

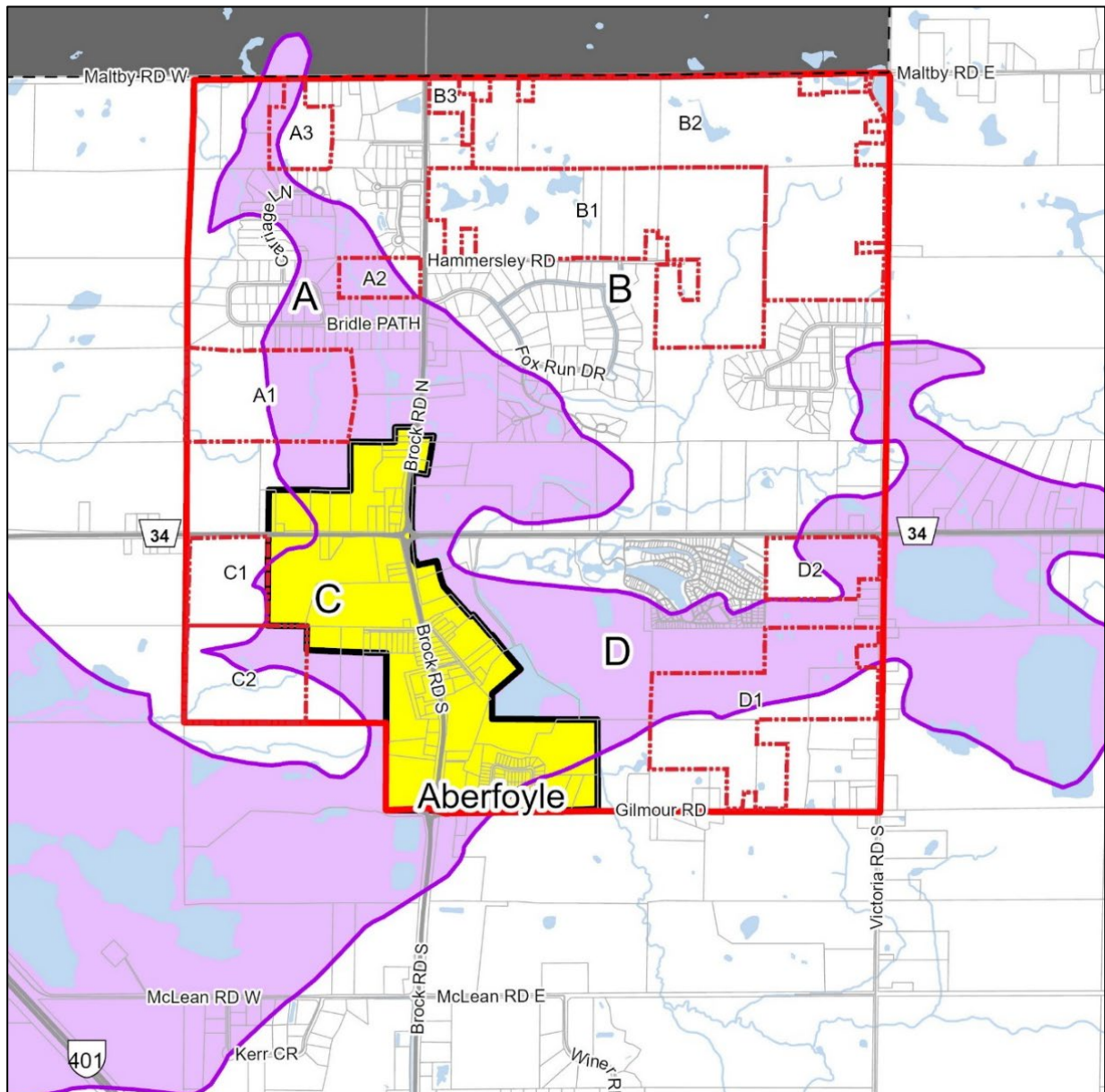


PLANWELL<sup>OM</sup>

Wellington County Official Plan Review

# Aberfoyle Expansion Review

Aggregate Impact Assessment



County of Wellington  
Planning and Development Department

September 2025



# Aberfoyle Expansion Review

## Aggregate Impact Assessment

### 1.0 Introduction

The purpose of this report is to review potential impacts to existing mineral aggregate operations and identified resource areas in and adjacent to the proposed Aberfoyle Expansion Study Area in accordance with applicable Provincial and County policy.

