aggregate extraction is permitted in this area subject to the policies outlined in the Growth Plan (see Section 4.2 of this Report).

The subject lands are designated Core Greenlands and Greenlands in the County of Wellington Official Plan according to Schedule B7. The subject lands are not located within the Mineral Aggregate Resource

Overlay on Schedule D of the County's Official Plan, however, they contain high quality aggregate resources based on site-specific resource testing. The lands are zoned Natural Environment and Agricultural within the Environmental Protection Overlay in Township of Puslinch Zoning By-law 23/2018.

Applications to amend the County of Wellington Official Plan and Township of Puslinch Zoning By-law have been submitted in conjunction with the ARA licence application.

The subject lands contain approximately 5.5 million tonnes of high quality sand & gravel resources within the proposed extraction area. CBM is applying for a maximum annual tonnage of 1,000,000 per year.

The proposed Aberfoyle South Pit Expansion represents the wise use and management of provincially significant resources, is consistent with the Provincial Policy Statement, and conforms to the Growth Plan, and the County of Wellington Official Plan based on the following:

- The Growth Plan states that building communities and the infrastructure required to support growth within the Greater Golden Horseshoe region will require significant aggregate resources, and that providing these resources close to market can support the timely provision of infrastructure and reduced GHG emissions. The subject lands contain significant sand and gravel resources that are located in a close to market location.
- WSP prepared a Natural Environment Report (WSP, November 2023) which confirmed that there are no significant wetlands, significant woodlands, significant valleylands, significant wildlife habitat, or significant areas of natural and scientific interest located within the proposed Licence Boundary and proposed extraction area of the pit. The proposed pit is located adjacent to the Mill Creek Provincially Significant Wetland, significant woodlands and significant wildlife habitat. A 30 m extraction setback has been implemented in the pit design from these identified significant natural heritage features. The Level 1 / 2 Natural Environment report concluded that, through the implementation of the recommended mitigation measures, there will be no negative impacts to the Mill Creek PSW, surrounding significant woodlands, or significant wildlife habitat. A DFO request for review will be submitted to assess potential impacts to Tributary 3 and associated fish habitat.
- WSP prepared a Level 1 and 2 Water Report (WSP, November 2023) which concluded that groundwater users in the vicinity of the site will not be impacted subject to the recommended mitigation. The report concluded that the post rehabilitated scenario represents an opportunity to generate improved water quality as a result of the change in land use from agriculture.
- WSP prepared a Noise Impact Assessment (WSP, November 2023) which concluded that the proposed pit operation is predicted to satisfy Ministry of Environment, Conservation and Parks (MECP) sound level limits at nearby receptors based on the recommendations and mitigation measures provided in the assessment and implemented on the Site Plan. This mitigation measures included the construction of Acoustic berms and operational restrictions will be implemented to mitigate noise to acceptable levels.
- Golder (WSP) prepared a Stage 1-2 Archaeological Assessment (Golder, August 2023) for the subject lands which was accepted by the Ministry of Citizenship and Multiculturalism (MCM). The assessment resulted in the identification of two locations within the proposed extraction

area which were recommended for Stage 3 Assessment. The Stage 3 assessments have been completed (WSP, June 2023) which determined that, prior to extraction, a Stage 4 assessment is required. These areas have been identified and properly buffered on the ARA site plans in accordance with the recommendations of the Stage 3 Reports and as contemplated in the Stage 1-2 assessment accepted by MCM.

- TYLin prepared a Transportation Impact Assessment (TYLin, November 2023) which concluded that study intersections are projected to operate with nearly zero delay and highly efficient conditions with the addition of future truck traffic. No operational roadway improvements, such as exclusive turn lanes at the site accesses, would be required to accommodate the projected pit traffic at the study intersections. A comprehensive test of the structural condition of the Mill Creek culvert and Concession 2 roadway was recommended to confirm the overall haul route's load bearing capacity.
- The subject lands are actively farmed but are not designated Prime Agricultural Area in the County of Wellington Official Plan according to Schedule B7. MHBC prepared an Agricultural Review which evaluated the agricultural resources both on the subject lands and within the surrounding area (1 km). The review concluded that, subject to the implementation of the proposed mitigation measures regarding water quality and quantity, noise, dust, and traffic, there are no anticipated impacts to the agricultural system as a result of the proposed pit expansion.
- The operational design of the pit incorporates the recommendations of the technical reports prepared for the application to ensure that the pit can operate within the Provincial guidelines and minimize social, economic and environmental impacts.

# 2.0 PROPOSAL

## 2.1 CBM Aggregates

CBM Aggregates is a division of St. Marys Cement Inc. (Canada) ('CBM'), and is a full service provider and distributor of high-quality aggregate materials for all construction needs. CBM has licensed pits and quarries across southern Ontario, including several other pits in the Township of Puslinch that are both active and rehabilitated. Over the last 10 years, CBM has rehabilitated and surrendered approximately 40 ha of land within the Township of Puslinch which includes areas subject to redevelopment for industrial and rural uses. This total does not account for lands that are currently being progressively rehabilitated that are still licenced under the Aggregate Resources Act.

## 2.2 Subject Lands

The subject lands are located at 6947 Concession Road 2, legally described as Part of Lots 18, 19, and 20, Concession 1, geographic Township of Puslinch (**Figure 1**). The subject lands are sometimes referred to as the "Lake" property from previous ownership. The lands are currently used for the production of cash crops, and the dwelling contained on the property is outside of the proposed licensed boundary. The dwelling is currently used as a farm office, and is not currently inhabited.

The subject lands are located within a larger site that is approximately 80 ha in size. As shown on **Figure 1**, the proposed licensed area has been delineated to avoid significant natural features. Further, the proposed extraction area is setback at least 30 m from the adjacent significant wetlands. At its closest point, Mill Creek is located approximately 60 m from the proposed extraction area.

## 2.3 Project Description and Existing Pit

CBM is proposing a below water pit on the subject lands that will serve as an expansion to their existing operations at the Aberfoyle South Pit. The proposed area to be licensed is 44.8 ha, and the proposed extraction area is approximately 27.5 ha. The proposed expansion will not contain any processing, washing, or recycling on the site. There will be no water taking (e.g. dewatering or pumping) on site.

The subject lands will be accessed via a new entrance located at the east end of the subject lands (see Figure 2). Truck travel will not be permitted to head west from the subject lands on Concession 2. The current residential entrance to the subject lands will remain in place for access to the house and for farm access. Trucks will not be permitted to use this entrance.

Lands that are not located within the proposed extraction area will be used for setbacks from environmental features and for landscaped visual and acoustic berms. The existing vegetation in these setbacks will be maintained, except where berms are required to be constructed. Along Concession 2,

the setback from the road will be 30 metres. In addition, there will be a 30m setback from all significant natural features. A portion of the licensed area at the northern edge of the subject lands is not proposed for extraction or any aggregate-related activities as identified on the site plan. This land would remain under licence to ensure the protection of the identified archaeological resources as requested by MCM and to provide potential additional lands for natural restoration. This area is not proposed to be zoned or designated for extraction. A 30 metre setback will be provided from the natural feature (tributary 3) separating this area from the limit of extraction.

There are approximately 5.5 million tonnes of high quality sand and gravel resources available within the proposed extraction area. The proposed maximum annual extraction tonnage for the site is 1,000,000 tonnes. The resources are identified as tertiary sand and gravel deposit in the Aggregate Resources Inventory Paper (ARIP) 162; however on site drilling results indicate the resource would be more typically categorized as a primary to secondary ARIP deposit. The resources are capable of producing Granular A, B, M, and coarse and fine aggregates used in hot-mix asphaltic paving and concrete.

There will be no aggregate processing on the subject lands. Materials will be extracted via excavators and dragline (for below water extraction), stockpiled within the extraction area and then shipped, via highway trucks, for processing to the existing Aberfoyle South Pit operation (Licence # 5497). Highway trucks will ship materials from the subject lands along Concession Road 2 to the main processing plant at the Aberfoyle South Pit. This is a distance of approximately 2 km (**Figure 2**). Trucks will not permitted to travel west on Concession 2 or use Sideroad 20.

The processed aggregate from the Aberfoyle South Pit will then be shipped to market using the existing truck entrance/exit on Concession Road 7, north across Highway 401 to McLean Road and then primarily east to Highway 6. This is the existing truck haul route for the Aberfoyle South Pit.

The proposed hours of operation for the expansion are 7 am to 7 pm daily. Shipping hours are restricted to 7 am to 6 pm on weekdays and 8 am to 4 pm on Saturdays.

The lands will be extracted to a maximum depth of approximately 285 masl. The removal of aggregate resources from below the water table will result in the creation of a lake that will be approximately 26 ha in size. Shallow shoreline areas are proposed around the perimeter of the lake.

Approximately 0.3 ha of new wetland habitat will be created in areas of the setback adjacent to the Mill Creek PSW. In addition, approximately 6.7 ha of new forest cover will be created within the 30 m setback adjacent to the Mill Creek PSW primarily along the western, southern and eastern setback areas. At least 35% of the site is proposed to be rehabilitated to forest cover consistent with the rehabilitation requirements in the Growth Plan.

The ARA Site Plans (Rehabilitation Plan) include additional details regarding progressive and final rehabilitation. The rehabilitated landform will be compatible with the surrounding area.

## 2.4 Required Applications

The following approvals are required to permit the proposed Aberfoyle South Pit Expansion:

- An amendment to the Township of Puslinch Zoning By-Law to rezone the Subject Lands from Agricultural (A) and Natural Environment (NE) Zones to the Extractive Industrial (EXI) Zone.
- An amendment to Schedules B7 and Schedule D of the County of Wellington Official Plan to permit an expansion to an existing aggregate operation.
- A Class 'A' license for a below water pit under the Aggregate Resources Act.

This application is considered a Class A license under the Aggregate Resources of Ontario Provincial Standards. Pre-consultation meetings occurred with the County, Township and Grand River Conservation Authority on September 28, 2021 and July 27, 2023. The Technical Reports required for the licence and planning applications include the following as confirmed through the pre-consultation process:

- Aggregate Resources Act Site Plans, MHBC, November 2023
- Planning Report and ARA Summary Statement, MHBC, November 2023
- Natural Environment Report, WSP, November 2023
- Water Report Level 1 / 2, WSP, November 2023
- Maximum Predicted Water Table Report, WSP, November 2023
- Stage 1 and 2 Archaeological Assessment, Golder Associates Ltd. (WSP), August 2023
- Stage 3 Archaeological Assessments, WSP, June 2023
- Noise Assessment Report, WSP, November 2023
- Transportation Impact Assessment, TYLin, November 2023
- Best Management Practices Plan for the Control of Fugitive Dust, WSP, October 2023
- Agricultural Review, MHBC, September 2023
- Aggregate Resource Evaluation, WSP, November 2023

# 3.0 BACKGROUND

## 3.1 Surrounding Land Uses and Features

The subject lands are located within a rural area of the Township of Puslinch. The following is a description of the land uses surrounding the proposed Aberfoyle South expansion lands (**Figure 1**).

**North:** North of the subject lands is the Provincially Significant Wetland Complex and Natural Features associated with Mill Creek. Two houses are located within 120 m of the subject lands. All Agility, a dog training facility, is located approximately 500 m northwest of the subject lands. Agricultural lands are located further to the northwest of the subject lands, with a bank barn located at 4363 Wellington Road 35. Dufferin's Mill Creek Pit is located northeast of the subject lands. Further to the north (approximately 1 km) is Highway 401.

**East:** East of the subject lands is Mill Creek which is approximately 60 m from the proposed extraction area at its closest point. East of Mill Creek is Sideroad 20. The majority of land uses further east of the subject lands are licensed aggregate operations (see **Figure 2**). The existing Aberfoyle South Pit is located east of the subject lands.

**South:** Mill Creek runs directly to the south of the subject lands, along with its associated Wetland Complex and natural features. Further south, several rural residences front onto Sideroad 20. Some agricultural production is located to the south, beyond the natural features associated with Mill Creek. This includes Bee Sweet Nature (approximately 820 m from subject lands), a nature company selling native plants and farm market products, as well as Sunrise Therapeutic Riding and Equestrian Centre (approximately 1 km from the subject lands).

**West:** Directly to the west of the subject lands are additional natural features associated with Mill Creek and the Provincially Significant Wetland Complex. One house is located immediately west of the Subject Lands. Further to the West is Wellington Road 35. Several rural residential lots are located along Wellington Road 35, in addition to some agricultural production.

In total, there are two off-site houses located within 120 m of the subject lands (proposed licensed boundary). There is one house located along the proposed haul route along Concession 2 (7053 Concession 2). This recently built house is located adjacent to the Dufferin Mill Creek Pit and CBM McMillan Pit.

## 3.2 Aggregate Resources

The majority of the subject lands are mapped as sand and gravel deposits of tertiary significance in the Wellington County ARIP 162 (**Figure 3**). However, onsite drilling has indicated that the resources on site would be more typically categorized as a primary and secondary ARIP deposit. These aggregate resources can be used to produce granular products, as well as coarse and fine aggregates used in hot-mix asphaltic paving and concrete.

Based on the on-site resource testing, there are approximately 5.5 million tonnes of high quality sand and gravel resources available within the proposed extraction area (Aggregate Resource Evaluation, WSP, 2023). The sand and gravel deposit on site has an average thickness of approximately 11 m. CBM is applying for an annual maximum extraction limit of 1,000,000 tonnes.

Resources extracted from the subject lands will be processed at the existing Aberfoyle South Pit. This location is close to market and the proposed pit extension will supply a source of high quality materials in a close to market location. Making additional resources available from the subject lands for processing at the existing pit would allow CBM to continue to serve local infrastructure and construction projects including areas that have been designated for a significant amount of growth and development.

## 3.3 Natural Heritage Features

WSP prepared a Natural Environment Report (WSP, November 2023), which fulfills the requirement for an Environmental Impact Assessment as required by the County's Official Plan, as well as a natural heritage evaluation as required in the Growth Plan. The Terms of Reference for the Natural Environment Report were provided to the Township, County and GRCA through the pre-consultation process for review.

The Natural Environment Report assessed the potential impact of the proposed pit on features identified on, or within 120 m, of the area proposed to be licensed. The report included the following components; a species at risk screening; a review of the water balance (WSP, November 2023); and field surveys which assessed plant communities, a three season botanical inventory, anuran call count surveys, amphibian habitat assessment for Jefferson Salamander, Blanding's turtle habitat assessment, breeding bird surveys, bat habitat surveys, wildlife habitat assessment, and fish habitat assessment. Data from field surveys and desktop analysis was analysed to determine if the proposed pit would have any negative impact on the identified natural features or ecological functions. The Natural Environment Report also identifies any mitigation and monitoring requirements to ensure there will be no impact to the adjacent and surrounding natural heritage features.

The report included a field assessment summary of the mapped unevaluated wetlands to evaluate their potential significance. Of the six mapped unevaluated wetlands, three were confirmed to be wetlands based on the field assessment, and none met the criteria to be classified as significant wetlands. Two of those non-PSW wetlands are located within the proposed limit of extraction, which will result in the loss of approximately 0.3 hectares of non-significant wetland habitat. This is proposed to be replaced through progressive rehabilitation. The Report concluded that, there are no anticipated impacts to the Mill Creek Provincially Significant Wetland's features or functions.

There are no significant wetlands, significant woodlands, habitat of endangered species or threatened species, significant valleylands, significant wildlife habitat, or significant areas of natural and scientific interest located within the proposed extraction area of the pit. The proposed pit is located adjacent to the Mill Creek Provincially Significant Wetland, significant woodlands and significant wildlife habitat. A 30 m extraction setback will be applied from these features to ensure that they are protected.

Mill Creek and its tributaries support a cold water fish community. The change in the temperature of groundwater reporting to Tributary #3 is predicted to be less than 1 °C. No negative impacts on coldwater fish habitat in Tributary #3 are anticipated as a result of this potential temperature change. Base flow changes are possible to Tributary #3 as a result of the proposed pit activities. While Tributary #3 itself will have a 30 m extraction setback, the Natural Environment Report recommended that a Request for Review be submitted to DFO in accordance with federal requirements.

The Natural Environment Report concluded that, through the implementation of the recommended mitigation measures, there will be no negative impacts to the Mill Creek PSW, surrounding significant woodlands, or significant wildlife habitat.

## 3.4 Water Resources & Mill Creek Watershed

The subject lands are located adjacent to a Provincially Significant Wetland known as Mill Creek Puslinch Wetland Complex (**Figure 4**). Mill Creek runs directly south and east of the proposed licensed area. There is no extraction proposed within the PSW or any of its associated natural features. A 30 m extraction setback has been applied to these features.

WSP prepared a Level 1/2 Water Report (WSP, November 2023), which fulfills the requirement of water resources impact studies as required by the County's Official Plan, as well as a hydrologic evaluation in the Growth Plan. The Terms of Reference for the Water Report were provided to the Township and County through the pre-consultation process.

The Water Report assessed the potential impacts that the proposed pit expansion could have on groundwater and surface water resources on or within 120 metres of the site. The Level 1/2 Water report includes an assessment of both Hydrogeological resources and surface water resources. The Hydrogeological assessment includes a review of Source Protection Plans, field investigations including borehole drilling and baseline groundwater monitoring, a review of local groundwater users, the development of a water budget, the construction of a 3D numerical groundwater flow model, the development of a groundwater analytical model to predict thermal impacts, an analysis of cumulative effects, and the development of a monitoring plan for groundwater. A Maximum Predicted Water Table Report was also prepared for the ARA Application and identifies the maximum water table elevation. The Surface Water assessment includes a background review of available information, review of the GRCA floodplain data, site visit to confirm drainage features, a water budget, monitoring of the temperature and flow of Mill Creek and associated tributaries, an effects assessment on features within the site and vicinity, and the development of a monitoring plan for surface water.

The overall objectives of the Water Report were to: 1) characterize the baseline hydrogeological and hydrological conditions in the vicinity of the site under current, pre-extraction conditions; and 2) assess the potential effects of the proposed operations and rehabilitation conditions on groundwater and surface water resources and the potential need for mitigation (if necessary). The following tasks were completed over several years to achieve the study objectives:

- A review of publicly available hydrogeologic and hydrologic data and reports for the Site and surrounding area;
- A field investigation program that included: borehole drilling and monitoring well installations; stream piezometer and surface water monitoring installations; monthly groundwater monitoring (water levels and temperatures); quarterly stream monitoring (water levels and flow); groundwater quality sampling; and hydraulic conductivity testing.
- A review of local groundwater users based on the Ministry of the Environment, Conservation and Parks (MECP) Water Well Information System (WWIS) and Permit To Take Water (PTTW) databases.
- Development of a Site water budget for Existing, Operational and Rehabilitated Scenarios to estimate pre-and post-development surplus, runoff and infiltration rates.
- Review and assessment of applicable Source Protection Plan mapping and policies applicable to the Site and proposed pit.
- The construction and calibration of a numerical groundwater flow model and subsequent predictive simulations to estimate potential water quantity impacts of the proposed below-water extraction on surrounding groundwater and surface water receptors.
- The development of a groundwater / surface water mixing model to assess potential thermal impacts of the proposed aggregate extraction on water temperatures in local streams and creeks.
- An assessment of groundwater vulnerability and the potential for water quality impacts.
- An analysis of potential cumulative effects of the proposed aggregate extraction in light of the other neighbouring aggregate operations.

The technical analysis undertaken for the Report determined that there is one overburden groundwater user (residential well #6708455) immediately northeast of the proposed licence area within the predicted zone of influence of the Site. The potential reduction in the groundwater table elevation at this private well during operations is predicted to be approximately 1 m, and if required, the pump in the well can be lowered by this amount to restore its original drawdown capacity, thereby mitigating the potential impact. No other overburden groundwater (well) users are predicted to experience any change in groundwater levels during aggregate extraction operations or post-rehabilitation.

The report also assessed water quality onsite, and concluded that the post-rehabilitation scenario represents an opportunity to generally improve water quality as the resulting change in land use will reduce the potential for agricultural impacts directly on the Site, as the lands are currently farmed. During operations, Best Management Practices and Provincial Standards will apply to prevent spill events on site.

Potential impacts to baseflow were also assessed in the Water Report, and the results of the analysis predict that there will be localized temporary reductions in baseflow during active aggregate extraction, which will be mostly confined to the proposed licence area (Site) and the immediate surrounding CBM owned property. Upon post-rehabilitation, groundwater flow modelling predicts there will be changes in baseflow along Tributary #3, varying from an increase of up to 0.8% in some areas and a decrease of 7.5% in other areas, primarily due to localized water table flattening.

Temperature modelling suggests that the thermal influence of the rehabilitated pond on nearby surface water features is expected to minimal, with a predicted maximum increase of less than 1 degree Celsius.

Additionally, the Water Report completed a cumulative effects assessment which evaluated potential impacts at both a local and subwatershed scale. The report concluded that there are no cumulative effects predicted for water resources locally or within in the Mill Creek subwatershed as a result of below water sand and gravel extraction at the proposed Aberfoyle South Pit Expansion.

## 3.5 Agricultural Resources

The subject lands are actively farmed, and contain a barn and two drivesheds that are located outside of the proposed licenced area. According to soils mapping from OMAFRA, the subject lands contain Class 2 and 3 soils (Burford Loam and Dumfries Sandy Loam, respectively) which are considered prime agricultural lands (**Figure 5**).

The subject lands contain approximately 5.8 ha of the provincially mapped Prime Agricultural Area with remainder identified as Candidate Area (**Figure 6**). Approximately 2.8 ha is within the limit of extraction. However, the Provincial Agricultural System has not been implemented in the County of Wellington's Official Plan to date, and thus does not apply, as the lands are not designated Prime Agriculture in the County Official Plan. Regardless, MHBC completed an Agricultural Review (MHBC, September 8, 2023) which evaluated the agricultural resources both on the subject lands and within the surrounding area (1 km). The review included a survey of the site and surrounding agricultural land uses to understand any potential impacts that the proposed expansion could have on the agricultural system.

The review concluded that, subject to the implementation of the proposed mitigation measures regarding water quality and quantity, noise, dust, and traffic, there are no anticipated impacts to the agricultural system as a result of the proposed pit expansion.

## 3.6 Transportation System

The proposed pit expansion is located on Concession 2, approximately 2 km west of the existing processing plant at the CBM Aberfoyle South Pit. Trucks are proposed to exit the site at the east end of the subject lands, travelling east to the existing processing plant (**Figure 2**). Approximately 1 km of the proposed haul route is or has been used for truck traffic related to the other licensed pits in the area. There is one house located along the proposed haul route along Concession 2 (7053 Concession 2). This recently built house is located adjacent to the Dufferin Mill Creek Pit and CBM McMillan Pit. All other uses along the proposed route are mineral aggregate operations.

TYLin was retained by CBM Aggregates to prepare a Traffic Impact Study (TIS) to evaluate the impacts that the proposed Aberfoyle South Pit expansion could have on the transportation system in the area. The TIS evaluated the potential impacts from the future truck traffic that will be generated from the proposed pit along the 2km stretch of Concession 2. The proposed operation would generate a total of 28 trips during the AM and PM peak hours (14 in, 14 out). Travel demand is not anticipated to increase on surrounding boundary road networks as the proposed pit will replace the aggregate resources currently being supplied by other "feeder" pits in the immediate area that are nearing depletion. The report reviewed the historic turning movement count data at the intersection of Concession 2 and Side Road 20 and future traffic modeling to determine that intersections are projected to operate under good conditions with all turning movements operating at LOS B or better, with minor delay. The proposed access to the pit is projected to meet or exceed applicable sightline requirements.

TYLin recommended that a comprehensive test of the structural condition of the Mill Creek culvert, along with bore hole analysis of the subject section of Concession 2 roadway, be undertaken to confirm the overall haul route's load bearing capacity.

To mitigate dust and debris, TYLin recommended provision of rumble bars at the proposed entrance / exit to the proposed pit.

The Township's Heavy Vehicle By-law 063-2021 establishes heavy truck prohibitions on specified roads. Schedule A to the By-law states that heavy trucks are prohibited on Concession 2 from Wellington Road 32 to Sideroad 20. This leaves approximately 100 m as the only portion of the proposed haul route on Concession 2 which prohibits heavy trucks. However, the exemptions in Section 3 of the By-law would apply to this site thus permitting heavy truck traffic along this stretch of road:

### *3. Exemptions*

*3.1 Subsection 2.1 shall not apply to any Heavy Vehicle actually engaged in making delivery to or a collection from premises which cannot be reached except by way of a Highway or portion of Highway referred to in Schedule "A"; or to prohibit the use of such Heavy Vehicle, for such purposes, provided that in making such delivery or collection the said Highway or portion of Highway is travelled only in so far as is unavoidable in getting to and from such premises; and provided that the delivery or collection is not in violation of any other Township By-law.*

*3.2 Subsection 2.1 shall not apply to a Heavy Vehicle owned or operated by a person actually engaged in travelling to and from their place of residence or business located in the Township of Puslinch which cannot be reached except by way of Highway or portion of Highway referred to in Schedule A provided that said Highway or portion of Highway is travelled only in so far as is unavoidable in getting to and from the owner or operator's place of residence or business; and provided that the parking of the heavy vehicle is permitted at the property in accordance with the Township's Zoning By-law.*

(Township of Puslinch By-law 063-2021)

The proposed access to the pit has been located to ensure that as few residences as possible are located along the haul route (one), to satisfy sightline requirements, and to limit how much of the haul route corresponds with the portion of Concession 2 that is subject to the heavy truck prohibition, regardless of the stated exemptions.

In August 2023, the Township approved a Roads Management Plan which is a guidance document for the Township for the purpose of maintaining and operating the road network. As per the approved plan dated August 30, 2023, Concession 2 from County Road 35 to Sideroad 25 has been identified as one of the top 20 road sections for road resurfacing in the Township based on the calculated priority ratings and is scheduled to occur within the next 1-5 years. The stretch from County Road 35 to Sideroad 20 S is recommended for single lift asphalt and the stretch from Sideroad 20 to Sideroad 25 is identified as a truck route and recommended for a double lift of asphalt. Therefore the majority of the proposed haul route is recognized as a truck route which is to be constructed and maintained accordingly based on the Roads Management Plan.

# 4.0 POLICY REVIEW

The following is an assessment of the proposed Aberfoyle South Pit Expansion relative to the policies and provisions of the following documents:

- Provincial Policy Statement (2020);
- A Place to Grow: Growth Plan for the Greater Golden Horseshoe (August 2020);
- County of Wellington Official Plan 1999 (Office Consolidation June 1, 2022)
- Township of Puslinch Zoning By-law 023/2018

## 4.1 Provincial Policy Statement (2020)

The Provincial Policy Statement (PPS) 2020 provides policy direction on matters of Provincial interests related to land use planning and development, and sets the policy framework for regulating the development and use of land in Ontario. The PPS aims to provide appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment.

Provincial plans are to be read in conjunction with the PPS, and take precedence over the PPS where any conflict arises, except where the relevant legislation provides otherwise.

The PPS recognizes the key Provincial interest in natural heritage, water, agricultural, mineral, and cultural heritage and archeological resources as they provide important economic, environmental, and social benefits. The wise use and management of these resources over the long term is a key provincial interest.

The PPS states mineral aggregate resources shall be protected for long-term use (2.5.1). Additionally, as much of the mineral aggregate resources as realistically possible shall be made available as close to market as possible (2.5.2.1). Making the resource available close to market reduces greenhouse gas emissions, transportation costs, and road network impacts from the transportation of the resource.

The proposed Aberfoyle South Pit Expansion contains significant aggregate resources, and is strategically located close to Highway 401 with access to major markets in the Greater Toronto Area, Kitchener-Waterloo, Cambridge, and Guelph areas, which are areas identified for significant growth and development, and infrastructure maintenance and renewal. Additionally, the expansion will allow CBM to utilize existing and approved processing facilities at their Aberfoyle South Pit operation.

The proposed Aberfoyle South Pit Expansion has been extensively studied and the operational design of the pit incorporates technical recommendations from the completed reports and studies to ensure that no negative impacts occur to significant natural heritage features or adverse impacts on surrounding land uses as a result of the proposed operation. This includes extensive study of potential impacts to Mill Creek and associated natural features.

The application is consistent with the PPS in the following respects:

- The proposed pit has been appropriately designed and buffered to mitigate potential adverse effects on surrounding sensitive land uses. Acoustic and visual berms will be constructed in accordance with the Noise Report and as included on the Aggregate Resources Act Site Plans to mitigate noise impacts in compliance with Provincial regulations. The berms will also screen pit operations. The closest off-site house is approximately 150 m from the proposed extraction area. Many of the houses in the area of the proposed pit along Concession 2 are located within 1 km of Highway 401, a dominant background noise source (PPS Policy 1.2.6.1).
- The diversity and connectivity of natural features in the area, and the long-term ecological function and biodiversity of natural heritage systems will be maintained or improved as a result of progressively rehabilitating the pit to natural features including wooded areas (6.7 ha), new (0.3 ha) and open water (26 ha). The proposed extraction area is primarily comprised of agricultural lands surrounded by natural features, Concession 2 and the existing house and agricultural structures associated with the subject lands (PPS Policy 2.1.2).
- There are no significant wetlands, significant woodlands, significant valleylands, significant wildlife habitat, or significant areas of natural and scientific interest located within the proposed extraction area of the pit. The proposed pit is located adjacent to the Mill Creek Provincially Significant Wetland, significant woodlands and significant wildlife habitat. A 30 m extraction setback will be applied from these features. The Level 1 / 2 Natural Environment report concluded that there will be no negative impacts to the Mill Creek PSW, surrounding significant woodlands, or significant wildlife habitat. The Natural Environment Report considered the small, unevaluated wetlands on the Subject Lands and determined that they were not considered Provincially Significant Wetlands. Wetland habitat is proposed to be replaced in accordance with the provisions of the Growth Plan. Therefore, there is no development or site alteration proposed in significant natural heritage features (PPS Policy 2.1.5)
- Mill Creek and its tributaries support a cold water fish community. Although the contributions from the site to Mill Creek will change as a result of extraction and rehabilitation activities, no adverse impacts are predicted to Mill Creek or the majority of its tributaries as a result of changes in water resources. Because changes to the baseflow of Tributary #3 are expected, a DFO Request for Review will be required for the Project (PPS Policy 2.1.6).
- No development or site alteration is proposed in habitat of endangered species and threatened species (PPS Policy 2.1.7).
- A Water Report (WSP, November 2023) was completed to evaluate any potential impacts of the proposed pit on the quality and quantity of groundwater resources and surface water features. The field investigations and groundwater flow modelling predicts that there will be a temporary reduction in localized groundwater table elevations during active aggregate extraction, which will be mostly confined to the proposed licence area (Site) and the immediate surrounding CBM owned property. The report concluded that surface water runoff to Mill Creek will have a minor localized impact to Tributary #3; however, the water surplus from the pit is expected to infiltrate and report to the creek downstream of the subject lands, and therefore not anticipated to have a significant impact. A water monitoring program as well as a domestic Well Complaint Protocol will be in place to ensure there are no adverse impacts on groundwater resources and surface water features (PPS Policy 2.2.2).

- While the subject lands contain prime agricultural lands (Class 2 and 3), the lands are not designated Prime Agricultural Area in the County's Official Plan (PPS Policy 2.3).
- The proposed Aberfoyle South Pit expansion makes significant, high quality aggregate resources available from a close to market location. The Aberfoyle South Pit expansion has been carefully designed so that extraction occurs in a way which minimizes social, economic and environmental impacts (PPS Policies 2.5.2.1, 2.5.2.2).
- The subject lands will be progressively rehabilitated to natural heritage features including new wetlands and woodlands, and final rehabilitation will be compatible with surrounding land uses and approved land use designations (PPS Policy 2.5.3.1).

A small portion of the subject lands is located within the prime agricultural area as mapped by the Province however the lands are not designated as a prime agricultural area in the County's Official Plan. Therefore, the subject lands are not considered to be *"in prime agricultural areas, on prime agricultural land"*. Regardless, an Agricultural Review was completed to assess agricultural resources on the subject lands and within the surrounding area. It was determined that there will be no impacts on agricultural resources as a result of the proposed pit (PPS Policy 2.5.4.1).

- There are no built heritage resources or significant cultural heritage landscapes located within the subject lands (PPS Policy 2.6.1).
- A Stage 1-2 Archaeological Assessment was completed for the subject lands and accepted by MCM. The assessment resulted in the identification of two locations (Location 3 and 5) within the proposed extraction area which were recommended for a Stage 3 Archaeological Assessment. Stage 3 assessments were completed for Locations 3 and 5 and concluded that further assessment was required in the form of a Stage 4 Archaeological Assessment. Prior to any disturbance of Locations 3 and 5, the Stage 4 assessment(s) must be completed and applicable clearance(s) from the MCM will be required. These areas have been identified and properly buffered on the ARA site plans as contemplated in the Stage 1-2 assessment accepted by MCM. Therefore, the identified significant archaeological resources will be conserved (PPS Policy 2.6.2).
- The majority of the extraction area is located within a floodplain, as mapped by GRCA (**Figure 7**). Development is to be directed away from areas of natural hazards such as floodplains where there is an unacceptable risk to public health or safety or of property damage. Aggregate extraction is not outright prohibited within floodplains when reading the PPS in its entirety. High quality aggregate resources often overlap with floodplains, such as the subject lands and other licensed pits in Puslinch including the Mill Creek watershed. As assessed in the Water Report, the proposed pit will not negatively affect upstream or downstream lands from flooding hazards and the extraction area will provide additional storage for water to reduce impacts of any regional flooding events (PPS Policy 3.1).

In conclusion, the Proposed Aberfoyle South Pit Expansion is consistent with the Provincial Policy Statement (2020), and represents good planning, wise resource management, and is in the public interest after considering the economic, environmental, and social factors that apply to this application.

## 4.2 Growth Plan (2020)

The Growth Plan for the Greater Golden Horseshoe (“Growth Plan”) is the Province’s initiative to plan for growth and development in the Greater Golden Horseshoe (GGH) in a way that supports economic prosperity, protects the environment, and helps communities achieve a high quality of life. The Growth Plan provides a long-term framework for deciding where and how to grow within the Greater Golden Horseshoe, while recognizing the realities that local governments face. The proposed Aberfoyle South Expansion is located within the Growth Plan Area (**Figure 8**).

The Growth Plan states a balanced approach to the wise use and management of all resources, including those related to water, natural heritage, agriculture, cultural heritage and mineral aggregates will be implemented in the GGH (Section 4.1).

The Growth Plan recognizes the importance of protecting and managing the GGH’s mineral aggregate resources:

*“Building compact communities and the infrastructure needed to support growth requires significant mineral aggregate resources. The Aggregate Resources Act establishes the overall process for the management of mineral aggregate operations, and this Plan works within this framework to provide guidance on where and how aggregate resource extraction can occur, while balancing other planning priorities. The GGH contains significant deposits of mineral aggregate resources, which require long-term management, including aggregate reuse and recycling. Ensuring mineral aggregate resources are available in proximity to demand can support the timely provision of infrastructure and reduce transportation-related greenhouse gas emissions”* (Section 4.1).

The Growth Plan states that building communities and the infrastructure required to support growth within the region will require significant aggregate resources, and that providing these resources close to market can support the timely provision of infrastructure and reduced GHG emissions. The proposed Aberfoyle South Pit Expansion will provide high quality mineral aggregates within 30 km of the following areas designated for substantial future growth in the Growth Plan:

- Guelph
- Kitchener-Waterloo
- Cambridge
- Milton
- Burlington
- Hamilton
- Brantford

Section 4.2.2.1 states that a Natural Heritage System (NHS) for the Growth Plan has been identified by the Province to support a comprehensive, integrated and long-term approach to planning for the protection of the region’s natural heritage and biodiversity. Further, Section 4.2.2.2 states that municipalities will incorporate the Natural Heritage System for the Growth Plan as an overlay in official plans and will apply policies to maintain, restore, or enhance the diversity and connectivity of the system and the long-term ecological or hydrologic functions of the features. The subject lands are located within the Natural Heritage System for the Growth Plan as mapped by the Province (**Figure 4**).

Section 4.2.2.4 states that provincial mapping of the NHS for the Growth Plan does not apply until it has been implemented in the applicable official plan. Until that time, the Growth Plan policies that refer to the NHS for the Growth Plan will apply outside settlement areas to the natural heritage systems identified in Official Plans that were approved and in effect as of July 1, 2017. The NHS for the Growth Plan has not yet been implemented in the County's Official Plan. The subject lands are located within the Greenlands and Core Greenlands designations in the County's Official Plan.

Notwithstanding the NHS policies in Section 4.2.2, Section 4.2.8.2 of the Growth Plan states that new mineral aggregate operations within the NHS for the Growth Plan are subject to specific policies. However, these policies do not apply to the subject lands since the proposed pit is an expansion of an existing mineral aggregate operation based on Section 4.2.8.2 c):

*"an application requiring a new approval under the Aggregate Resources Act to expand an existing mineral aggregate operation may be permitted in the Natural Heritage System for the Growth Plan, including in key natural heritage features, key hydrologic features and any associated vegetation protection zones, only if the related decision is consistent with the PPS and satisfies the rehabilitation requirements of the policies in this subsection."*

The proposed pit expansion may be permitted in the Natural Heritage System, including in key natural heritage features and key hydrologic features only if the related decision is consistent with the PPS and satisfies the Growth Plan's rehabilitation requirements. As outlined in Section 4.1 of this Report, the proposed Aberfoyle South Pit Expansion is consistent with the policies of the PPS. The proposed pit application also satisfies the Growth Plan's rehabilitation requirements as addressed below.

Regardless of Section 4.2.8.2 c), the subject lands (i.e. lands proposed to be licensed) do not contain any significant wetlands, habitat of endangered species and threatened species, and significant woodlands as confirmed in WSP's Natural Environment Report (WSP, November 2023).

Section 4.2.8.3 states that applications in prime agricultural areas will require agricultural impact assessments, and where possible, will seek to maintain or improve connectivity of the Agricultural System.

As identified on **Figure 6**, a portion of the subject lands are identified within the provincially-mapped Agricultural System as Prime Agricultural Area. Approximately 2.8 ha of the proposed extraction area is identified as Prime Agricultural Area. However, as the Agricultural System mapping has not yet been implemented in the County's Official Plan, prime agricultural areas identified in the County's Official Plan as of July 1, 2017 will be considered the agricultural land base for the purposes of the Growth Plan (see Section 4.2.6.8).

The subject lands are not designated as a Prime Agricultural Area in the County's Official Plan and were not designated as such as of July 1, 2017 (see **Figure 9**). Therefore, the subject lands are not considered a Prime Agricultural Area.

The following aggregate rehabilitation policies in Section 4.2.8 are applicable to the proposed application:

Table 1: Conformity with the Rehabilitation Policies of the Growth Plan

Growth Plan Policies for Aggregate Rehabilitation	Proposed Application
<p>4. For rehabilitation of new mineral aggregate operation sites, the following apply:</p> <p>a) the disturbed area of a site will be rehabilitated to a state of equal or greater ecological value and, for the entire site, long-term ecological integrity will be maintained or enhanced;</p>	<p>The disturbed area will be rehabilitated to a state of equal or greater ecological value through the creation of a 26 ha naturalized pond, 0.3 ha of wetland and 6.7 ha of new woodland habitat. Except for 0.3 ha of non-significant wetland area with limited ecological functions, the remainder of the proposed extraction area is currently in active agricultural land.</p> <p>The long term ecological integrity of the site will be maintained and enhanced through the protection of Mill Creek and its natural features, and the creation of additional wetland and woodland habitat adjacent to the existing Mill Creek PSW. The entire 30 m setback adjacent to the PSW will be progressively rehabilitated to wetland and woodland habitat. The new pond that will be created will have irregular shorelines and shallow shoreline areas that will create new aquatic wildlife habitat not currently present on the site. In addition, new ecological linkages will be created that will connect with adjacent and other CBM operations in the area.</p>
<p>b) if there are key natural heritage features or key hydrologic features on the site, or if such features existed on the site at the time of the application:</p> <p>i. the health, diversity, and size of these key natural heritage features and key hydrologic features will be maintained or enhanced; and</p> <p>ii. any permitted extraction of mineral aggregate resources that occurs in a feature will be completed, and the area will be rehabilitated, as early as possible in the life of the operation;</p>	<p>The subject lands contain three small unevaluated wetland patches within the agricultural lands with limited ecological functions. These small wetland patches were determined to not be PSW. Approximately 0.3 ha of wetland is located within the proposed extraction area.</p> <p>Wetlands are considered both key natural heritage features and key hydrologic features in the Growth Plan.</p> <p>The health, diversity and size of the wetlands will be enhanced through the creation of new wetlands that will no longer be isolated but rather located in ecologically strategic locations adjacent to the Mill Creek PSW and new woodland habitat.</p> <p>The existing small wetlands will be retained as long as possible and are generally located in the final phase of extraction. Through progressive rehabilitation, the new proposed wetland features will be created prior to the removal of 0.3ha of on-</p>

	site wetlands. Therefore, there will be no net loss of wetland at anytime during the pit operation.
c) aquatic areas remaining after extraction are to be rehabilitated to aquatic enhancement, which will be representative of the natural ecosystem in that particular setting or ecodistrict, and the combined terrestrial and aquatic rehabilitation will meet the intent of policy 4.2.8.4 b); and	The pond resulting from pit extraction activities will be rehabilitated to aquatic enhancement including irregular shorelines, shallow shoreline areas and new wetlands representative of the natural ecosystem in the area. The shallow shoreline widths and depths in the pond will be varied to promote maximum diversity within the habitat for fish and wildlife. The natural influx of external organic matter (i.e., leaf litter) will be promoted along shoreline areas through the management of forest edges and minimization of cleared areas between the extraction area and Mill Creek-Puslinch PSW to the south. Shallow emergent marsh vegetation (i.e., herbaceous species listed above) will be planted in water $\pm 0.15$ m deep and be interspersed with cover structures (e.g., boulders and root wads) areas along the shoreline. Basking logs, nesting platforms and boxes will be created for turtle, waterfowl, and swallows respectively.
<p>5. Final rehabilitation for new mineral aggregate operations in the Natural Heritage System for the Growth Plan will meet these additional criteria:</p> <p>b) where there is extraction below the water table, no less than 35 per cent of the non-aquatic portion of the land subject to each license in the Natural Heritage System for the Growth Plan is to be rehabilitated to forest cover, which will be representative of the natural ecosystem in that particular setting or ecodistrict. If the site is also in a prime agricultural area, the remainder of the land subject to the license is to be rehabilitated in accordance with policy 2.5.4 of the PPS, 2020; and</p>	<p>Approximately 19.1 ha of land within the proposed licence is considered to be non-aquatic land. This includes land outside of the extraction area as well as setbacks and buffers. Therefore approximately 6.7 ha (35%) is required to be rehabilitated to forest cover.</p> <p>The proposed final rehabilitation plan includes approximately 6.7 ha (35%) of new forest cover. The forest plantings will be comprised of native species representative of the area, and will occur adjacent to significant natural features.</p>
c) rehabilitation will be implemented so that the connectivity of the key natural heritage features and the key hydrologic features on the site and on adjacent lands will be maintained or enhanced.	The rehabilitation plan will consist of a pond surrounded by nearshore, riparian, and upland habitats created in the pit setback and buffer areas. This will create a transitional zone between the adjacent Mill Creek-Puslinch PSW and the pit pond. Currently, these areas are in active agricultural production with limited ecological functions. This transitional zone will enhance the existing wildlife

	movement corridor, improve and create connectivity and linkages, and enhance the ecological conditions of the adjacent key natural heritage features and key hydrologic features on adjacent lands.
--	---

In conclusion, the proposed Aberfoyle South Pit expansion conforms to the policies of the Growth Plan.