The County Planning Department is currently undertaking an Official Plan Review to update the policies of the County Official Plan to address recent provincial policy changes and accommodate long-term forecasted growth to 2051. Puslinch is forecasted to experience residential growth over the planning period and currently does not have an adequate supply of suitably designated residential lands to accommodate forecasted growth. The Township's household need has been quantified in County Planning report PD2024-29 and PD2025-20. As part of addressing the identified household need an expansion to the Secondary urban centre of Aberfoyle is being proposed. It is worth noting that compared to other municipalities in the County, growth in Puslinch is limited because:

- There are no municipally serviced Urban Centres to direct growth.
- Of the two Secondary Urban Centres, only Aberfoyle can potentially be expanded (Morriston is in the Greenbelt).
- There is only one designated Hamlet (Arkell) compared to thirty-six other Hamlets across Wellington.
- The Province did not support recognizing the historic hamlet of Puslinch in the southern end of the Township as part of OPA 119 because it was in the Greenbelt.

The study area described below represents the limits of the proposed expansion of Aberfoyle. This expansion would facilitate opportunities for residential development across the Study Area allowing the Township to comprehensively plan for and meet their forecasted growth.

### 2.0 Aberfoyle Expansion Study Area

The Aberfoyle Expansion Study Area (Study Area) is shown in Figure 1 and is located centrally in the Township of Puslinch and is approximately 985 ha (2,434 ac) in size. The Study Area has a northern limit of Maltby Road (City of Guelph), an eastern limit of Victoria Road S, a southern limit of Gilmour Road, and a western limit of the midway point between Concession 7, Part Lots 16 through 22. Wellington Road 46 (Brock Road S) and Wellington Road 34 bisect the area.

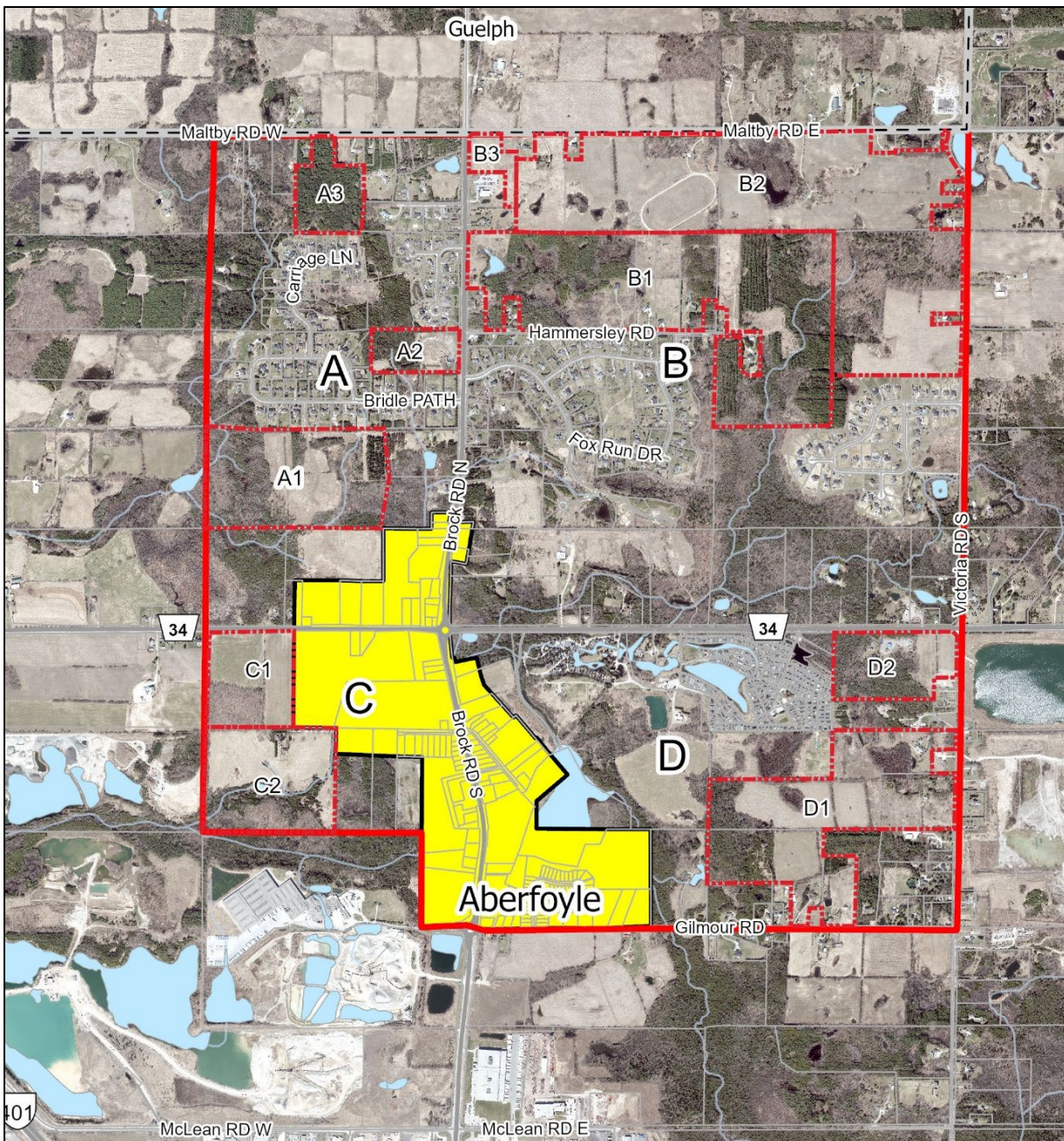
The Study Area contains the most populated areas in the Township of Puslinch and includes the current secondary urban centre of Aberfoyle, several developed Country Residential subdivisions, the Mini Lakes Residential Community, and numerous rural residential properties of various sizes and configurations. The area is bisected by the Greenlands System of the