## 4.3 County of Wellington Official Plan (1999)

The County of Wellington Official Plan provides direction over the next 20 years to the physical development of the County, its local municipalities, and to the long term protection of County Resources.

The current version of the County of Wellington Official Plan was adopted by Council on September 24, 1998 and approved by the Ministry of Municipal Affairs on April 13, 1999 and came into effect on May 6 1999. The Official Plan was most recently consolidated in September 2023.

The subject lands are part of the Rural System of the County of Wellington. The County of Wellington Official Plan recognizes that the Rural System will provide opportunities for employment and that the main employment generator in the rural system will be resource-based industries, including aggregate operations (policy 4.2.5.).

### 4.3.1 *Impact Assessment (Section 4.6)*

Section 4.6 of the Official Plan states that the County or local municipality may require studies to be undertaken to measure various impacts and to propose methods of reducing or eliminating impacts (4.6.1). The Official Plan states that studies completed as part of a licensing procedure (e.g. Aggregate Resources Act) may fulfill all or part of the requirements of this section.

The following studies have been submitted with the proposed Aberfoyle South Pit Application. The requirement for these studies was discussed with the Township and County during pre-consultation meetings on September 28, 2021 and July 27, 2023:

- Aggregate Resources Act (ARA) Site Plans
- Planning Report and ARA Summary Statement
- Natural Environment Report / Environmental Impact Study
- Water Report Level 1 / 2
- Maximum Predicted Water Table Report
- Stage 1 and 2 Archaeological Assessment
- Stage 3 Archaeological Assessments
- Noise Impact Assessment
- Transportation Impact Assessment
- Best Management Practices Plan for the Control of Fugitive Dust
- Agricultural Review
- Aggregate Resource Evaluation

### **4.3.2 Paris and Galt Moraine Policy Area (Section 4.9.7)**

Section 4.9.7 of the County Official Plan outlines policies pertaining to the Paris and Galt Moraine. The Paris and Galt Moraines are unique landforms with a combination of soil types, numerous land surface depressions, and higher elevations relative to surrounding lands. The Moraines function as a support for hydrologic processes and features that influence groundwater and surface water resources at regional and local scales. Policies within this section are intended to protect and enhance these features.

A small portion of the subject lands are located within the Paris and Galt Moraine Policy Area (**Figure 10**). Proposals such as mineral aggregate operations are required to demonstrate that ground and surface water functions will be maintained, and where possible, restored and enhanced (Policy 4.9.7.2). WSP's Water Report concluded that ground and surface water functions will be maintained throughout the duration of the pit operations including after final rehabilitation is complete. The proposed rehabilitation after-use of a naturalized pond and specialized wildlife habitat will also maintain moraine features and processes.

### **4.3.3 Mill Creek Watershed (Section 4.10.1)**

The Mill Creek begins in Puslinch near the Milton boundary and flows westerly to meet the Grand River in Cambridge. The Mill Creek is a cold, groundwater fed stream which supports sensitive aquatic life and fish species such as trout. The Watershed is a valley formed of glacial deposited sands and gravels. It is recharged through rainfall falling on the Paris and Galt Moraines which infiltrates the soil and recharges the groundwater system, then flows into the valley floor and discharges into Mill Creek.

The proposed Aberfoyle South Pit Expansion is located north and west of Mill Creek, and is entirely within the Mill Creek Watershed. To ensure the protection of Mill Creek and its watershed, the County Official Plan outlines policies to be followed, which include:

- a) *the natural heritage features identified by the Mill Creek Watershed Study will be included within Wellington County's Greenland System and will be protected;*

The proposed extraction area of the Aberfoyle South Pit expansion was carefully designed to avoid, protect, and mitigate potential impacts to the natural features located adjacent to the subject lands.

- b) *infiltration levels will be maintained by:*
  - *Limiting impervious cover (buildings & pavement) in a subcatchment area(s) to 20% requiring storm water best management practices to encourage infiltration and maintain water quality and quantity.*

There are no permanent structures or development proposed that would result in impervious cover on the subject lands.

- c) *in areas such as Aberfoyle and the industrial lands adjacent to the Hanlon Expressway where urban development is anticipated the municipality will:*
  - *develop zoning standards which encourage more landscaped areas and less impervious cover for commercial, industrial and residential uses and which integrate storm water management facilities into landscaped areas;*
  - *use site plan review to encourage infiltration and best storm water management practices;*

- *Require environmental impact assessments where development proposals are significant enough to warrant them.*

This location does not apply to the subject lands nor is this use considered urban development.

d) *encourage stream rehabilitation and restoration efforts that result in improved bank stability, increased vegetative cover, pond discharge controls and improved aquatic habitat.*

The proposed rehabilitation will increase natural vegetative cover on the subject lands and provide for improved aquatic habitat through the creation of new wetlands that will not be isolated by agricultural cropland.

#### **4.3.4 Greenlands System (Section 5)**

The subject lands are designated Core Greenlands and Greenlands in the County of Wellington Official Plan according to Schedule B7 (**Figure 9**). As confirmed by the County through pre-consultation, the agricultural lands subject to proposed extraction are designated primarily Core Greenlands due to their mapping within the GRCA floodplain.

The Greenlands System is divided into two categories, Core Greenlands and Greenlands. Core Greenlands include lands which have greater sensitivity or significance. This includes PSWs, all other wetlands, habitat of endangered or threatened species and fish habitat, and hazardous lands. The Greenlands System will be maintained or enhanced. Activities which diminish or degrade the essential functions of the Greenlands System will be prohibited.

##### **4.3.4.1 Core Greenlands (Section 5.4)**

The Core Greenlands designation includes all wetlands (PSW and non-PSW; habitat of endangered or threatened species and fish habitat; and hazard lands).

All wetlands in the County are included in the Core Greenlands. Development and site alteration is not permitted within PSWs. There is no development proposed within the Mill Creek PSW and the wetland will be protected by a 30 m setback.). The Official Plan policies require that all other wetlands are to be protected in large measure and development that would seriously impair their future ecological functions will not be permitted. The subject lands contain three small unevaluated wetland patches within the agricultural lands. These wetland patches have limited ecological functions and were assessed to not meet the criteria for significance. Approximately 0.3 ha of wetland are located within the proposed extraction area. In conformity with applicable Growth Plan policies, the health, diversity and size of the wetlands proposed to be removed will be maintained and enhanced through rehabilitation which will result in the creation of new wetlands that will no longer be isolated in an agricultural field and will be strategically located in a more ecologically appropriate location adjacent to the Mill Creek PSW and new woodland habitat. Future ecological functions will be enhanced for otherwise isolated, small wetlands surrounded by agricultural land. As the new proposed wetlands will replace the current wetlands, there will be no net loss in wetlands as part of the pit application.

The GRCA has been contacted as part of pre-consultation for this application and has reviewed the terms of reference for the Natural Environment Report/EIS. This meets the intent of Official Plan Policy 5.4.1.

The County Official Plan policies state that development and site alteration will not be permitted within habitat of endangered and threatened species except in accordance with provincial and federal requirements. There is no habitat of endangered and threatened species within the proposed extraction area. In addition, there will be no negative impact on adjacent habitat of endangered and threatened species. With regard to fish habitat, although the contributions from the site are changing, no adverse impacts are predicted to Mill Creek or the majority of its tributaries within the study area as a result of changes in water resources. Because changes to the baseflow of Tributary #3 are expected, a DFO Request for Review will be required for the Project. Under the Aggregate Resources of Ontario Provincial Standards, the ARA application will also be circulated to the DFO for review. Potential impacts to Tributary #3, including ecological functions, will be addressed through the DFO Request for Review process.

The Core Greenlands designation also includes areas subject to flooding hazards and erosion hazards and hazardous sites that could be unsafe for development or site alteration due to naturally occurring hazards like organic soils or unstable bedrock conditions. The majority of the subject lands are located in the GRCA mapped floodplain. The County Official Plan states that generally development shall be directed away from areas in which conditions exist which would pose risks to public health and safety or property caused by natural hazards. Development is not permitted where the use is institutional, an essential emergency service, or the use is associated with the disposal, manufacture, or treatment of hazardous substances. None of these uses are proposed.

As confirmed with GRCA through pre-consultation, aggregate extraction is not prohibited within floodplains. Hazardous lands do not pose the same risk to property or public health and safety when the use is a mineral aggregate operation, due to the extractive nature of development with no permanent structures or buildings, or sensitive uses. It should also be noted that other licensed pits in the Township are located within the floodplain associated with Mill Creek. It is not uncommon for high quality aggregate resources to be located within floodplains.

As requested by GRCA, the Water Report assessed potential impacts of the pit operation on upstream and downstream flooding and concluded that there would be no impacts. The final pond could reduce peak flows in local flooding conditions where surface water is held within the pond.

#### **4.3.4.2 *Greenlands (Section 5.5)***

The Greenlands designation includes other significant natural heritage features including habitat, areas of natural and scientific interest (ANSI), streams and valley lands, woodlands, environmentally sensitive areas, ponds, lakes and reservoirs and natural links.

The proposed pit is surrounded by adjacent woodlands. There are no significant woodlands within the subject lands. As outlined in the Natural Environment Report (WSP, November 2023), the 30 m setback, as measured from the dripline of Mill Creek-Puslinch PSW / significant woodland, is expected to be sufficient to protect the woodland root zone and any berms located within the 30 m setback area will be located a minimum of 5 m from the dripline of the woodland. The majority of the 30 m setback from the woodland will be reforested as part of the rehabilitation plan. Therefore, the proposed pit will not impact the adjacent woodland or its ecological function (Policy 5.5.4).

Section 5.5.5 of the Official Plan states that environmentally sensitive areas (ESA) as determined by the County from previous studies will be protected from development or site alterations which would negatively impact them or their ecological functions. As confirmed by the County, the Greenlands

designation on the subject lands coincides with the Galt Creek and Forest Environmentally Sensitive Area which was identified based on a study completed in the 1970s. As assessed in the Natural Environment Report, there will be no negative impacts on the surrounding natural features or their ecological functions that are part of the Galt Creek and Forest ESA. The portion of the Galt Creek and Forest ESA proposed to be extracted is currently in an agricultural condition. Through rehabilitation, the area will be returned to a naturalized condition that supports and enhances the ecological functions of the Galt Creek and Forest ESA. Therefore, there will be no negative impact to the ecological function of the ESA (Policy 5.5.5).

#### **4.3.4.3 Development Control in Core Greenlands & Greenlands (Section 5.6)**

Within the Core Greenlands designation, development is not permitted in Provincially Significant Wetlands or in significant habitat of threatened or endangered species, except in accordance with provincial and federal requirements. There is no development proposed within the PSWs or significant habitat of threatened or endangered species.

In other Core Greenlands areas, and in Greenlands areas, permitted uses may include aggregate extraction within Mineral Aggregate Areas subject to appropriate rezoning, licensing and the policies of the County's Official Plan. An application to amend the County's Official Plan to include the subject lands within the Mineral Aggregate Area as well as zoning by-law amendment and Aggregate Resources Act Licence applications are being submitted to the appropriate review and approval agencies.

Section 5.6.2 states that permitted uses in both the Core Greenlands and Greenlands designations shall only be permitted if:

- there are no negative impacts on significant features and functions and no significant negative impacts on other greenland features and functions;
- the hazardous lands policies of Section 5.4.3 are met;
- the development conforms to policies of the applicable adjacent or underlying designation.

As confirmed by the technical studies completed for the pit application, there will be no negative impacts on the adjacent significant features and their functions, and no significant negative impacts on other Greenland features and functions, including the ESA. The adjacent significant natural features will be protected from aggregate extraction through setbacks and buffers and ecological functions will be enhanced through the creation of a new naturalized pond, new woodland and wetland habitat which is currently agricultural cropland with little ecological function

The proposed pit application conforms to the hazardous lands policies of Section 5.4.3 No prohibited development or structures are proposed within the floodplain and aggregate extraction is not prohibited in floodplains when reading provincial and municipal policies in their entirety.

Policy 5.6.2 requires that where development is proposed in the Greenland system or on adjacent lands, the County or local municipality shall require the developer to:

- a) identify the nature of the features potentially impacted by the development;
- b) prepare, where required, an environmental impact assessment to ensure that the requirements of this Plan will be met, and consider enhancement of the natural area where appropriate and reasonable.

- c) address any other relevant requirements set out in Section 4.6.3 Environmental Impact Assessment.

Through the Natural Environment Report (WSP, October 2023) the Policy 5.6.2 requirements noted above have been addressed and satisfied. Enhancements to the natural area are proposed as a result of the creation of new wetlands and woodland habitat otherwise not present on the agricultural cropland.

Section 5.6.2 states that no development will be approved unless the County is satisfied that the Greenland and Environmental Impact Assessment policies are met. As summarized above and addressed through the Natural Environment Report, the proposed pit application conforms to the Greenland and Environmental Impact Assessment policies of the County of Wellington Official Plan.

#### **4.3.4.4 Restoration and Enhancement (Section 5.7)**

Section 5.7 of the Official Plan recognizes that while the majority of the County policy framework is focused on protecting natural heritage features from development and site alteration, the County also supports restoration and enhancement of the natural heritage system. This section acknowledges that the development control process can provide a means to identify opportunities for restoration and enhancement where development activities are taking place.

The proposed pit application represents an opportunity to enhance the County's Greenlands system by creating new aquatic and terrestrial habitat while also making available high quality aggregate resources available close to market.

#### **4.3.5 Mineral Aggregate Areas (Section 6.6)**

Mineral aggregate areas are part of the County's Rural System which is primarily natural resource land and other uses typically found in non-urban areas. The Rural System, for the most part, is a relatively stable part of the County landscape devoted to economic activities based on natural resources. The County's policies are intended to maintain the essential character of these areas to ensure that the economic activities and employment opportunities which depend on Wellington's natural resources are maintained and enhanced.

##### **4.3.5.1 Mineral Aggregate Resource Overlay (Section 6.6.1)**

Policy 6.6.1 states that lands within the Mineral Aggregate Resource Overlay are areas of high potential for mineral aggregate extraction and are shown as an overlay on Schedule C. These lands have been identified by the Province in the Aggregate Resource Inventory Paper (ARIP) 162 which generally consist of sand and gravel deposits and selected bedrock resources that the Province has identified as being of primary, or secondary significance.

Section 6.6.1 also states that there are sites in the Mineral Aggregate Resource Overlay where there is an existing or approved mineral aggregate operation that lies outside of the sand and gravel resource areas of Primary or Secondary Significance and selected bedrock resources.

The subject lands are not located within the Mineral Aggregate Resource Overlay (**Figure 11**) as they contain sand and gravel deposits of tertiary significance as identified in ARIP 162. However, onsite drilling has indicated that the aggregate resources on site would be more typically categorized as a primary to secondary ARIP deposit.

The Mineral Aggregate Resource Overlay only indicates that aggregate deposits are likely to be available, it does not presume that all conditions are appropriate to allow extraction to proceed. Similarly, the Mineral Aggregate Resource Overlay does not limit or preclude an application for new or expanding aggregate operations only to these areas in the County as specifically recognized in Section 6.6.1. The intention is to make as much aggregate resources available as close to markets as is realistically possible consistent with the direction provided in the PPS.

#### **4.3.5.2 New Mineral Aggregate Operations (Section 6.6.5)**

Aggregate operations are identified as a permitted use in the Core Greenlands and Greenlands designation, subject to the policies of the Plan. Section 6.5.5 states that new or expanding mineral aggregate operations require an amendment to the Mineral Aggregate Area shown on Schedule B of the Official Plan. CBM is applying for an amendment to the County's Official Plan to permit the proposed expansion by establishing the Mineral Aggregate Area on the subject lands as well as the Mineral Aggregate Resource Overlay. A draft Official Plan Amendment is included as Appendix B. Only those lands within the proposed extraction area are proposed to be included within the Mineral Aggregate Resource Overlay.

Section 6.6.5 of the Official Plan outlines the policies to be satisfied when establishing a new or expanding mineral aggregate operation.

Table 2: Conformity with the County Official Plan Policies for New Mineral Aggregate Operations (S. 6.6.5)

County of Wellington Official Plan Section 6.5.5	Proposed Application
a) the impact on adjacent land uses and residents and public health and safety;	<p>There will be no adverse impacts to public health and safety related to this proposal as demonstrated by the completed technical studies submitted with the applications.</p> <p>The subject lands are located in a rural area of the Township of Puslinch. Surrounding land uses are primarily aggregate, rural residential, and natural heritage features. Some agricultural production occurs adjacent to the proposed expansion.</p>
b) the impact on the physical (including natural) environment;	<p>There will be no negative impacts on the significant natural features located adjacent to the subject lands. There are no significant wetlands, significant woodlands, significant valleylands, significant wildlife habitat, or significant areas of natural and scientific interest located within the proposed extraction area of the pit. The proposed pit is located adjacent to the Mill Creek Provincially Significant Wetland, significant woodlands and significant wildlife habitat. A 30 m extraction setback and buffer will be applied from these features.</p> <p>No development or site alteration is proposed in habitat of endangered species and threatened species.</p>

c) the capabilities for agriculture and other land uses;	<p>A small portion of the subject lands is located within the prime agricultural area as mapped by the Province however the lands are not designated as a prime agricultural area in the County's Official Plan. An Agricultural Review (MHBC, September 2023) was completed to assess agricultural resources on the subject lands and within the surrounding area. It was determined that there will be no impacts on agricultural resources as a result of the proposed pit.</p>
d) the impact on the transportation system;	<p>The traffic study (TYLin, November 2023) concluded that study intersections are projected to operate with nearly zero delay and highly efficient conditions accounting for future truck traffic. No operational roadway improvements, such as exclusive turn lanes at the site accesses, would be required to accommodate the projected development traffic at the study intersections.</p> <p>The proposed access to the pit has been located to ensure that: as few residences as possible are located along the haul route (one), to satisfy sightline requirements; and, to limit how much of the haul route is within the heavy truck prohibition regardless of the stated exemptions.</p> <p>The traffic study recommended that a comprehensive test of the structural condition of the Mill Creek culvert, along with borehole analysis of the subject section of Concession 2 roadway, be undertaken to confirm the overall haul route's load bearing capacity.</p>
e) Existing and potential municipal water supply resources are protected in accordance with Sections 4.9.5 and 4.9.5.9 of this Plan and the applicable Source Protection Plan.	<p>Existing and potential municipal water supply resources will be protected. The subject lands are not located within a wellhead protection area, intake protection zone, issue contributing area, or the Wellhead Water Quantity Zone (WHPA-Q) based on the Grand River Source Protection Plan (<b>Figure 12</b>). Regardless, best management practices and a spills protection plan will be in place for equipment maintenance and on-site fuel storage.</p>
f) the possible effect on the water table or surface drainage patterns;	<p>WSP completed a Level 1/2 Water Report (November 2023) which assessed the water table level and any potential impacts to the quality and quantity of water due to below water extraction on groundwater uses, surface water, and groundwater dependant receptors within the natural environment.</p> <p>Mill Creek and its tributaries support a cold water fish community. Base flow changes are possible to Tributary #3 as a result of the proposed pit activities. While Tributary #3 itself will have a 30 m extraction setback, the Natural Environment</p>

	<p>Report recommended that a Request for Review be submitted to DFO in accordance with federal requirements.</p> <p>The study concluded that, subject to the implementation of the proposed recommendations and mitigation, there would be no anticipated impacts to water quality or quantity, surface water features or their functions. Potential decreases in base flow to Tributary 3 are not anticipated to impact Mill Creek, as discussed in the Water and Natural Environment Reports.</p>
g) the manner in which the operation will be carried out;	Extraction will occur in five phases generally in a west to east direction. Extracted materials will be shipped to the Aberfoyle South Pit for processing using Highway trucks. Details of the operation including phasing and progressive rehabilitation are provided on the ARA site plans.
h) the nature of rehabilitation work that is proposed; and	The subject lands will be rehabilitated through the creation of a 26 ha naturalized pond, 0.3 ha of new wetlands, and 6.7 ha of new woodlands. Details of the rehabilitation plan are provided in the ARA site plans.
i) the effect on cultural heritage resources and other matters deemed relevant by Council.	Archeological assessments have been completed and the required mitigation has been incorporated on the ARA Site Plan.