County which includes a number of natural heritage features, natural hazards, and other environmentally sensitive areas. The rural areas, outside of the Greenland system, are secondary agricultural areas where some active cultivation is occurring with a limited number of livestock facilities present.

The Study Area has been divided into 4 quadrants (A, B, C and D) and then into ten focus areas as locations for potential growth.

**Figure 1**      **Aberfoyle Expansion Study Area**



### 3.0 Land use Planning Context

Within the County of Wellington, the applicable Provincial and County land use planning policy documents that provide policy direction related to the protection and management of mineral aggregate resources include:

- The Provincial Planning Statement, 2024
- The Greenbelt Plan, 2017
- The County Official Plan

An analysis of the policies outlined below will be provided in Section 5.0 Impact Analysis of this report. It is noted that the Study Area is outside of the regulated Greenbelt Plan Area, therefore the policies of the Greenbelt Plan have not been reviewed in this assessment.

### 3.1 Provincial Planning Statement (PPS), 2024

The Provincial Planning Statement (PPS), 2024 provides policy direction on matters of provincial interest related to land use planning and sets the policy framework for regulating the development and use of land in Ontario. The PPS aims to provide for appropriate development while balancing the protection of resources of provincial interest, public health and safety and the natural and built environment. All planning decisions must be consistent with the PPS.

The PPS provides direction to planning authorities to protect and manage mineral aggregate resources in Section **4.5 – Mineral Aggregate Resources**. Key directions include:

**“4.5.1.1** *Mineral aggregate resources* shall be protected for long-term use and, where provincial information is available, *deposits of mineral aggregate resources* shall be identified.”

**“4.5.2.1** As much *mineral aggregate resources* as is realistically possible shall be made available as close to market as possible.”