#### **4.3.5.3 Public Information (Section 6.6.6)**

When approvals are being considered for mineral aggregate operations, the following information shall be made available to the public:

- a) Detailed site plans
- b) Estimated quality and quantity of the resource
- c) Description of the surrounding lands
- d) Any related reports prepared by the proponent
- e) Any other information deemed relevant by Council

The preceding information will be made available to the public including the Aggregate Resources Act Site Plan and Aggregate Resource Evaluation. This Report and the Site Plan contains information on the surrounding lands. Further, the related reports and other information required under the Planning Act and Aggregate Resources Act have been submitted with the proposed pit application. CBM has established a project website where these studies and information will be available to the public.

#### **4.3.5.4 Ancillary Uses (Section 6.6.7)**

Section 6.6.7 identifies criteria for establishing ancillary uses. The ancillary uses specifically identified in Section 6.6.4 are not proposed at this pit. For greater clarity, CBM is not proposing an asphalt plant, concrete plant, aggregate transfer station, aggregate blending, or aggregate recycling uses at this site. This pit operation will strictly act as a “feeder pit” with no aggregate processing or washing.

#### **4.3.5.5 Rehabilitation (Section 6.6.8)**

Section 6.6.8 of the County's Official Plan states that all proposals for new aggregate extraction shall include a plan for eventual rehabilitation. The plan shall:

- a) *provide for progressive rehabilitation whenever feasible;*
- b) *be prepared in detail by a recognized expert;*
- c) *be compatible with the long term uses permitted by the surrounding official plan designations;*
- d) *on lands designated Prime Agricultural Areas, provide a detailed agricultural rehabilitation plan which restores substantially the same areas and average soil quality for agriculture as before extraction occurred; and*
- e) *on lands designated Secondary Agricultural Areas, provide an agricultural rehabilitation plan which, whenever feasible, restores substantially the same areas and average soil quality for agriculture as before extraction occurred.*

A Rehabilitation Plan has been submitted for the proposed pit and was prepared by a qualified expert authorized to prepare site plans under the Aggregate Resources Act. As the subject lands are designated Core Greenlands and Greenlands, the lands will be progressively rehabilitated to natural heritage features including a naturalized pond, new wetlands and woodlands. These features will provide aquatic and terrestrial habitat and the final rehabilitation will be compatible with surrounding land uses and approved land use designations.

#### **4.3.5.6 Mining Below Water Table (Section 6.6.9)**

Section 6.6.9 states that extraction below the water table may only be allowed and complete agricultural rehabilitation is not required if the following is demonstrated:

- a) *there is a substantial quantity of mineral aggregates below the water table warranting extraction or the depth of planned extraction in a quarry makes rehabilitation unfeasible;*

The Subject Lands contain about 5.5 million tonnes of high-quality aggregate resources. Over 95% of the sand and gravel resources located on the subject lands are located below the water table; therefore, there is a substantial quantity of mineral aggregates below the water table warranting extraction.

- b) *on lands designated Prime Agricultural Areas, other alternatives have been considered by the applicant and found unsuitable, and rehabilitation in remaining areas will be maximized;*

The subject lands are not designated Prime Agricultural Area in the County's Official Plan based on Schedule B7.

- c) *impacts on the environment, including quality and quantity of surface and groundwater resources, will be minimal; and*

Impacts on the environment will be minimized in accordance with provincial and municipal standards as detailed in the Water Report (WSP, November 2023) and Natural Environment Report (WSP, November 2023).

- d) *the intended after use will be compatible with the long term uses of adjacent areas.*

The proposed extraction area will be rehabilitated to natural heritage features compatible with the long term uses of adjacent areas which include PSW and significant woodlands. Further, the subject lands outside the extraction area will be maintained as agricultural land and lands associated with the residential and agricultural structures on the site.

Mitigation measures have been put in place and the operation has been carefully designed to ensure the proposed expansion minimizes social, economic and environmental impacts.

The proposed amendment and pit expansion conform to the County's Official Plan.

## 4.4 Township of Puslinch Zoning By-law 23/2018

The subject lands are zoned Agricultural (A) and Natural Environment (NE) in Township of Puslinch Zoning By-law 23/2018 (**Figure 13**). The subject lands also contain the Environmental Protection (EP) Overlay. This is not a separate zone but an overlay that represents natural heritage features included in the Greenlands designation in the County's Official Plan as well as lands regulated by the GRCA e.g. floodplains.

Section 13.2 outlines the special provisions that may apply to proposed development within the EP Overlay. It must be demonstrated that there will be no negative impacts on the specified natural features or their ecological functions. This has been demonstrated through the completed technical studies and by requiring a 30 m setback from adjacent natural features.

Surrounding lands are zoned Agricultural, Natural Environment, and Extractive.

CBM has applied to amend the Zoning By-Law from the Agricultural and Natural Environment Zones to Extractive Zone while maintaining the EP Overlay. Lands not proposed for extraction will be placed in a Natural Environment or Agricultural Zone. A draft Zoning Amendment is included as Appendix B of this report.

# 5.0

## AGGREGATE RESOURCES ACT SUMMARY STATEMENT

The following information is provided to address the requirements for a Summary Statement for a Class A Licence as set out in the Aggregate Resources of Ontario Standards (2020). The CVs for the Report Authors are included in Appendix C.

### 5.1 Agricultural Classification of the Site - Standard 1.1

According to soils mapping from OMAFRA, the subject lands contain Class 2 and 3 soils (Burford Loam and Dumfries Sandy Loam, respectively) (**Figure 5**). The Burford Loam is described as containing “smooth very gently sloping” topography with a stoniness class of “slightly stony”. The Dumfries Sandy Loam is described as containing “irregular steeply sloping” topography with a stoniness class of “very stony”.

The subject lands are not proposed to be returned to agricultural use as part of rehabilitation. The subject lands are not designated Prime Agricultural Area in the County’s Official Plan.

Please refer to Section 3.5 of this Report for further information on agricultural resources.

### 5.2 Applicable Planning and Land Use Considerations - Standard 1.2

The subject lands are located approximately 2 km from the existing Aberfoyle South Pit (ARA License #5497), which is owned and operated by CBM. The subject lands will act as an expansion to this license. The lands surrounding the proposed pit expansion include natural heritage features (Mill Creek and PSW), rural residential uses, agricultural uses and licensed aggregate operations. There are two off-site residences located within 120 metres of the proposed license boundary with the closest house being approximately 150 m from the extraction area.

The subject lands are designated Greenlands and Core Greenlands in the County’s Official Plan based on Schedule B7 (**Figure 9**). The lands are zoned Natural Environment and Agricultural in the Township’s Zoning By-Law (**Figure 13**).

The subject lands are not located within the Greenbelt Plan but are subject to the policies in the Growth Plan for the Greater Golden Horseshoe.

In addition to the ARA Licence Application, a County of Wellington Official Plan Amendment and Township of Puslinch Zoning By-Law Amendment are also required to permit the proposed pit extension.

Please refer to Sections 3 and 4 of this Report for a further discussion on Planning and Land Use Considerations.

## 5.3 Source Protection Area Considerations - Standard 1.3

The subject lands are not located within a Wellhead Protection Area, Wellhead Water Quantity Zone, Intake Protection Zone or Issue Contributing Area as identified in the Grand River Source Protection Plan (**Figure 12**). The subject lands are classed as a Significant Groundwater Recharge Area with a vulnerability score of 4. The operation and rehabilitation of the pit are expected to result in annual recharge rates that will maintain the Significant Groundwater Recharge Area classification.

Best management practices and a spills protection plan will be in place for on-site fuel storage.

## 5.4 Quality and Quantity of Aggregate On Site Standard 1.4

The majority of the subject lands are identified as having sand and gravel deposits of tertiary significance according to ARIP 162 (**Figure 3**). However, onsite drilling has indicated that the resources on site would be more typically categorized as a primary to secondary ARIP deposit. These resources are primarily used to produce granular products, as well as course and fine aggregates used in hot-mix asphalt paving and concrete production.

Based on the on-site resource testing, there are approximately 5.5 million tonnes of high quality sand and gravel resources available within the proposed extraction area. Over 95% of the sand and gravel resources located on the subject lands are located below the water table. The sand and gravel deposit on site has an average thickness of approximately 11 m.

Resources extracted from the subject lands will be transferred via highway trucks and processed at the existing Aberfoyle South Pit. This location provides high quality materials in a close to market location including concrete, asphalt, crushed stone, granular and sand products.

Please refer to Section 3.2 for further information on aggregate quantity and quality.

## 5.5 Main Haulage Routes - Standard 1.5

The proposed pit is considered a “feeder pit” or a “load and haul” as materials extracted from the subject lands are proposed to be processed at the Aberfoyle South Pit, and then shipped to market using the existing entrance and haul route at Concession Road 7. Material will be hauled using highway trucks from the subject lands approximately 2 km to the existing pit, along Concession Road 2. There will be no truck traffic heading west on Concession 2.

The traffic study found that during the peak hour, there would be 28 trips during both the AM and PM peak hour (14 inbound, 14 outbound).

A single truck entrance / exit is proposed along the eastern portion of the subject lands on Concession 2. An access permit will be obtained from the Township as the applicable road authority.

Please refer to Section 3.6 for further information on haul routes and truck traffic.

## 5.6 Progressive and Final Rehabilitation - Standard 1.6

The lands will be extracted to a maximum depth of approximately 285 masl. The resulting pond area will be approximately 26 ha in size. Below water, the rehabilitated side slopes will be 2:1 or the natural angle of repose, while above the water side slopes will be 3:1. Shallow and undulating shoreline areas are proposed around the perimeter of the lake to create varying topography and lake depths.

Approximately 0.3 ha of new wetlands will be created in selected areas of the setback adjacent to the Mill Creek PSW. Approximately 6.7 ha of new forest cover will be created which is proposed to occur within the 30 m setback adjacent to the Mill Creek PSW primarily along the western, southern and eastern setback areas. At least 35% of the site will be rehabilitated to forest cover consistent with the rehabilitation requirements in the Growth Plan. These features will be created progressively as extraction proceeds through the site as outlined on the phasing plans of the ARA Site Plans.

The rehabilitated landform will be compatible with the surrounding area. Refer to the ARA site Plans (Rehabilitation Plan) for additional details regarding progressive and final rehabilitation and Section 2.3 of this Report.

# 6.0 CONCLUSIONS

CBM is applying for a Class 'A' Licence under the Aggregate Resources Act, a Zoning By-law Amendment and County Official Plan Amendment to permit aggregate extraction below the water table on lands located at 6947 Concession Road 2, legally described as Part of Lots 18, 19, and 20, Concession 1, geographic Township of Puslinch.

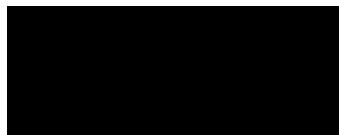
The proposed Aberfoyle South Pit Expansion lands are located to the west of the existing Aberfoyle South Pit, which is owned and operated by CBM (Licence #5497). The subject lands will act as an expansion to Licence #5497.

The subject lands contain about 5.5 million tonnes of high quality sand and gravel resources in a location that is close to market with ongoing aggregate extraction and approved facilities to process the materials extracted from the subject lands (CBM Aberfoyle South Pit). Resources extracted from the subject lands will help support the timely provision of infrastructure and reduce transportation-related greenhouse gas emissions.

The operational design of the pit incorporates the recommendations of the technical reports prepared for the application in order that the pit can operate within Provincial guidelines and minimize social, economic and environmental impacts.

The proposed Aberfoyle South Pit Expansion represents the wise use and management of significant aggregate resources and is in the public interest in consideration of the economic, social and environmental factors that apply to this application. The proposal is consistent with the PPS, and conforms to the Growth Plan and Wellington County Official Plan.

Submitted by:



Neal DeRuyter, BES, MCIP, RPP



Caitlin Port, MES, MCIP, RPP

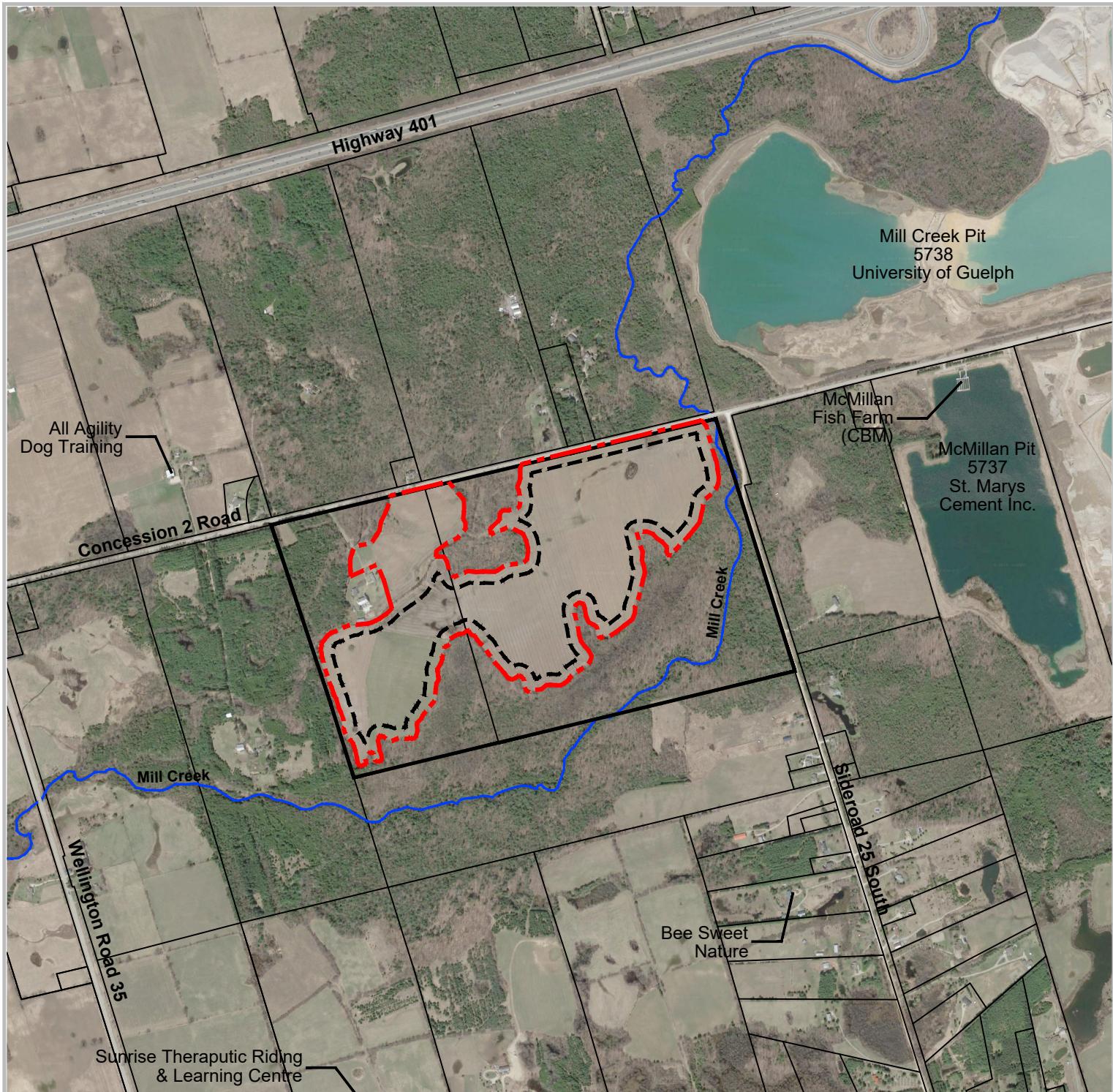


Figure 1

## Context Plan

### CBM Aberfoyle South Expansion

Concession 2 Road  
Township of Puslinch  
County of Wellington

#### LEGEND



Property Boundary  
(88.5 ha)



Proposed Licensed Boundary  
(44.8 ha)



Proposed Limit of Extraction  
(27.5 ha)

Sources:  
Google - Satellite Imagery  
LIO/Geohub - Pit Boundaries

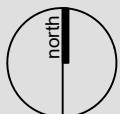
DATE: October 2022

FILE: Y321AB

SCALE: 1:15,000

DRAWN: DGS

K:\Y321AB-CBM ABERFOYLE SOUTH PIT EXPANSION\PT\BSITE.DWG



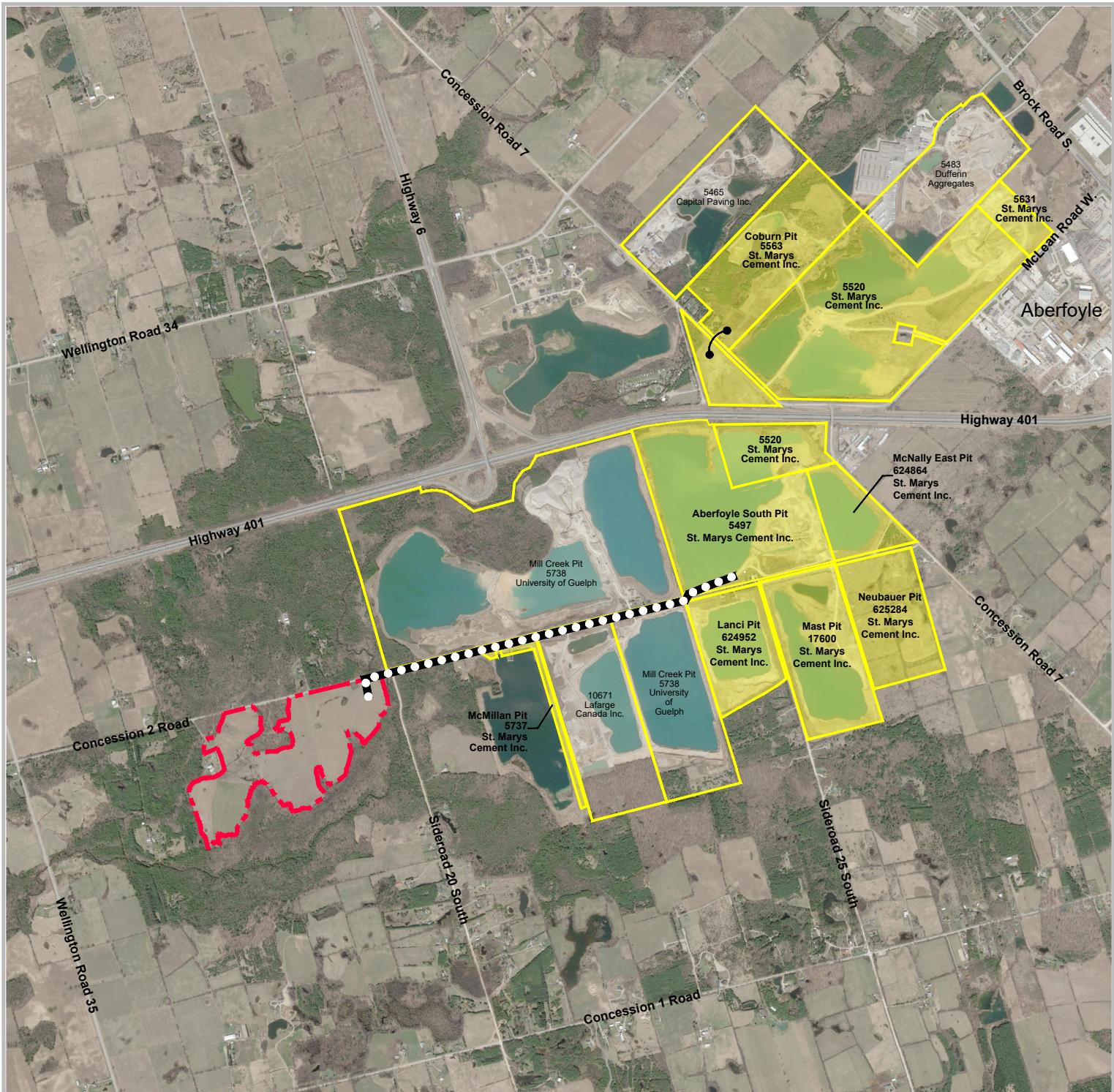


Figure 2

## Proposed Haul Route

### LEGEND



Subject Lands



Haul Route



ARA Licence (St. Marys Cement Inc.)



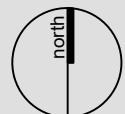
ARA Licence (Other)

DATE: October 2022

FILE: Y321AB

SCALE: 1:30,000

DRAWN: DGS



## CBM Aberfoyle South Expansion

Concession 2 Road  
Township of Puslinch  
County of Wellington

Sources:  
Google Satellite Imagery  
LIO/Geohub Pit & Quarry Boundaries

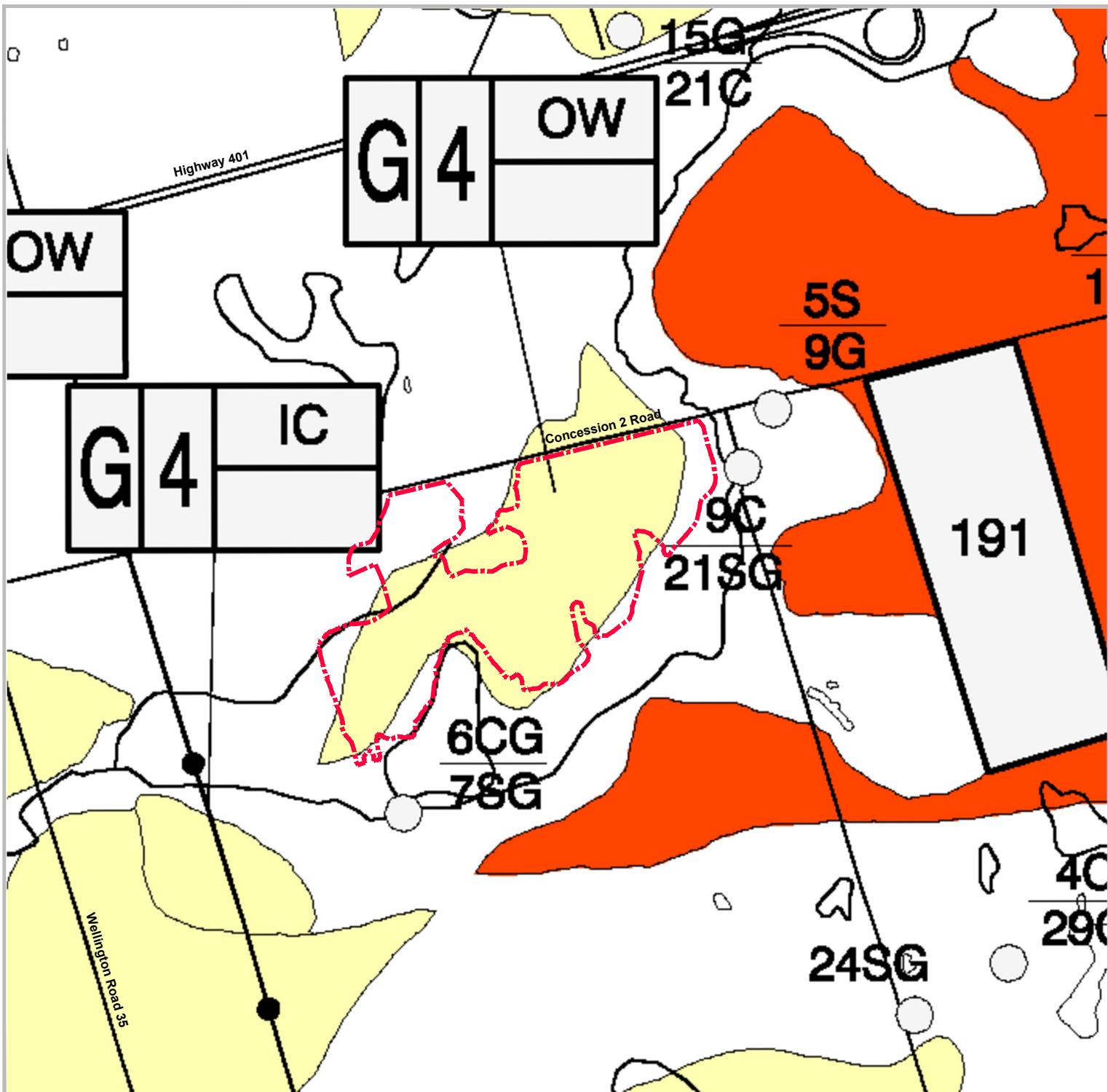


Figure 3

## Wellington County Aggregate Resources Inventory Paper 162 Sand and Gravel Resources

**CBM Aberfoyle South  
Expansion**  
Concession 2 Road  
Township of Puslinch  
County of Wellington

### LEGEND

- Proposed Licence Boundary
- Selected Sand And Gravel Resource Area Primary Significance
- Sand And Gravel Deposit Tertiary Significance
- Other Surficial Deposits or Exposed Bedrock

Source: Ontario Geological Survey, Aggregate Resource Inventory Paper 162, Map 1B Wellington County (South) Sand and Gravel Resources

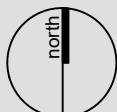
DATE: October 2022

FILE: Y321AB

SCALE: 1:15,000

DRAWN: DGS

K:\Y321AB-CBM ABERFOYLE SOUTH PIT EXPANSION\RP\T\RP162.DWG



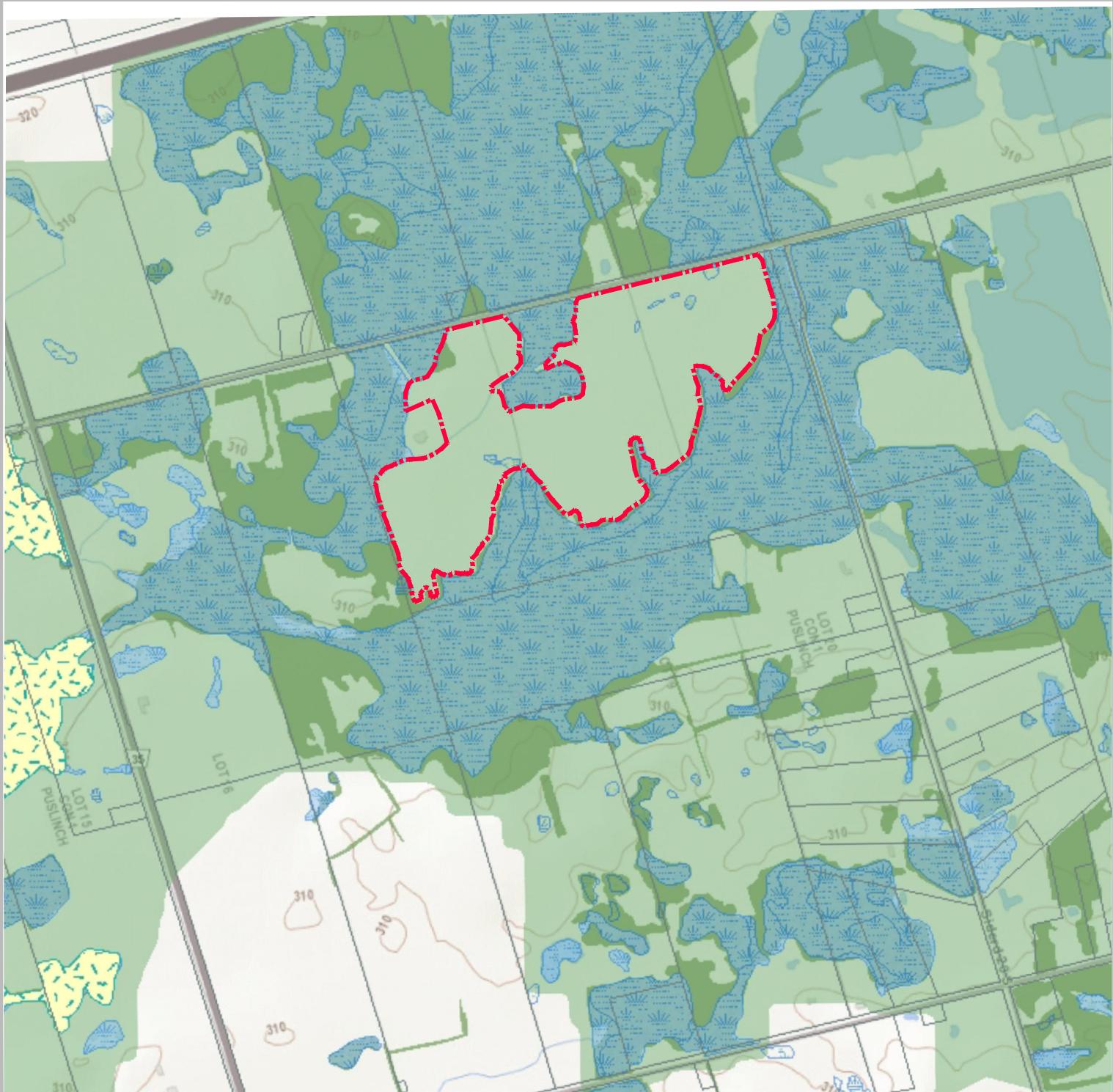


Figure 4

## Natural Heritage Areas

### CBM Aberfoyle South Expansion

Concession 2 Road  
Township of Puslinch  
County of Wellington

#### LEGEND



Proposed Licence Boundary



Galt Creek and Forests  
Regional ANSI



Provincially Significant Wetland



Woodland



Natural Heritage System

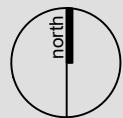
Source: Ontario Ministry of Natural Resources and Forestry,  
Make a Map: Natural Heritage Areas

DATE: October 2022

FILE: Y321AB

SCALE: 1:15,000

DRAWN: DGS



K:\Y321AB-CBM ABERFOYLE SOUTH PIT EXPANSION\RPT\NMNR NATURAL HERITAGE AREAS.DWG

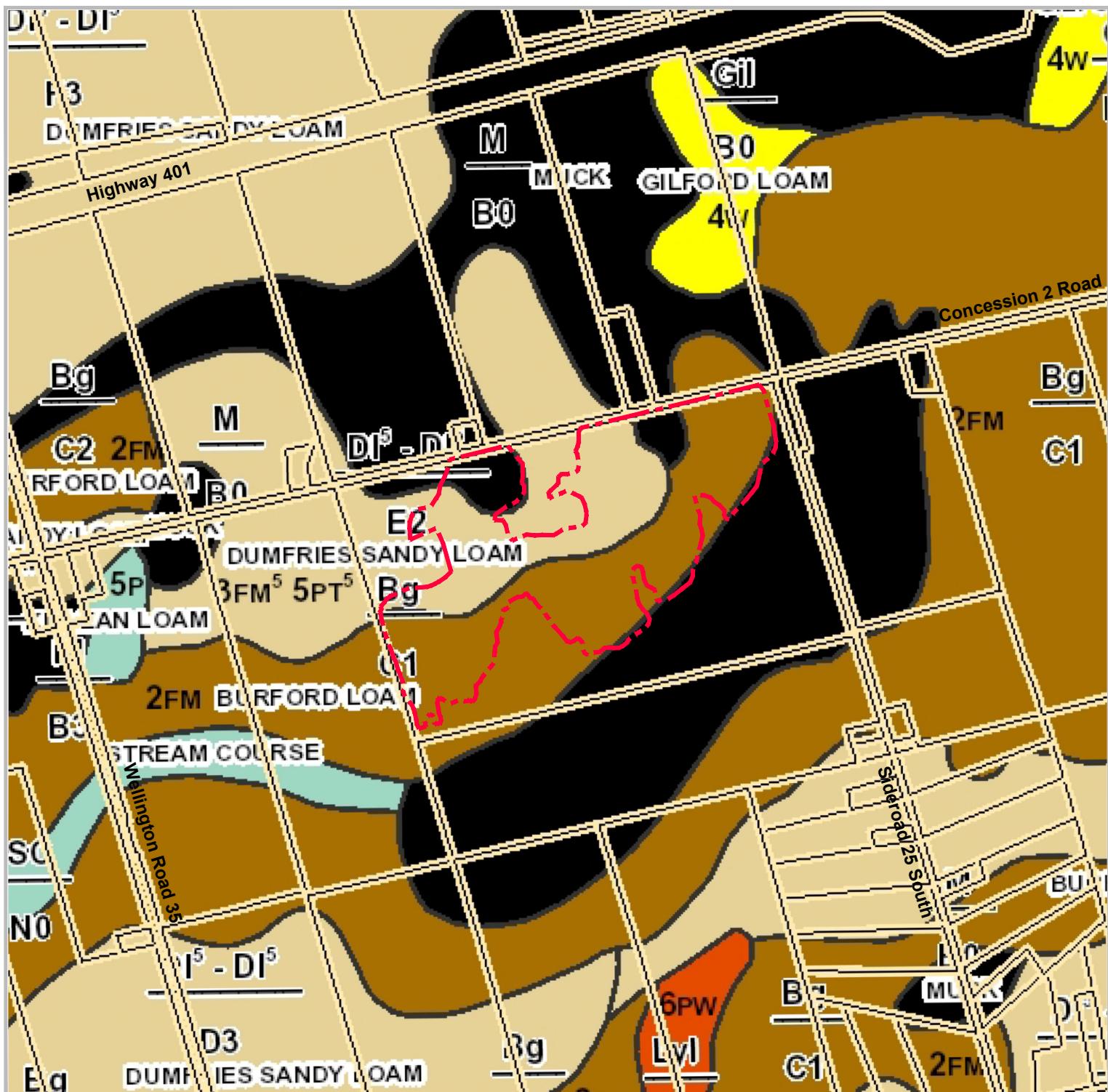


Figure 5

## Soil Capability for Agriculture

### CBM Aberfoyle South Expansion

Concession 2 Road  
Township of Puslinch  
County of Wellington

#### LEGEND



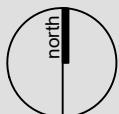
Proposed Licence Boundary

DATE: October 2022

FILE: Y321AB

SCALE: 1:15,000

DRAWN: DGS



K:\Y321AB-CBM ABERFOYLE SOUTH PIT EXPANSION\RP\T\SOIL CAPABILITY FOR AGRICULTURE.DWG

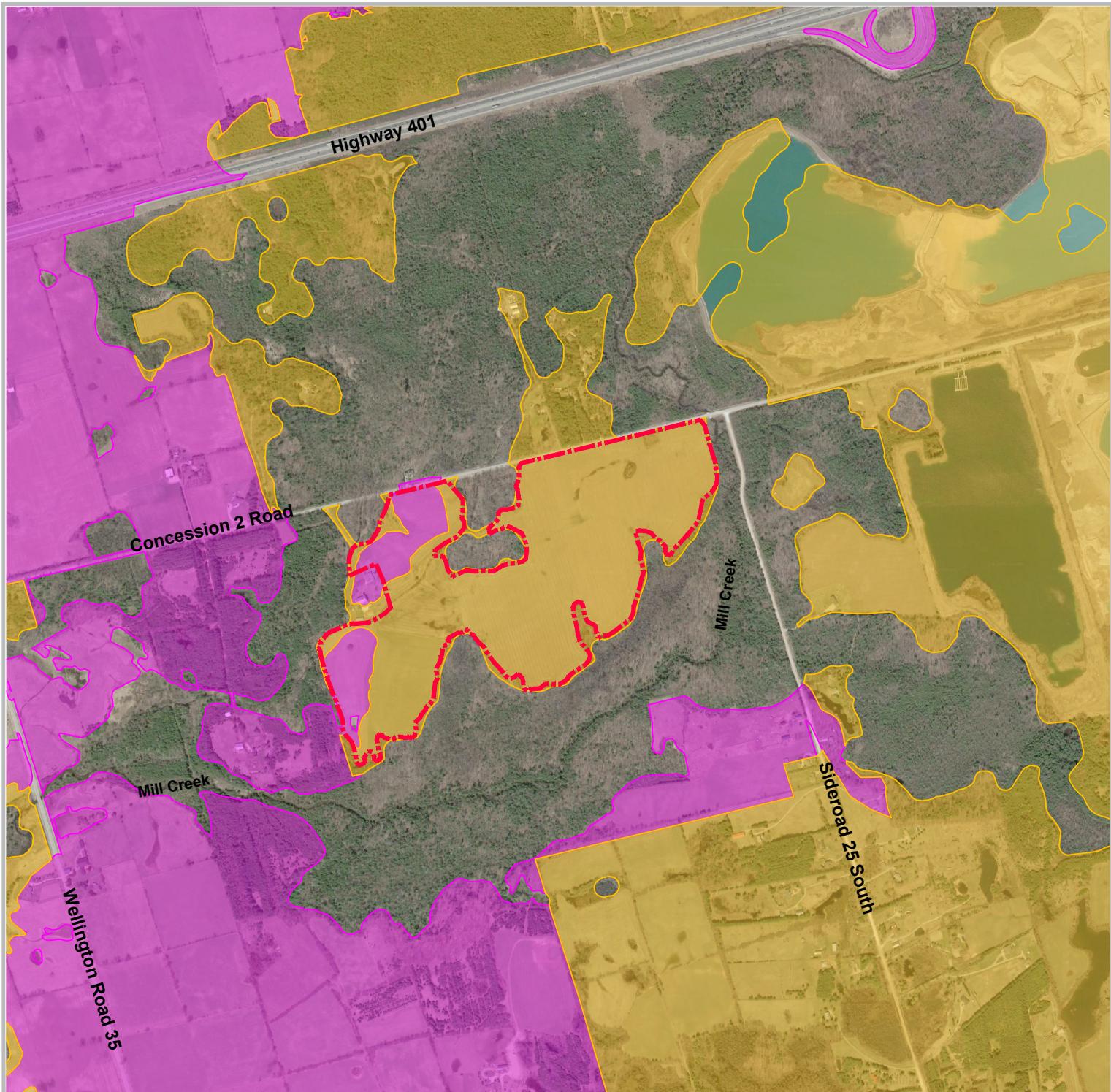


Figure 6

## Provincial Prime Agricultural Area Mapping

### CBM Aberfoyle South Expansion

Concession 2 Road  
Township of Puslinch  
County of Wellington

#### LEGEND



Proposed Licence Boundary



Candidate Area



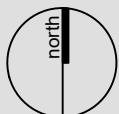
Prime Agricultural Area

DATE: October 2022

FILE: Y321AB

SCALE: 1:15,000

DRAWN: DGS



K:\Y321AB-CBM ABERFOYLE SOUTH PIT EXPANSION\RPT\PROVINCIAL PRIME AGRICULTURAL LAND MAPPING.DWG

Sources:  
Google Satellite Imagery;  
Agricultural Land Base Data, Ontario Geohub open data

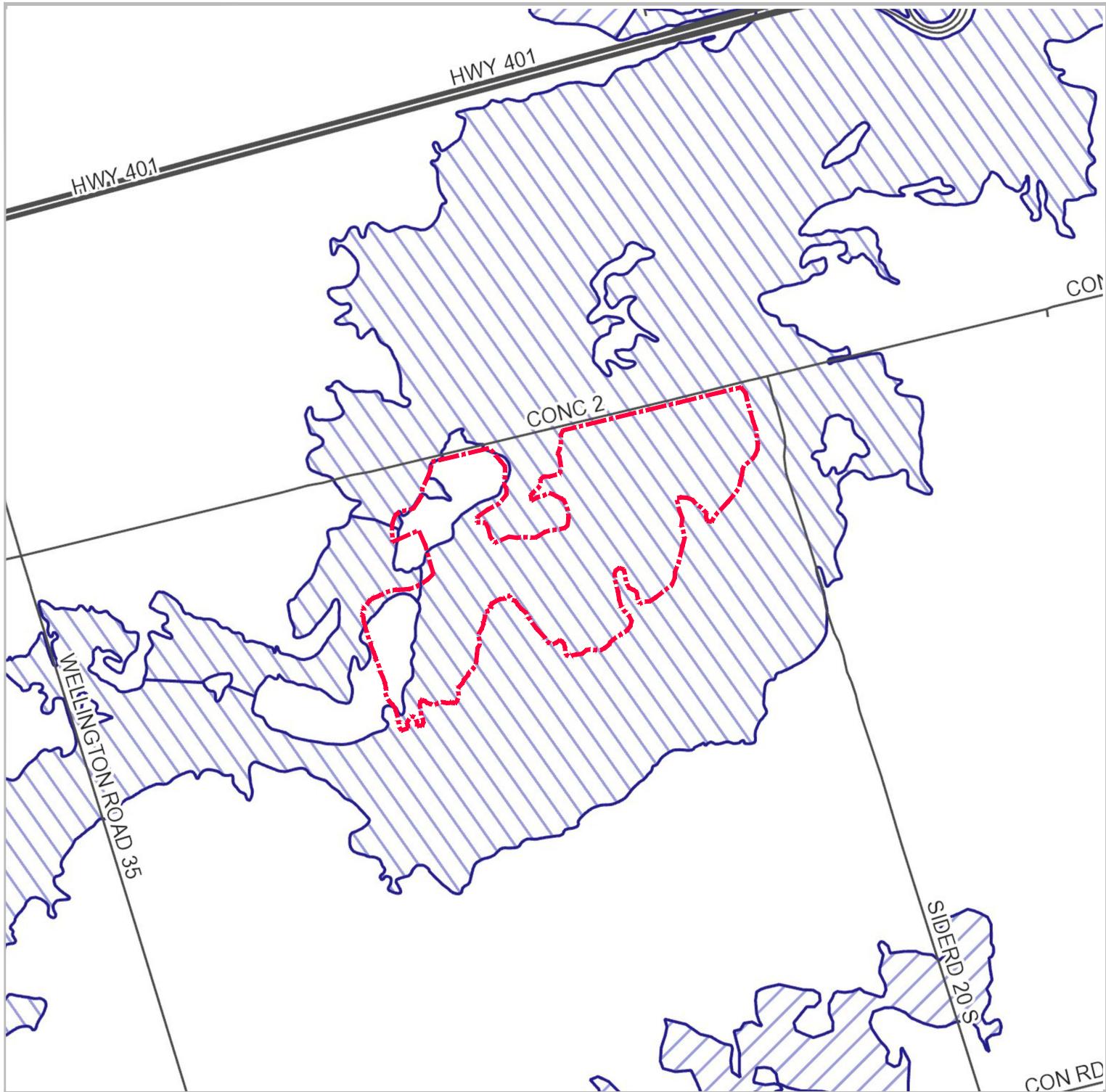


Figure 7

## GRCA Floodplain Mapping

**CBM Aberfoyle South Expansion**  
 Concession 2 Road  
 Township of Puslinch  
 County of Wellington

### LEGEND

- Proposed Licence Boundary
- Floodplain Engineered
- Floodplain Estimated

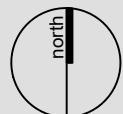
Source: Grand River Conservation Authority (GRCA) Map Your Property  
 online mapping