**“4.5.2.2** Extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts.”

In addition to the broad directions related to the identification of the resources, the PPS provides additional policy direction related the protection of the resource from development proposed in and adjacent to existing mineral aggregate operations and known *deposits of mineral aggregate resources*. The PPS states:

**“4.5.2.4** *Mineral aggregate operations* shall be protected from *development* and activities that would preclude or hinder their expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact. Existing *mineral aggregate operations* shall be permitted to continue without the need for official plan amendment, rezoning or development permit under the



*Planning Act*. Where the *Aggregate Resources Act* applies, only processes under the *Aggregate Resources Act* shall address the depth of extraction of new or existing *mineral aggregate operations*. When a license for extraction ceases to exist, policy 4.5.2.5 continues to apply.

**4.5.2.5** in known *deposits of mineral aggregate resources* and on *adjacent lands, development* and activities which would preclude or hinder the establishment of new operations or access to the resource shall only be permitted if:

- a) resource use would not be feasible; or
- b) the proposed land use or development serves a greater long-term interest; and
- c) issues of public health, public safety and environmental impact are addressed.”

The PPS in **Section 3.5 - Land Use Compatibility** provides additional direction to planning authorities when considering sensitive lands uses near major facilities to ensure long-term viability of major facilities. The PPS defines a major facility to include resource extraction activities. The PPS states:

**“3.5.1** *Major facilities* and *sensitive land uses* shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.

**3.5.2** Where avoidance is not possible in accordance with policy 3.5.1, planning authorities shall protect the long-term viability of existing or planned industrial, manufacturing or other *major facilities* that are vulnerable to encroachment by ensuring that the planning and development of proposed adjacent sensitive land uses is only permitted if potential *adverse affects* to the proposed sensitive land use are minimized and mitigated, and potential impacts to industrial, manufacturing or other major facilities are minimized and mitigated in accordance with provincial guidelines, standards and procedures.”

## **3.2 County of Wellington Official Plan**

The County of Wellington Official Plan implements provincial policy and provides more detailed land use planning direction for the physical development of the County, local municipalities and the long-term protection of resources. It should be noted that the Township of Puslinch relies on the County Official Plan as their municipal Official Plan.

Section **6.6 Mineral Aggregate Areas** of the Official Plan establishes a policy framework in the County for the protection and management of mineral aggregate resources that have been

identified in Wellington. The County framework mirrors the provincial policy directives outlined above and include policies which identify resource areas and establish protection of high potential resource areas. Key policies include:

**Section 6.6.1 Mineral Aggregate Resource Overlay** – this section outlines how the County maps and identifies high potential resource areas that have been identified by the Province through the Aggregate Resource Inventory Papers No. 162. This identification includes the mapping of sand and gravel resource areas of primary and secondary significance on Schedule D – Mineral Aggregate Resource Overlay - in the Official Plan. It also outlines environmental and land use constraints that have been removed from the provincially identified resource area. These include all primary and secondary urban centres plus 300 m beyond their boundaries, provincially significant wetlands, other wetlands and significant woodlands.

The identification of the resource areas is complemented with sections **6.2.2 Protection** and **6.6.3 Existing Aggregate Operations**, which states:

**“6.6.2** In areas adjacent to or in the Mineral Aggregate Resource Overlay, development which would preclude or hinder new aggregate operations or access to the resource will only be allowed if:

- a) resource extraction use would not be feasible;
- b) the proposed development serves a greater long-term public interest; in this case reasonable efforts should be made to use the resource wherever practical;
- c) issues of public health, public safety and environmental impact are addressed.

**6.6.3** Existing *licensed mineral aggregate operations* are permitted and shall be recognized in Municipal Zoning by-laws. Licensed aggregate operations are shown in Appendix 2 of this Plan. Expansion of an existing operation shall be subject to all policies of this Plan which would apply to new aggregate operations. These operations will be protected from new land uses which would preclude or hinder their expansion or continued use, or which would be incompatible due to public health, public safety or environmental concerns.”

### 3.3 Summary

Based on the above Provincial and County policy framework applicable to mineral aggregate resources, planning authorities are to protect aggregate resources and operations in a cautious manner to ensure as much of the resource as possible is available for extraction and protected from incompatible land uses. Provincial and County policy provides limited circumstances through which planning authorities may consider development in and adjacent to mineral aggregate resources and existing mineral aggregate operations to ensure as much mineral aggregate resource as realistically possible is available close to market.