DATE: October 2022

FILE: Y321AB

SCALE: 1:15,000

DRAWN: DGS



K:\Y321AB-CBM ABERFOYLE SOUTH PIT EXPANSION\RPT\GRCA FLOODPLAIN MAPPING.DWG

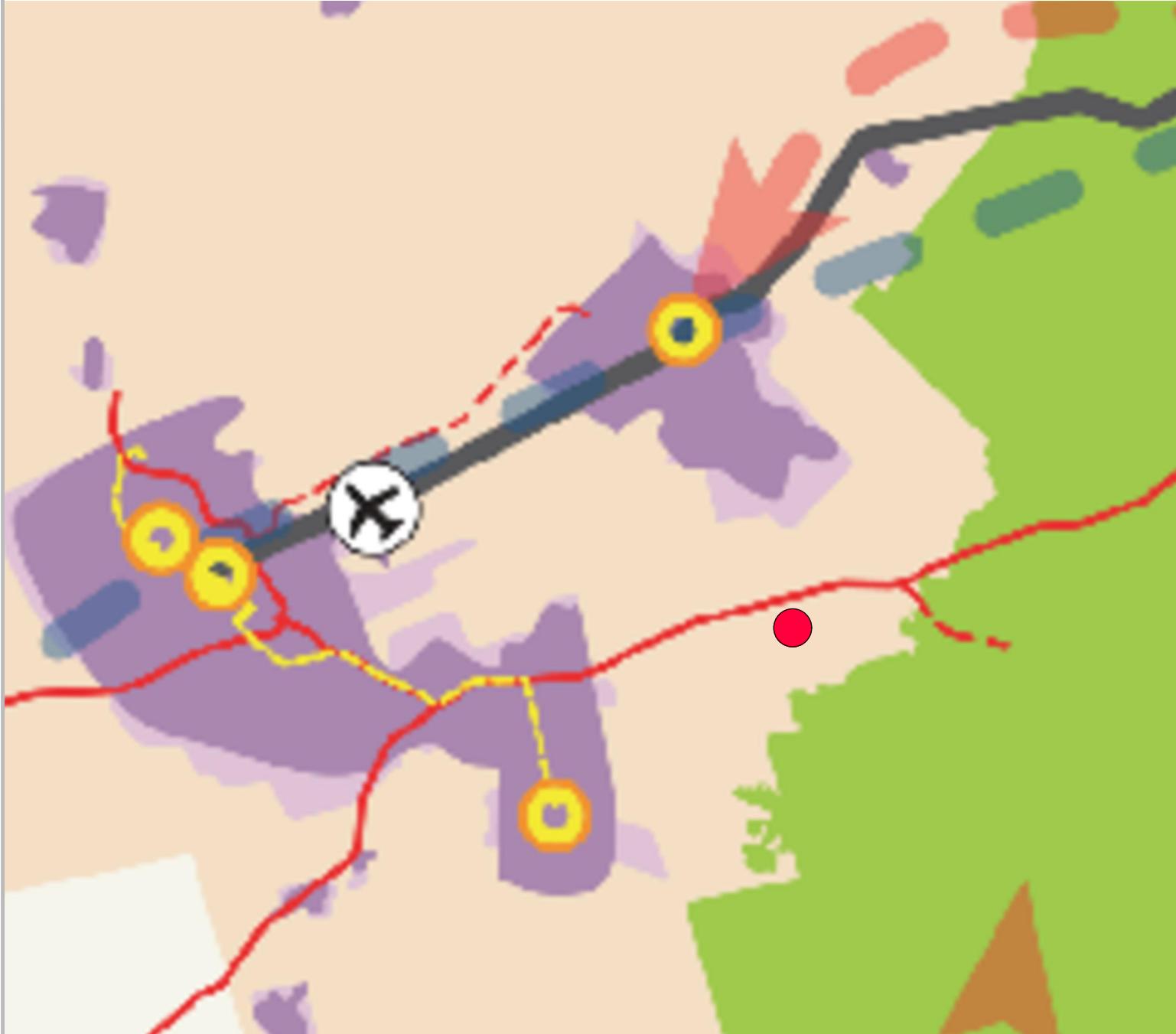


Figure 8

## Places to Grow Concept Plan

**CBM Aberfoyle South Expansion**  
 Concession 2 Road  
 Township of Puslinch  
 County of Wellington

### LEGEND

Location of proposed Aberfoyle South Pit Expansion

DATE: October 2022

SCALE: NTS

FILE: Y321AB

DRAWN: DGS

K:\Y321AB-CBM ABERFOYLE SOUTH PIT EXPANSION\RPT\PLACES TO GROW CONCEPT.DWG

### Source:

Produced by and using data sources from the Ministry of Municipal Affairs, Ministry of Natural Resources and Forestry and the Ministry of Transportation  
 © Queen's Printer for Ontario



PLANNING  
 URBAN DESIGN  
 & LANDSCAPE  
 ARCHITECTURE

200-540 BINGEMANS CENTRE DR, KITCHENER, ON, N2B 3X9  
 P: 519.576.3650 F: 519.576.0121 | [WWW.MHBCPLAN.COM](http://WWW.MHBCPLAN.COM)

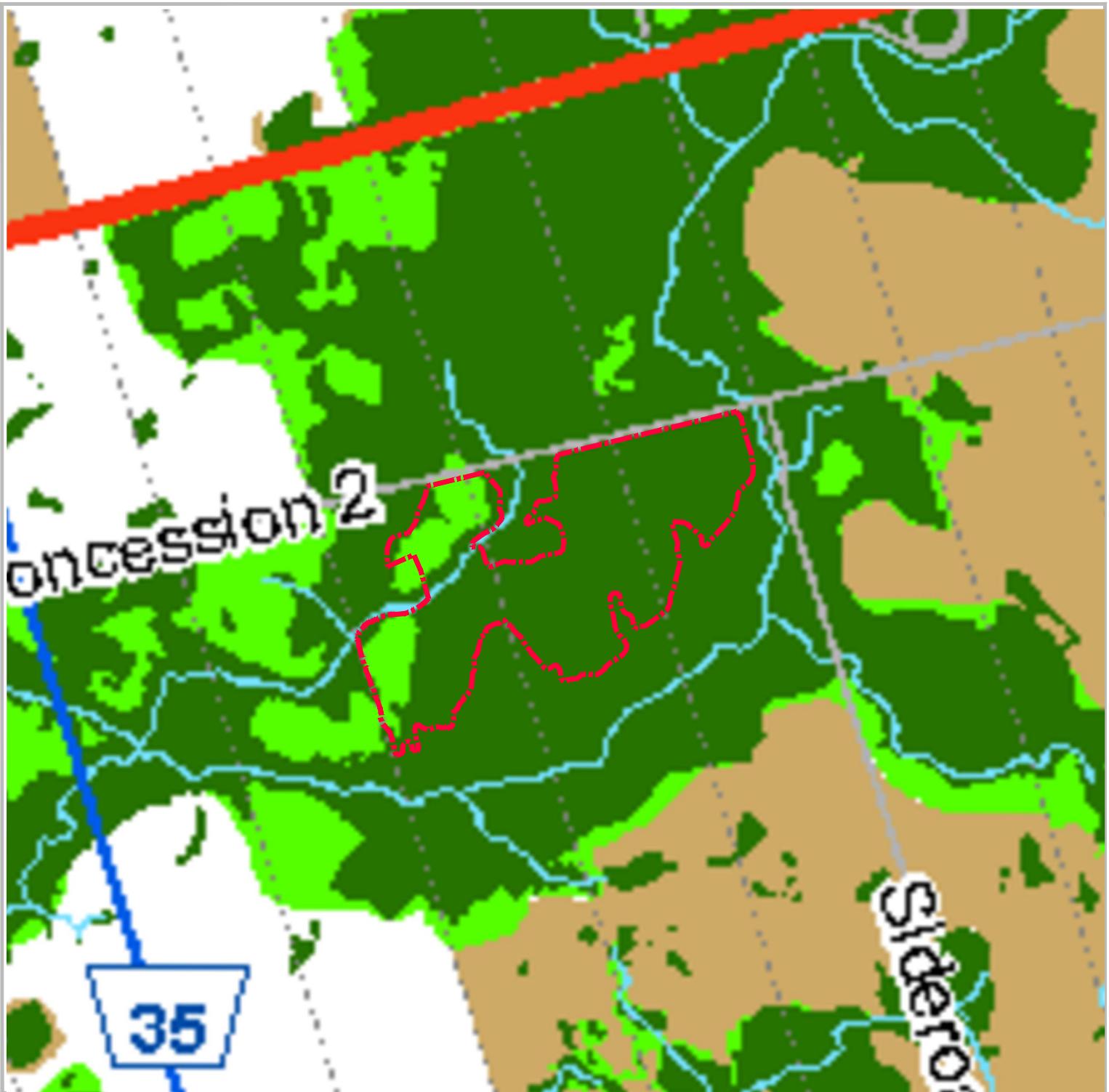


Figure 9

**County of Wellington  
Official Plan  
Schedule B7  
Land Use  
Puslinch**

**CBM Aberfoyle South  
Expansion**  
Concession 2 Road  
Township of Puslinch  
County of Wellington

**LEGEND**



Subject Lands

**The Greenlands System**

- Core Greenlands
- Greenlands

**The Rural System**

- Prime Agricultural
- Secondary Agricultural
- County Roads
- Provincial Highway
- Watercourse

Source: County of Wellington Official Plan, Schedule: B7 Land Use Puslinch (September 2023)

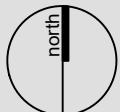
**DATE:** November 2023

**FILE:** Y321AB

**SCALE:** 1:15,000

**DRAWN:** DGS

K:\Y321AB- CBM ABERFOYLE SOUTH PIT EXPANSION\RPT\COUNTY OF WELLINGTON OP SCHEDULEB7 NOVEMBER2023.DWG



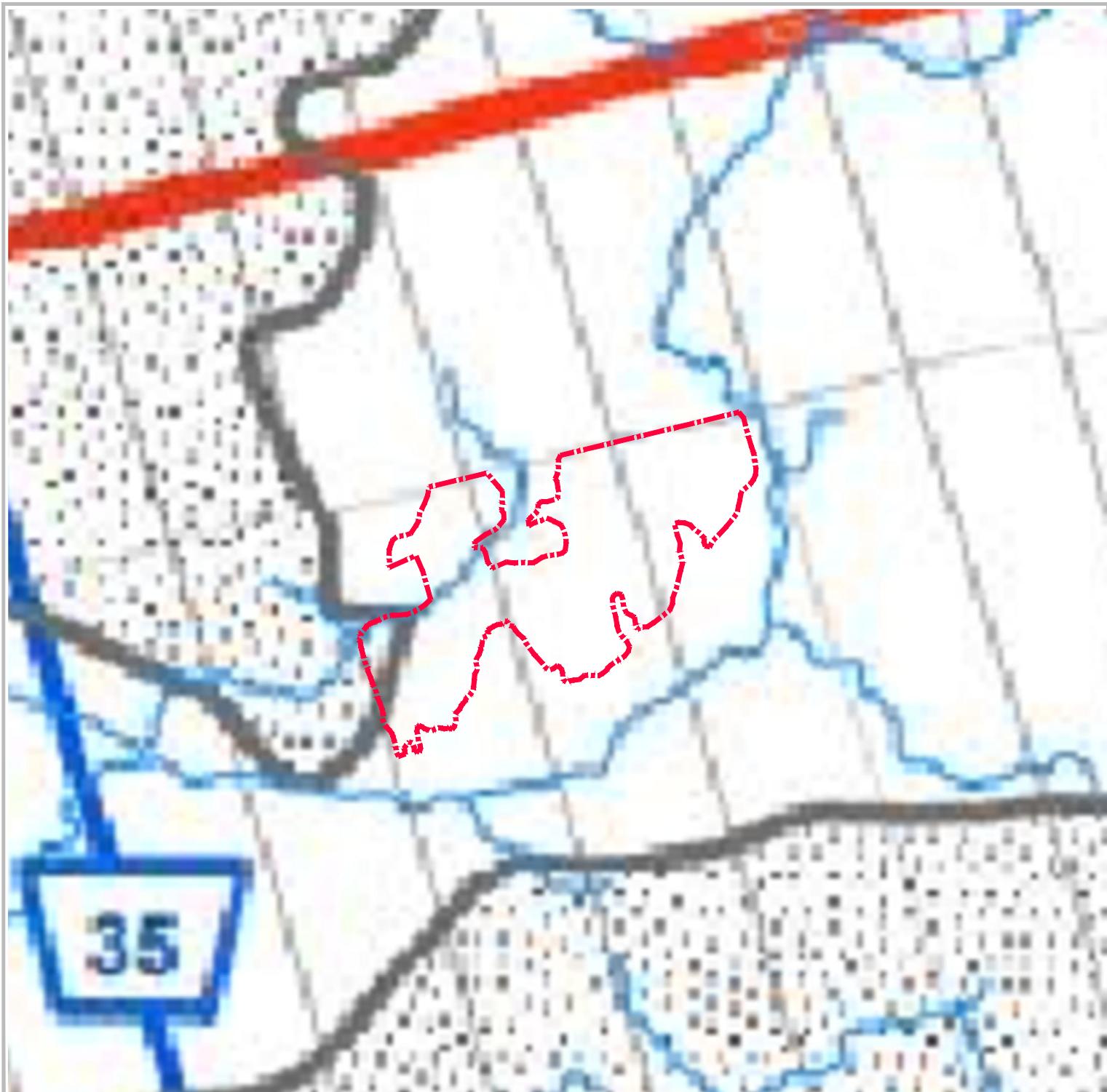
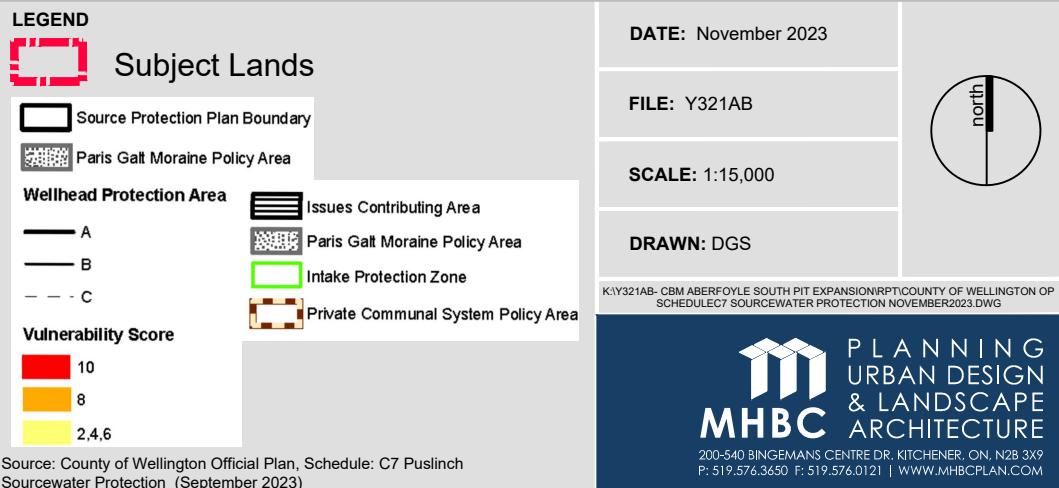


Figure 10

**County of Wellington  
Official Plan  
Schedule C7  
Puslinch  
Sourcewater Protection**

**CBM Aberfoyle South  
Expansion**

Concession 2 Road  
Township of Puslinch  
County of Wellington



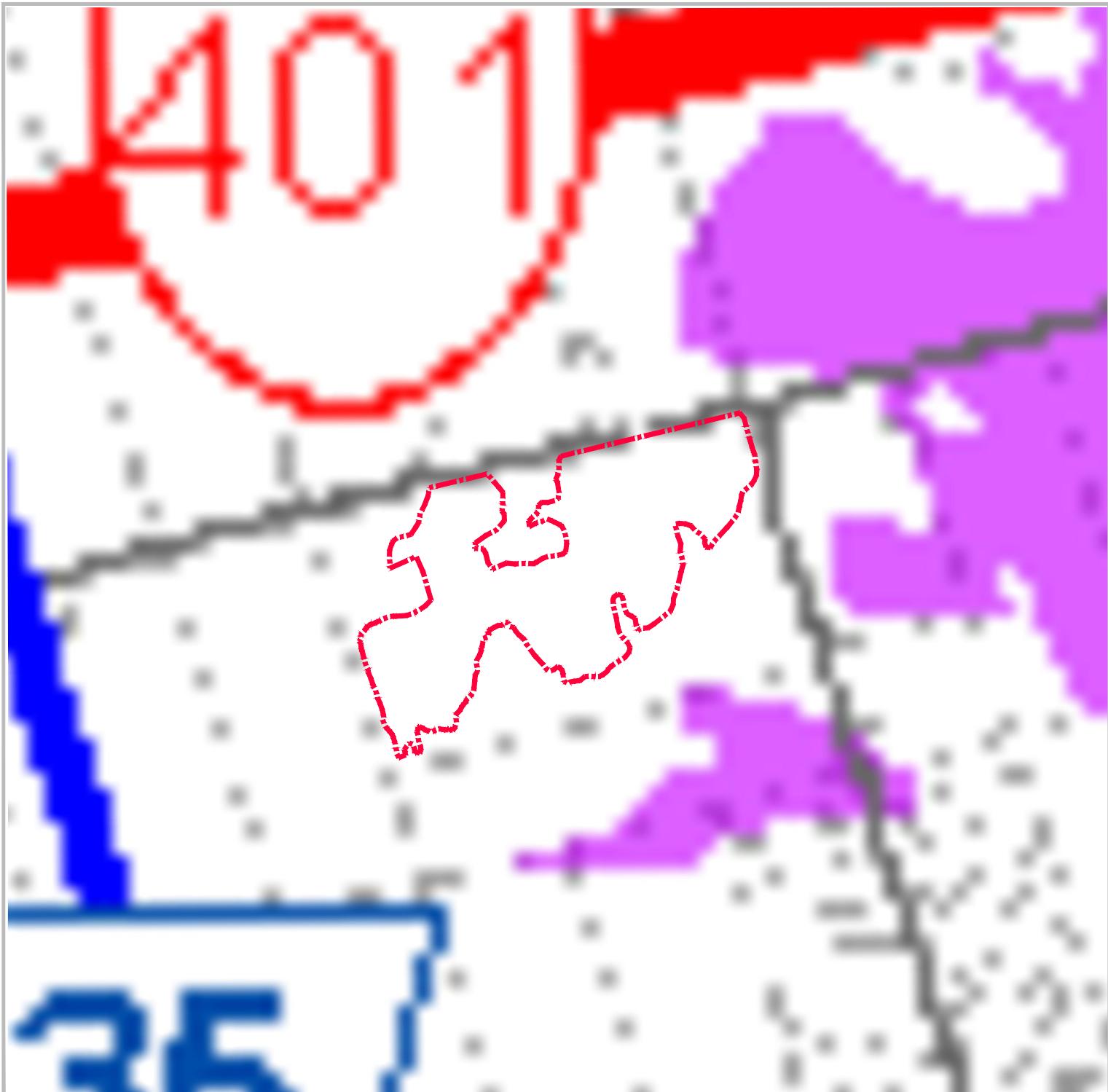


Figure 11

## County of Wellington Official Plan Schedule D Mineral Aggregate Resource Overlay

### CBM Aberfoyle South Expansion

Concession 2 Road  
Township of Puslinch  
County of Wellington

#### LEGEND



Subject Lands



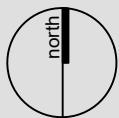
Sand and Gravel Resources  
of Primary and Secondary  
Significance

DATE: November 2023

FILE: Y321AB

SCALE: 1:15,000

DRAWN: DGS



K:\Y321AB- CBM ABERFOYLE SOUTH PIT EXPANSION\RPT\COUNTY OF WELLINGTON  
OP SCHEDULED MINERAL AGGREGATE RESOURCE OVERLAY NOVEMBER2023.DWG

Source: County of Wellington Official Plan, Schedule: D Mineral Aggregate  
Resource Overlay (September 2023)

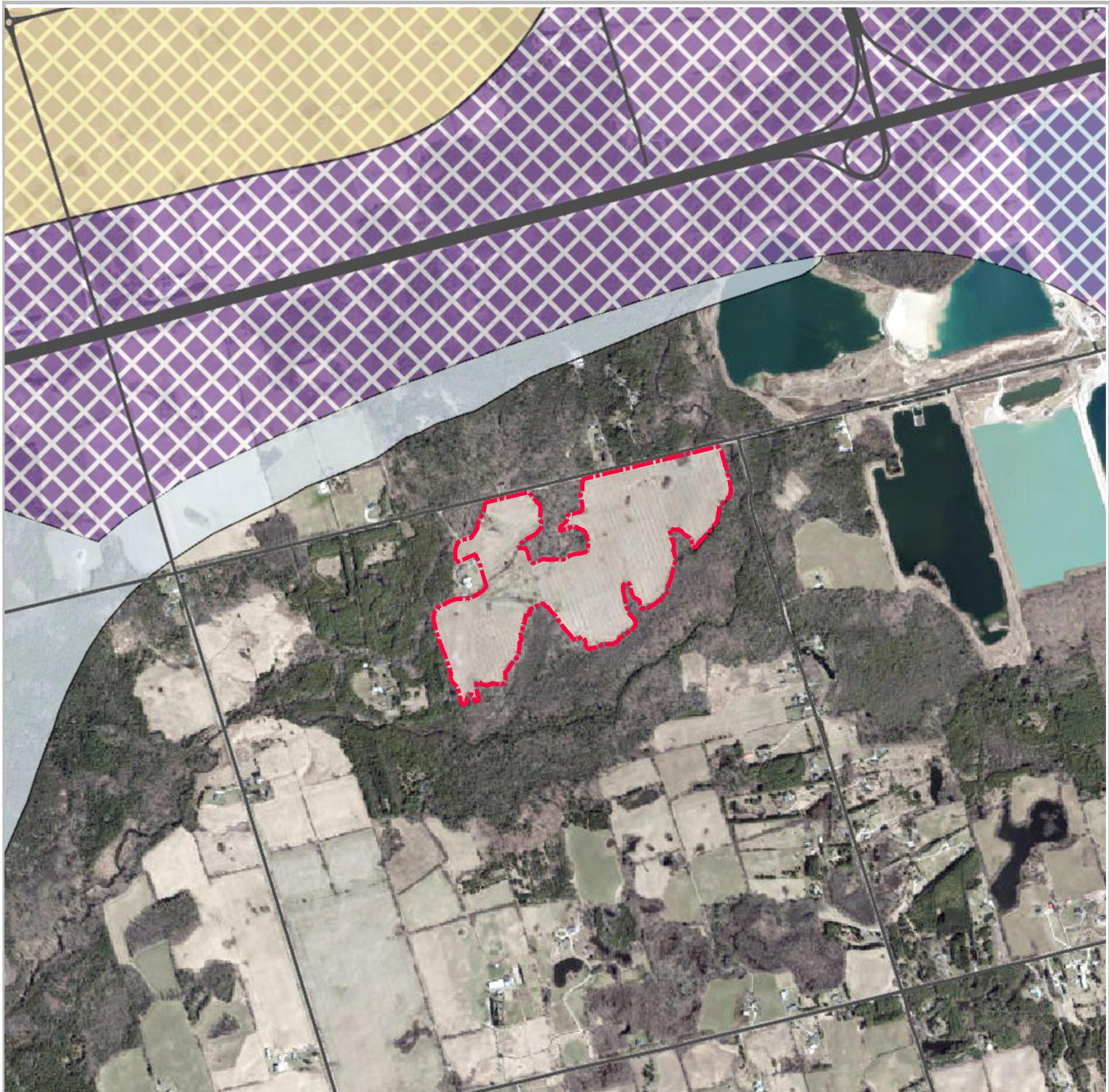


Figure 12

## GRCA Source Water Protection Plan

**CBM Aberfoyle South Expansion**  
 Concession 2 Road  
 Township of Puslinch  
 County of Wellington



Proposed Licence Boundary

Issue Contributing Area
IPZ-Intake Protection Zone (GRCA)
IPZ-1
IPZ-2
IPZ-3 corresponding to Event Based Area
WHPA-Wellhead Protection Area (GRCA)
WHPA-A
WHPA-B
WHPA-C
WHPA-D

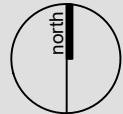
Wellhead Water Quantity Zone (GRCA)
Significant Risk (Approved)
Significant Risk (Draft)
Moderate Risk (Approved)
Moderate Risk (Draft)

DATE: October 2022

FILE: Y321AB

SCALE: 1:20,000

DRAWN: DGS



K:\Y321AB-CBM ABERFOYLE SOUTH PIT EXPANSION\PT\GRCA SOURCE WATER PROTECTION PLAN.DWG

Source: Grand River Conservation Authority (GRCA) Map Your Property online mapping

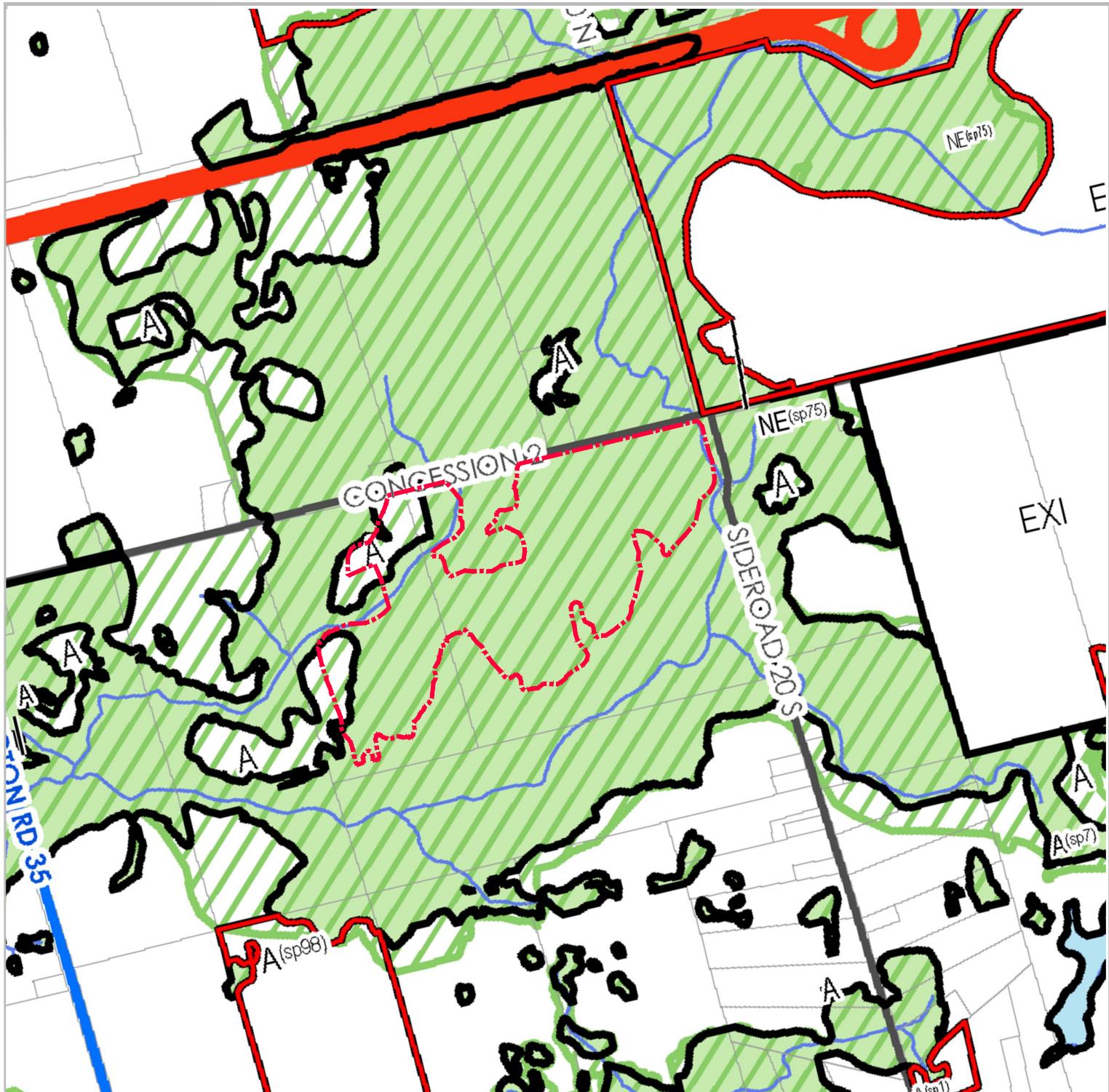


Figure 13

## Township of Puslinch Zoning By-law Schedule A

**CBM Aberfoyle South  
Expansion**  
Concession 2 Road  
Township of Puslinch  
County of Wellington

**LEGEND**

- Proposed Licence Boundary
- Site Specific Exemption
- Zoning Limits
- Environmental Protection Overlay
- Natural Environment
- A Agricultural
- EXI Extractive Industrial

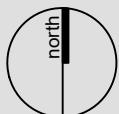
Source: Township of Puslinch Comprehensive Zoning By-law April 2018  
(Date printed: May 3, 2021)

DATE: October 2022

FILE: Y321AB

SCALE: 1:15,000

DRAWN: DGS



K:\Y321AB- CBM ABERFOYLE SOUTH PIT EXPANSION\RPT\PUSLINCH ZONING BY-LAW.DWG

## **Appendix A: Draft County of Wellington Official Plan Amendment**

**AMENDMENT NUMBER \_\_\_\_**

**TO THE OFFICIAL PLAN FOR THE**

**COUNTY OF WELLINGTON**

**Applicant: CBM Aggregates, A Division of St. Marys Cement Inc. (Canada)**  
**Proposed Aberfoyle South Pit Expansion**  
**Part Lot 18-20, Concession 1**  
**Township of Puslinch**

**County File No. OP-\_\_\_\_-23**

**DRAFT**

AMENDMENT NUMBER \_\_\_\_  
TO THE  
COUNTY OF WELLINGTON OFFICIAL PLAN

## INDEX

**PART A – THE PREAMBLE**

The Preamble provides an explanation of the proposed amendment including the purpose, location and background information, but does not form part of this amendment.

**PART B – THE AMENDMENT**

The Amendment describes the changes and/or modifications to the Wellington County Official Plan which constitute Official Plan Amendment Number \_\_\_\_.

**PART C – THE APPENDICES**

The Appendices, if included herein, provide information related to the Amendment, but do not constitute part of the Amendment.

## PART A – THE PREAMBLE

### PURPOSE

The purpose of this proposed Amendment is to:

1. Amend Schedule B7 of the Official Plan (the land use schedule for the Township of Puslinch) to allow for expansion of an aggregate extraction operation by adding the Mineral Aggregate Area overlay to the expansion lands with the exception of those lands to be maintained in the Core Greenlands and Greenlands designations.
2. Amend Schedule D of the Official Plan (Mineral Aggregate Resource Overlay) to add the proposed extraction area to the Sand and Gravel Resources of Primary and Secondary Significance boundary.

These amendments represent map changes only.

### LOCATION

The subject lands are located west of the existing CBM Aberfoyle South Pit. The lands are located on the south side of Concession 2 on Part of Lots 18, 19, and 20, Concession 1 in the Township of Puslinch.

In conjunction with a licence application under the Aggregate Resources Act, this application proposes to licence 44.8 ha (110.7 ac) of land of which 27.5 ha (65.5 ac) are proposed for extraction.

### BASIS

The County Official Plan provides for the establishment of new or expanded aggregate extraction operations subject to consideration of the potential impacts of such land uses on the natural environment, surrounding land uses, and the agricultural operations. The proposed extraction area includes two properties consisting of an agricultural field.

The proposed extraction area contains approximately 5.5 million tonnes of high quality sand and gravel resources. Resources will be extracted both above and below the water table.

The maximum annual tonnage limit is proposed to be 1,000,000 tonnes. There will be no aggregate processing on the subject lands as extracted resources will be transported by truck on Concession 2 east to the Aberfoyle South Main Pit operation for processing and shipment.

The subject lands are within the Core Greenlands and Greenlands designation of the County of Wellington Official Plan associated with the flooding hazards and adjacent Mill Creek PSW. No portions of the Mill Creek PSW are included in the proposed licensed boundary or extraction area of the pit, and a minimum 30 m setback will be applied to all portions of the adjacent PSW.

New or expanded mineral aggregate operations shall only be established through amendment to Mineral Aggregate Area shown on Schedule 'B' of the Official Plan. To permit an expanded extraction operation, an Official Plan Amendment is required to include the proposed expansion lands within the Mineral Aggregate Area.

The Mineral Aggregate Resource Overlay on Schedule 'D' of the Official Plan generally identifies areas of high potential for mineral aggregate extraction. These lands have been identified based on geological information in the Ministry of Northern Development and Mines Aggregate Resources Inventory Paper (ARIP No. 162). The Overlay also contains sites where there is an existing or approved mineral aggregate operation that lies outside of the sand and gravel resource areas of Primary or Secondary Significance and selected bedrock resources. The amendment also includes a map change to include the proposed extraction area within the Schedule C Overlay (approximately 27.5 ha). Licensed lands located outside of the proposed extraction area are not proposed to be included within the Overlay.

#### **OTHER APPROVALS**

An application for a Class A licence under the Aggregate Resources Act has been submitted to the Ministry of Natural Resources and Forestry.

An application for a zoning by-law amendment (File #####) to permit the pit has also been submitted to the Township of Puslinch.

#### **SUPPORTING INFORMATION**

In support of the proposed amendment to the Official Plan, CBM Aggregates has prepared a hydrogeological assessment, archaeological assessment, natural environment assessment, noise assessment, traffic impact assessment, planning justification report, dust best management practices plan and agricultural review.

## PART B – THE AMENDMENT

All of this part of the document entitled **Part B – The Amendment**, consisting of the following text and maps constitute Amendment No.XX to the County of Wellington Official Plan.

### DETAILS OF THE AMENDMENT

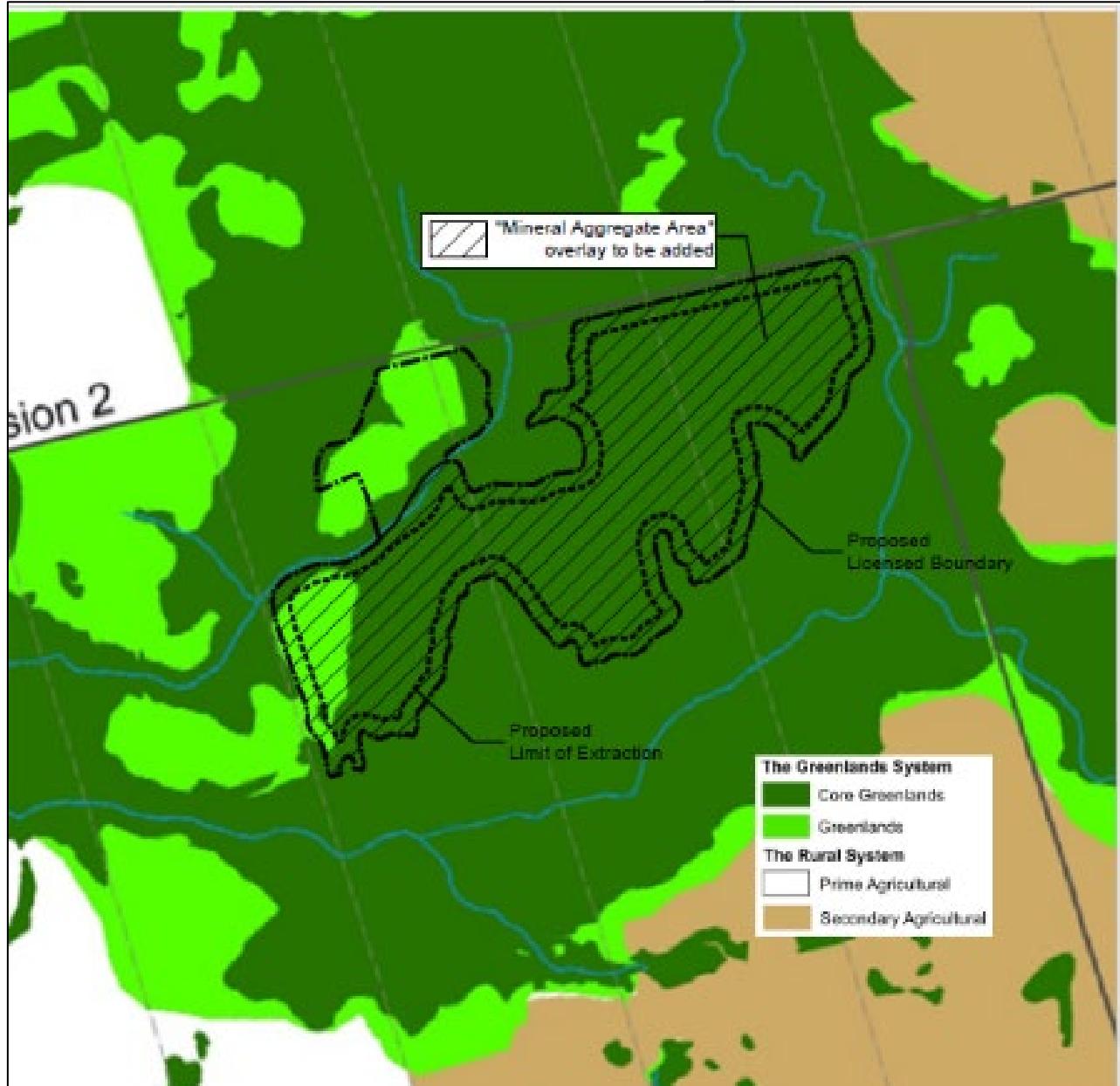
The Official Plan of the County of Wellington is hereby amended as follows:

1. THAT **Schedule B7 (Puslinch)** be amended on portions of Part of Lots 18-20, Concession 1 in the Township of Puslinch by adding the Mineral Aggregate Area to the subject lands as illustrated on the attached Schedule "A" of this Amendment.
2. THAT **Schedule D (Mineral Aggregate Resource Overlay)** be amended on portions of Part of Lots 18-20, Concession 1, in the Township of Puslinch by adding the Mineral Aggregate Resource Overlay (Sand and Gravel Resources of Primary and Secondary Significance) to the subject land as illustrated on the attached Schedule "B" of this Amendment.

**AMENDMENT NUMBER \_\_\_\_  
TO THE  
COUNTY OF WELLINGTON OFFICIAL PLAN**

**Schedule “A”**

**Amendment to Schedule B7 (Puslinch)**



**AMENDMENT NUMBER \_\_\_\_  
TO THE  
COUNTY OF WELLINGTON OFFICIAL PLAN**

**Schedule “B”**

**Amendment to Schedule D**



## **Appendix B: Draft Township of Puslinch Zoning By-Law Amendment**

# **THE CORPORATION OF THE TOWNSHIP OF PUSLINCH**

**BY-LAW NUMBER \_\_\_\_\_/202X**

## **A BY-LAW TO AMEND BY-LAW NUMBER 023/18, AS AMENDED, BEING THE ZONING BY-LAW OF THE TOWNSHIP OF PUSLINCH**

**WHEREAS**, the Council of the Corporation of the Township of Puslinch deem it appropriate and in the public interest to amend By-Law Number 023/18 pursuant to Section 34 of the Planning Act, R.S.O. 1990 as amended;

### **NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF PUSLINCH ENACTS AS FOLLOWS:**

1. That Schedule "A" of By-law 023/18 is hereby amended by rezoning PT LOT 18-20, CON 1 within the Township of Puslinch, 6947 Concession 2, from an **AGRICULTURAL (A)** to **EXTRACTIVE (EXI) SITE SPECIFIC PROVISION (EXI sp###); NATURAL ENVIRONMENT (NE)** to **EXTRACTIVE (EXI) SITE SPECIFIC PROVISION (EXI sp###)** and **NATURAL ENVIRONMENT (NE) SITE SPECIFIC PROVISION (NE sp###)** as shown on Schedule "A" of this By-law.
2. That the **ENVIRONMENTAL PROTECTION OVERLAY** remains on site as shown on Schedule "A" of this By-Law.
3. That Table 14.1, Site Specific Special Provisions is amended by adding the following Site Specific Special Provisions:

No.	Parent Zone	By-law	Additional Permitted Uses	Prohibited Uses	Site Specific Special Provisions
##	EXI	##/202#	<u>Only Permitted Uses:</u> Pit; Agricultural use; Conservation use; Wayside Pit or Quarry.	N/A	N/A
##	NE	##/202#	N/A	N/A	Visual and acoustic mitigation required for the pit as well as the truck entrance/exit can occur on these lands while such lands remain licensed under the Aggregate Resources Act.  A portion of these lands will also be used as an extraction setback from adjacent significant natural features.

4. If By-law Number 023/18 has come into full force and effect as it relates to the above-noted lands, this By-law shall become effective from the date of passage by Council and come into force in accordance with the requirements of the Planning Act, R.S.O. 1990 as amended.

READ A FIRST AND SECOND TIME THIS \_\_\_\_\_ OF \_\_\_\_\_, 202#.

MAYOR \_\_\_\_\_

CLERK \_\_\_\_\_

READ A THIRD TIME AND PASSED THIS \_\_\_\_\_ OF \_\_\_\_\_, 202#.

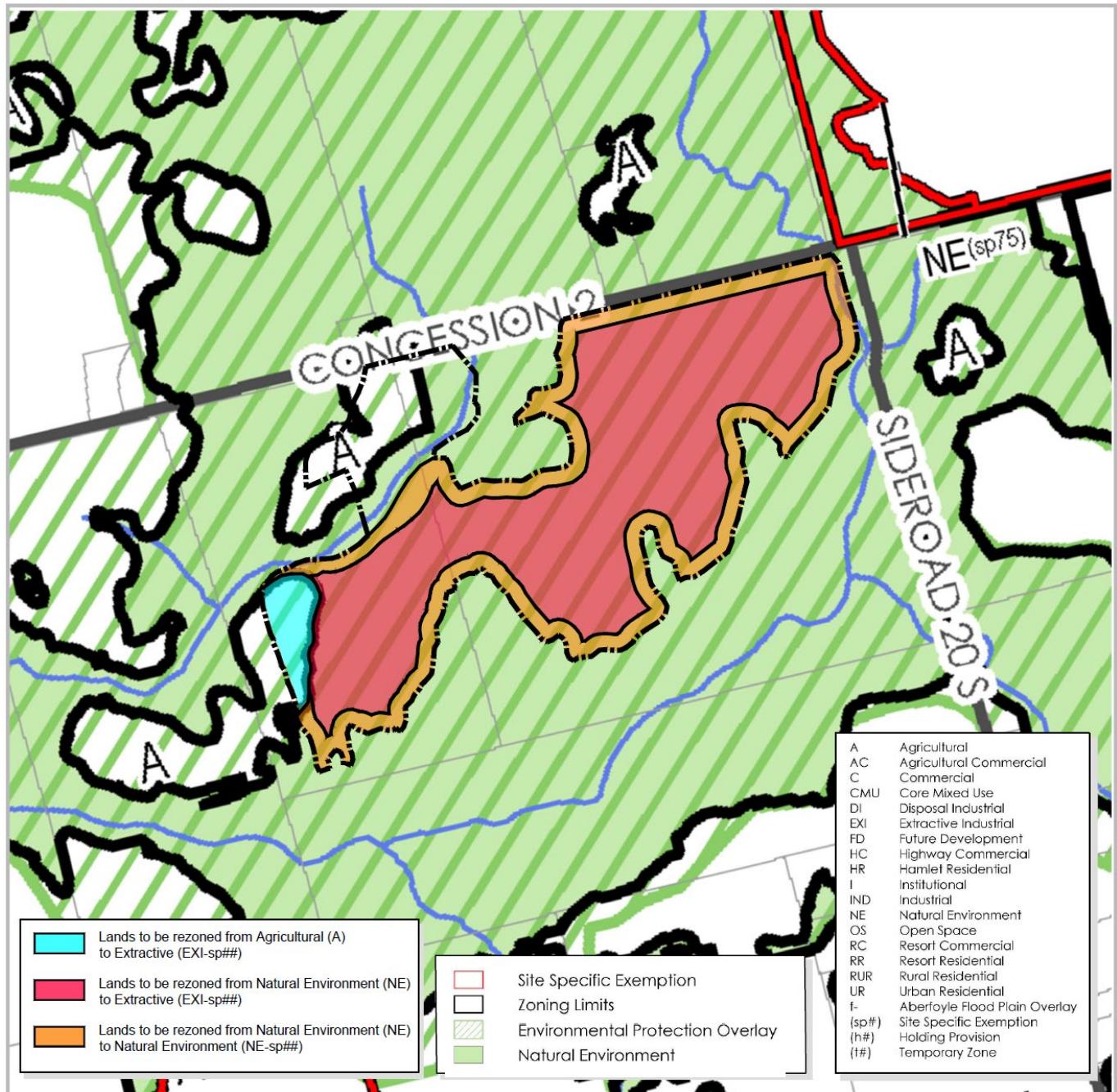
MAYOR \_\_\_\_\_

CLERK \_\_\_\_\_

**THE CORPORATION OF THE TOWNSHIP OF PUSLINCH**

**BY-LAW NUMBER\_\_\_\_/202#**

**Schedule "A"**



This is Schedule "A" to By-law No.\_\_\_\_/202#

Passed this\_\_\_\_day of\_\_\_\_, 202#.

**MAYOR**\_\_\_\_\_

**CLERK**\_\_\_\_\_

## **Appendix C: Curriculum Vitae of Report Authors**



**MHBC**  
PLANNING  
URBAN DESIGN  
& LANDSCAPE  
ARCHITECTURE

## CURRICULUM VITAE

### Neal DeRuyter, BES, MCIP, RPP

#### EDUCATION

2008  
Bachelor of Environmental Studies  
Honours Planning (Co-op)  
University of Waterloo

Neal DeRuyter, a Partner with MHBC, joined the firm in 2009 after graduating from the University of Waterloo in the Honours Planning Co-op program. Mr. DeRuyter has worked as a Planner in the private and public sectors with experience in aggregate resource, development and municipal planning.

Mr. DeRuyter has processed and managed several development applications including zoning by-law amendments, official plan amendments, and licence and site plan applications under the Aggregate Resources Act. He is certified by the Ministry of Natural Resources & Forestry to prepare site plans under the Aggregate Resources Act. He is a Registered Professional Planner and is a member of the Canadian Institute of Planners. He has provided expert evidence before the Ontario Municipal Board, Local Planning Appeal Tribunal and Ontario Lands Tribunal.

He has participated and authored several research studies and articles related to aggregate resource management. Mr. DeRuyter has presented on several occasions for various events at the School of Planning at the University of Waterloo. Mr. DeRuyter is a member of the Pragma Council at the University of Waterloo.

#### PROFESSIONAL HISTORY

2017- Present	Partner MacNaughton Hermsen Britton Clarkson Planning Limited
2013- 2017	Associate, MacNaughton Hermsen Britton Clarkson Planning Limited
2009- 2013	Planner, MacNaughton Hermsen Britton Clarkson Planning Limited

#### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x733  
F 519 576 0121  
nderuyter@mhbclan.com  
www.mhbclan.com

#### PROFESSIONAL ASSOCIATIONS

Full Member, Ontario Professional Planners Institute  
Full Member, Canadian Institute of Planners



**MHBC**  
PLANNING  
URBAN DESIGN  
& LANDSCAPE  
ARCHITECTURE

# CURRICULUM VITAE

## Neal DeRuyter, BES, MCIP, RPP

### PROFESSIONAL SERVICE

2014-Present Member, University of Waterloo PRAGMA Council

2012-Present Member, Ontario Expropriation Association

2015-Present Member, Eastern Ontario Committee, Ontario Stone, Sand & Gravel Association

### PUBLICATIONS

- 'Future Aggregate Availability and Alternatives Analysis, State of the Aggregate Resource in Ontario Study, 2009' (MNR)
- 'The Future of Ontario's Close to Market Aggregate Supply: The 2015 Provincial Plan Review' (OSSGA, 2015)
- Agricultural Impact Assessment and Rehabilitation Plan Guidelines for Aggregate Extraction, 2016 (OMAFRA)

### SELECTED PROJECT EXPERIENCE

- Research, preparation and coordination of reports / applications under the Planning Act, Niagara Escarpment Planning and Development Act and Aggregate Resources Act.
- Project management services for development applications.
- Conduct notification and consultation processes under the Aggregate Resources Act.
- Due diligence and property overview reports for prospective aggregate sites.
- Aggregate Resources Act site plan amendments.
- Planning assessment for commercial, residential, agricultural and industrial developments.

### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x733  
F 519 576 0121  
[nderuyter@mhbclan.com](mailto:nderuyter@mhbclan.com)  
[www.mhbclan.com](http://www.mhbclan.com)



**MHBC**  
PLANNING  
URBAN DESIGN  
& LANDSCAPE  
ARCHITECTURE

## CURRICULUM VITAE

### Neal DeRuyter, BES, MCIP, RPP

- Planning assessment for proposed urban use requests in Niagara Escarpment Plan through 2015-2017 Review.
- Research and preparation of reports / evidence for hearings before the Ontario Municipal Board / Local Planning Appeal Tribunal.
- Planning research and assessment for expropriation matters on behalf of public and private sector clients.

#### SELECTED PROJECT EXAMPLES

- AAROC Aggregates Bardoel Pit, Township of Southwest Oxford
- Bell Sand Farms Grose Pit Extension, Perth County
- Brock University, Niagara Escarpment Plan Lands, City of St. Catharines
- Cambridge Aggregates Inc. Edworthy West Pit, Township of North Dumfries
- CBM Ayr Pit Site Plan Amendment, Township of North Dumfries
- CBM Brantford Pit Site Plan Amendment, County of Brant
- CBM Bromberg Pit, Township of North Dumfries
- CBM Dorchester Pit, Municipality of Thames Centre
- CBM Eramosa Pit Extension, Township of Centre Wellington
- CBM Aberfoyle South Pit Expansion, Township of Puslinch
- CBM Linci Pit Expansion, Township of Puslinch
- Caledon Sand & Gravel Site Plan and Licence Amendments, Town of Caledon
- Capital Paving Shantz Station Pit, Township of Woolwich
- City of Iqaluit Pit and Quarry Operations Plans
- City of Kingston, Barriefield Affordable Housing Feasibility Study
- Erie Sand & Gravel MOS Pit, Municipality of Leamington
- Gallo Contracting Industrial Use, Township of Puslinch
- Graham Brothers Caledon Pit Site Plan Amendment and NEP Amendment, Town of Caledon
- Halton Crushed Stone Erin Pit Extension, Town of Erin
- James Dick Construction Ltd. Adjala Pit Extension, Township of Adjala-Tosoronto
- James Dick Construction Ltd. Erin Pit Extension, Town of Caledon
- James Dick Construction Ltd. Gamebridge Quarry Site Plan Amendment, Township of Ramara

#### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x733  
F 519 576 0121  
[nderuyter@mhbclan.com](mailto:nderuyter@mhbclan.com)  
[www.mhbclan.com](http://www.mhbclan.com)



**MHBC**  
PLANNING  
URBAN DESIGN  
& LANDSCAPE  
ARCHITECTURE

## CURRICULUM VITAE

### Neal DeRuyter, BES, MCIP, RPP

- James Dick Construction Ltd. Reid Road Quarry, Town of Milton
- Kaneff Properties, Royal Niagara Golf Club, City of St. Catharines
- Kieswetter Excavating Heidelberg Pit Site Plan Amendment, Township of Wilmot
- KPM Brantford Plant Expansion, Brant County
- Lafarge Canada Inc. Brantford Pit Expansion, County of Brant
- Lafarge Canada Inc. Navan Quarry Extension, City of Ottawa
- Lafarge Canada Inc. West Paris Pit, County of Brant
- Lillycrop Highway 6 Expropriation, Township of Puslinch
- Limehouse Clay Products Ltd. Site Plan Amendment, Town of Halton Hills
- Ministry of Agriculture, Food and Rural Affairs, Agricultural Impact Assessment and Rehabilitation Plan Guidelines for Aggregate Extraction (2016)
- Ministry of Natural Resources and Forestry, State of the Aggregate Resources in Ontario Study (2009)
- Ministry of Transportation, Highway 410 Expropriation, Town of Caledon
- North York Sand & Gravel Manvers Pit, City of Kawartha Lakes
- Ontario Stone, Sand & Gravel Association, Municipal Official Plan Reviews in Ontario
- Ontario Trap Rock Quarry, Town of Bruce Mines
- Queenston Quarry Reclamation Company Redevelopment, Town of Niagara-on-the-Lake
- Ramada Beacon Hotel, Town of Lincoln
- R.W. Tomlinson Ltd. Brechin Quarry, City of Kawartha Lakes
- R.W. Tomlinson Ltd. Brickyards Quarry, City of Ottawa
- R.W. Tomlinson Ltd. Kemptville Quarry, Municipality of North Grenville
- R.W. Tomlinson Ltd. Moodie Quarry Expansion, City of Ottawa
- R.W. Tomlinson Ltd. Moore Quarry, City of Ottawa
- R.W. Tomlinson Ltd. Napanee Asphalt Plant, Town of Greater Napanee
- R.W. Tomlinson Ltd. Reids Mills Pit, City of Ottawa
- R.W. Tomlinson Ltd. Stittsville Quarry, City of Ottawa
- R.W. Tomlinson Ltd. Storyland Pit, Renfrew County
- R.W. Tomlinson Ltd. Ready-Mix Site Plan Approval, City of Ottawa
- Thomas Cavanagh Construction Almonte Quarry Extension, City of Ottawa
- Thomas Cavanagh Construction Arnott Pit, Lanark County
- Thomas Cavanagh Construction Highland Line Pit, Lanark County
- Thomas Cavanagh Construction Goulbourn Quarry, City of Ottawa
- Township of Guelph-Eramosa, Review of Tri-City Spencer Pit

#### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x733  
F 519 576 0121  
nderuyter@mhbclan.com  
www.mhbclan.com



**MHBC**  
PLANNING  
URBAN DESIGN  
& LANDSCAPE  
ARCHITECTURE

## CURRICULUM VITAE

### Neal DeRuyter, BES, MCIP, RPP

- Township of West Lincoln, Preliminary Bedrock Resource Assessment in Smithville
- Walker Aggregates Inc. Amherstburg Quarry and McGregor Quarry, Town of Amherstburg
- Waterford Sand & Gravel Law Quarry Extension, Township of Wainfleet
- Wm. J. Gies Construction Stockyards Lands, Township of Woolwich

### PRESENTATIONS

- "Planners Forum" - Ontario Stone Sand & Gravel Association 2023 AGM
- "Bill 23 and Provincial Planning Changes" – Ontario Stone Sand & Gravel Association 2023
- "Ontario Land Use Planning Update" – Ontario Stone Sand & Gravel Association 2022 AGM
- "Public Engagement in the Time of Covid-19" – Ontario Stone Sand & Gravel Association 2021 AGM
- "Aggregate Information Session & Tour" – OPPI Southwest District 2018
- "Coordinated Plan Review" – Ontario Stone Sand & Gravel Association 2018 AGM
- "Planning as a Profession" – Faculty of Environment Open House at the University of Waterloo, March 2013
- "Rehabilitation of Licensed Pits and Quarries" – Canadian Association of Certified Planning Technicians Professional Development Conference, October 21, 2011
- Professional Practice, Public and Private Administration (PLAN 403), University of Waterloo, January 2010

### ARTICLES

- "Planning for a sustainable community" – Avenues Magazine (Ontario Stone, Sand & Gravel Association), Volume 1, Issue 2, 2011
- "The closer the better" – Avenues Magazine (Ontario Stone, Sand & Gravel Association), Volume 2, Issue 2, 2012
- "Diminishing supply" - Avenues Magazine (Ontario Stone, Sand & Gravel Association), Volume 3, Issue 1, 2013
- "Shipping aggregate from further afield" – Avenues Magazine (Ontario Stone, Sand & Gravel Association), Volume 3, Issue 2, 2013

### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x733  
F 519 576 0121  
nderuyter@mhbclan.com  
www.mhbclan.com



**MHBC**  
PLANNING  
URBAN DESIGN  
& LANDSCAPE  
ARCHITECTURE

## CURRICULUM VITAE

### Neal DeRuyter, BES, MCIP, RPP

- “The feasibility of alternative transportation options” – Avenues Magazine (Ontario Stone, Sand & Gravel Association), Volume 4, Issue 1, 2014
- “Keeping residents safe and dry” – Avenues Magazine (Ontario Stone, Sand & Gravel Association), Volume 4, Issue 2, 2014

#### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x733  
F 519 576 0121  
[nderuyter@mhbcplan.com](mailto:nderuyter@mhbcplan.com)  
[www.mhbcplan.com](http://www.mhbcplan.com)



## CURRICULUM VITAE

### Caitlin Port, MES, MCIP, RPP

#### EDUCATION

2014

Master of Environmental Studies in Planning  
University of Waterloo

2009

Bachelor of Environmental Studies  
Honours Environment & Resource Studies  
Biology Minor  
University of Waterloo

Caitlin Port, is an Associate with MHBC specializing in aggregate resource and rural land use planning.

Ms. Port has coordinated and prepared a number of aggregate projects across Ontario, including Licence Applications, Official Plan Amendments, and Zoning By-Law Amendments. She has experience writing and analyzing planning policies, preparing Planning Justification Reports, presenting at Public Meetings, and participating in Ontario Municipal Board Hearings. She has also prepared Aggregate Resources Act Site Plans, has experience with Site Plan Amendment Applications and has undertaken various policy reviews and due diligence reports for clients across Ontario.

In addition to aggregate management planning, Ms. Port also has experience with rural planning, including: on-Farm diversified uses, rural severances, small to medium scale residential development, and rural industrial development.

Ms. Port has authored three studies on aggregate rehabilitation in Ontario for the Ontario Stone, Sand, and Gravel Association and has presented on aggregate rehabilitation to a number of academic, municipal and community groups.

Ms. Port is a Registered Professional Planner and is qualified by the Ontario Municipal Board as an expert in Land Use Planning.

#### PROFESSIONAL ACCREDITATIONS/ASSOCIATIONS

- Full Member, Canadian Institute of Planners (CIP)
- Full Member, Ontario Professional Planners Institute (OPPI)
- Articling Agrologist (A.Ag) with the Ontario Institute of Agrologists
- Member, Ontario Stone, Sand & Gravel Association Rehabilitation and Waterloo-Wellington-Brant Regional Committee (OSSGA)

#### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x748  
F 519 576 0121  
cport@mhbcplan.com  
www.mhbcplan.com



## CURRICULUMVITAE

**Caitlin Port, MES, MCIP, RPP**

### PROFESSIONAL HISTORY

2020 - Present Associate,  
MacNaughton Hermsen Britton Clarkson Planning Limited

2017 - Present Senior Planner,  
MacNaughton Hermsen Britton Clarkson Planning Limited

2014 - 2017 Planner,  
Skelton Brumwell and Associates Ltd.

2013 Field and Research Assistant,  
Ontario Stone, Sand, and Gravel Association

### SELECTED AGGREGATE RESOURCES PROJECT EXPERIENCE

- Bell Sand Farms Ltd., Bell Sand Farms Pit Extension - Licence Application and Planning Approvals
- Waterford Sand and Gravel Ltd - Licence Application and Planning Approvals
- Lafarge Canada Inc., Brantford Pit Expansion - Licence Application and Planning Approvals
- J.G. Stewart, Haliburton Quarry – Licence Application to convert pit to a quarry
- Capital Paving Ltd., Shantz Station Pit - Licence Application and Planning Approvals
- James Dick Construction, Reid Road Reservoir Quarry, Milton - Licence Application and Planning Approvals
- Tomlinson Group, Brickyards Quarry, Ottawa - Licence Application and Planning Approvals
- Development of the Aggregate Rehabilitation Best Management Practices – Preparation and submission of a set of Aggregate Rehabilitation Best Management Practices to the Ministry of Natural Resources and Forestry.

#### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x748  
F 519 576 0121  
cport@mhbcplan.com  
www.mhbcplan.com



## CURRICULUMVITAE

### Caitlin Port, MES, MCIP, RPP

- VicDom Sand and Gravel, Utica Pit, Uxbridge – Licence Application and Planning Approvals
- Lippa Pit and Quarry - Licence Application and Planning Approvals
- VicDom Sand and Gravel Brock Road Amalgamation, Uxbridge – Licence Application and Planning Approvals
- Giofam Investments Inc. – Licence Application and Planning Approvals. Provided Expert Testimony on the *Aggregate Resources Act Licence Application and Planning Act Applications*.
- Miller Paving Ltd., Braeside Quarry – Licence Application and Planning Approvals. Assist with OMB Hearing
- Authored the Ontario Stone, Sand, and Gravel Association *Study of Aggregate Site Rehabilitation in Ontario Study Part II* (2013) and Part II Addendum (2014)
- Authored the Ontario Stone, Sand, and Gravel Association *Aquatic Aggregate Rehabilitation Study* (2017)

### SELECTED MUNICIPAL PLANNING EXPERIENCE

- LAV Developments – Zoning By-Law Amendment to permit a townhouse residential development
- Luso Valley Estate – Zoning By-Law Amendment to permit a wedding event use on property
- Erin Estate Weddings – Zoning By-Law Amendment to permit a wedding event use on the property
- Hearthstone Homes – Plan of Vacant Land Condominium to permit a 20 unit condominium development.
- Colacem Cement Plant – Assist with the preparation of evidence and materials for a Local Planning Appeal Tribunal Hearing on a Official Plan Amendment and Zoning By-Law Amendment to permit the establishment of a cement plant.
- Victoria Mews Seniors Housing Community – Zoning By-Law Amendment and Site Plan Application for a 30 unit residential housing project in Victoria Harbour
- Granite Ridge Phase II Subdivision - Plan of Subdivision, Condominium Application, Official Plan Amendment, Zoning By-

#### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x748  
F 519 576 0121  
cport@mhbcplan.com  
www.mhbcplan.com



## CURRICULUM VITAE

### Caitlin Port, MES, MCIP, RPP

Law Amendment, to permit the development of a 33 lot estate residential subdivision with common element features including a central water feature and open space

- Undertook a planning review and public consultation as part of the development of the Delphi Point ANSI Park Management Plan for the Town of the Blue Mountains
- Stewart Industrial Development – Zoning By-Law Amendment and OMB Hearing Preparation
- Various Consent and Minor Variance Applications across central Ontario

### PUBLICATIONS

- Port, C. (February 2015). The Real Story, *Avenues*, Volume 5, Issue 1, pp 17-18
- Port, C. (2015). Study of Aggregate Site Rehabilitation in Ontario, Part III, Study Addendum. The Ontario Stone, Sand, & Gravel Association.
- Port, C & Moos, M. (2014). Growing food in the suburbs: estimating the land potential for sub-urban agriculture in Waterloo, Ontario. *Journal of Planning Practice and Research*. 29(2), 152-170
- Port, C. (February 2014). Closing the Gap. *Avenues*, Volume 4, Issue 1, pp 10-13
- Port, C. & Scott, M. (2014).
- Study of Aggregate Site Rehabilitation in Ontario, Part II, Consolidated Report 2010-2013. The Ontario Stone, Sand, & Gravel Association.
- Port, C. (2013). Reducing aggregate-related land use conflicts. *Ontario Planning Journal*, 28, 4 (pg.18)

### CONTACT

540 Bingemans Centre Drive,  
Suite 200  
Kitchener, ON N2B 3X9  
T 519 576 3650 x748  
F 519 576 0121  
cport@mhbcplan.com  
www.mhbcplan.com