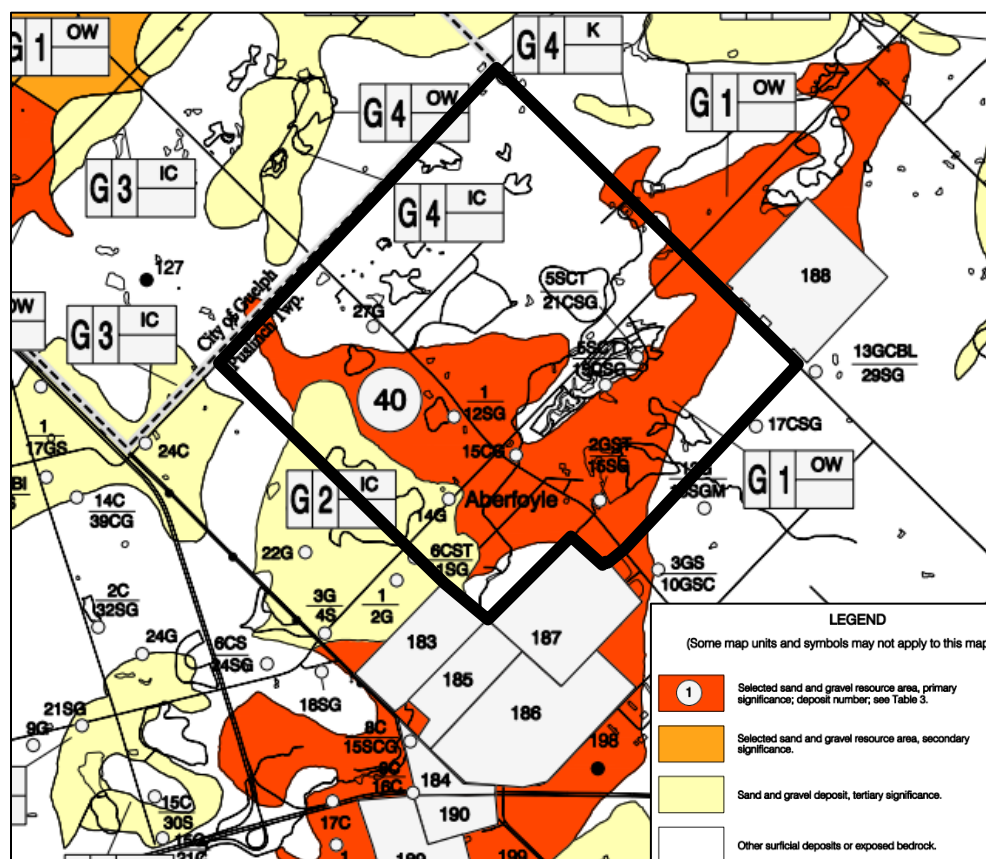
## 4.0 Mineral Aggregate Resource Context

The aggregate resources in the Township of Puslinch are largely a result of glacial activity that took place about 23,000 to 10,000 years ago. This period was marked by a series of glacial advances and retreats that resulted in deposits of sand and gravel resources across the County. The southern portion of the County, particularly the Township of Puslinch, experienced significant outwash deposits and geological formations such as the Paris and Galt Moraines, which are capable of producing high-quality aggregates. (ARIP 162 pg.11-12, 28)

### 4.1 Selected Sand and Gravel Resource Areas in Puslinch

High potential aggregate resource areas in Ontario have been identified based on work by the Ontario Geologic Survey (OGS) and documented in the Aggregate Resource Inventory Papers (ARIP). ARIP No. 162 provides an inventory and evaluation of the sand, gravel and bedrock resources in Wellington County and includes detailed information about the Township of Puslinch. The ARIP No. 162 breaks the resource mapping and analysis into 40 Selected Sand and Gravel Resources Areas and provides geological information about potential resource areas which exhibit favourable conditions for the discovery of material. Area 40 is the selected resource area that exists within the Study Area as shown in Figure 2 below:

**Figure 2** Aggregate Resource Inventory Map 162-1B – Sand and Gravel Resources (Area 40)



According to the ARIP No. 162, Area 40, is a combination of selected sand and gravel resources of primary and tertiary significance. The resources present includes sand and gravel resources with a content of greater than 35% gravel, with a range in average thickness from 3-6 metres to greater than 6 m or 53,000 – 106,000 tonnes per hectare to greater than 106, 000 tonnes per hectare. Across all of the resource areas in Area 40, it is estimated that 143.4 millions tonnes of aggregate material exist (ARIP Table 3. Pg 44). The geological origin of the resource is undifferentiated ice-contact stratified drift and Outwash with no known limitations. No field samples were completed as part of this analysis, but it is assumed that the quality of the aggregate would be similar to those materials being extracted in the mineral aggregate operations within the same formation. This material has proven to have commercial capabilities and is capable of feeding into various aggregate products. It is also noted that the water table is relatively high in this part of the Township usually requiring below water extraction to retrieve the bulk of the material present.

With regards to Selected Bedrock Resources, ARIP No. 162 does not identify any Selected Bedrock Resource Areas in the Study Area. This analysis focuses on the selected sand and gravel resources of primary and secondary significance.

#### **4.2 Existing Mineral Aggregate Extraction Operations (Within 1,000 m)**

There are no active sand and gravel mineral aggregate operations or quarries within the Study Area. However, within 1,000 m of the Study Area, there are six active mineral aggregate operations as can be seen in Figure 6 of this report. The six operations identified are discussed further in Section 5.2 of this report.



## 5.0 Impact Analysis

The impact analysis contained within this report will be carried out in two phases. The first phase will assess existing constraints to the identified primary and secondary sand and gravel resources areas that exist within the Study Area. This review will layer land use and environmental constraints over the identified potential resource areas to identify unconstrained resource areas. This review will inform determinations about resource development feasibility within the Study Area.

The second phase of this analysis will assess land use compatibility of an expanded urban boundary of Aberfoyle to existing mineral aggregate operations and potential resources areas within 1,000 m of the Study Area. This phase of the analysis will focus primarily on areas C and D of the Study Area as these areas are the only sections that interface directly with active mineral aggregate operations and identified sand and gravel resource of primary significance outside of the Study Area. This review will inform determinations about the potential to hinder or preclude resource development and current aggregate extraction.

### 5.1 Aggregate Resource Constraint Analysis

The aggregate resource constraint analysis assists in determining resource availability by demonstrating if potential aggregate resources development is constrained by current land use and environmental constraints. The objectives of this analysis are to:

- assess current constraints in the Aberfoyle Expansion Study Area;
- produce an estimate of potential resource areas after applying a reasonable set of land use and environmental constraints;
- to demonstrate the limitations on the availability of the resource for new aggregate resource development and assess the need for protection of the resource for future extraction.

The constraint analysis will occur through the following steps:

**Step 1.** Input of Geological Data (potential aggregate resource areas)

**Step 2.** Identify and Map Mineral Aggregate Resource Constraints

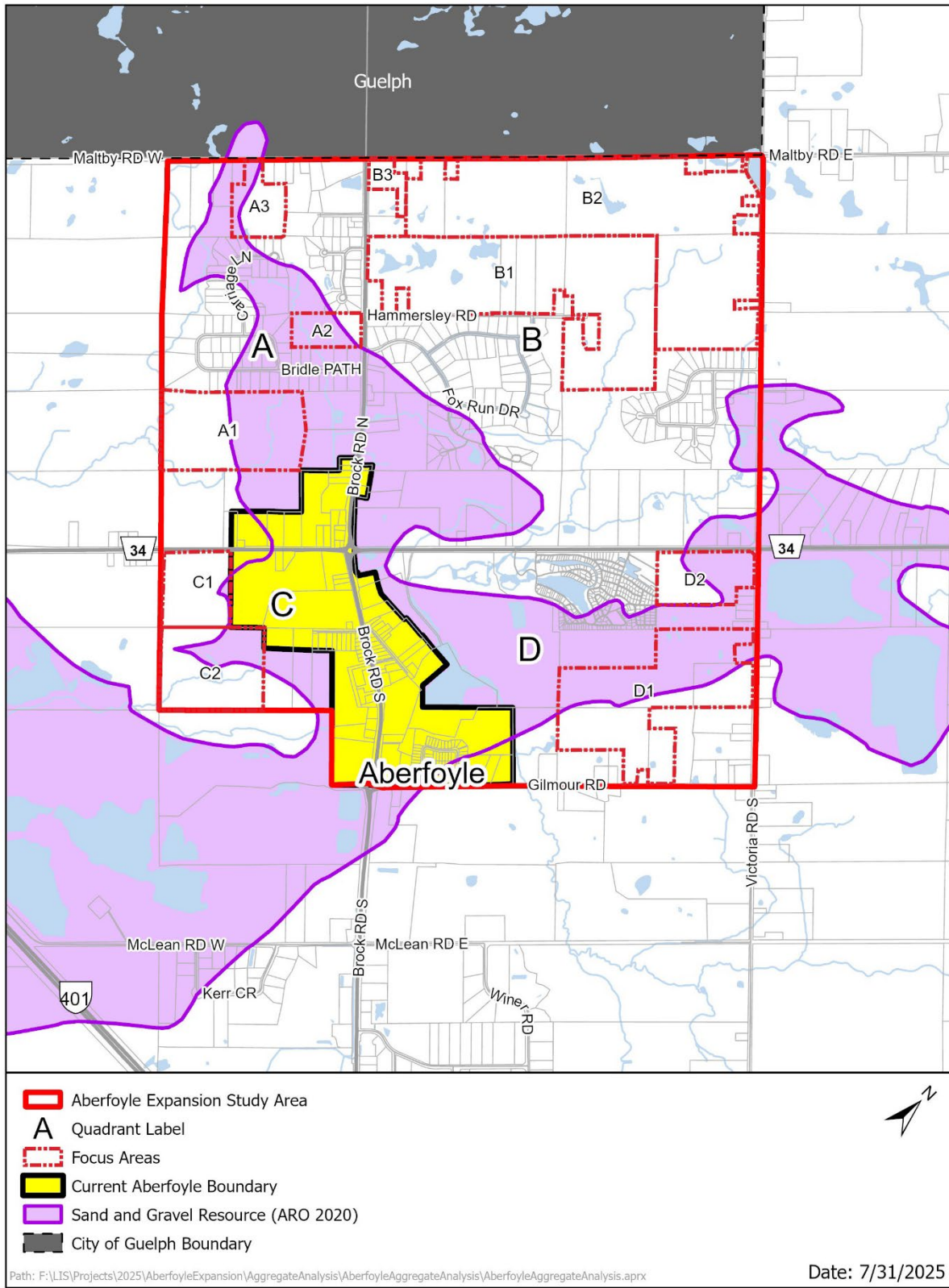
**Step 3.** Calculate Total Level of Constraints and Amount of Potential Resource Area Remaining

**Step 4.** Summary of Results

#### 5.1.2 Step 1- Input of Geological Data

For the purposes of this analysis the County utilized the latest Aggregate Resources of Ontario (ARO -2020) data from the Geology Ontario website, and cross referenced it with the Aggregate Resource Inventory Paper No.162 mapping of select sand and gravel resource areas. Figure 3 below maps the unaltered sand and gravel resources that intersect the Study Area. Approximately 375 ha (926 ac) of potential sand and gravel resource of primary significance is captured within the Study Area.

**Figure 3 Unaltered Sand and Gravel Resources (Primary and Secondary Significance)**





### 5.1.3 Step 2 – Identify Mineral Aggregate Resource Constraints

There are several land use and environmental constraints that can hinder or preclude access to potential mineral aggregate resource areas. These constraints originate from both Provincial and County policies and regulations, the natural environment, as well as existing development on the landscape.

County Planning Staff reviewed applicable Provincial and County policy and examined the Study Area for existing development constraints. Staff also reviewed Provincial guidance and other municipal and Provincial aggregate analysis to help inform study approach and constraints<sup>1</sup>. A total of 11 constraints were identified to be applicable within the Study Area. It is noted that not all constraints are the same and necessarily preclude access to the resource but instead some are factors that must be considered in assessing the feasibility of developing potential resource areas. The constraints are grouped into three categories:

- pre-emptive land uses;
- very serious constraints; and
- competing land uses

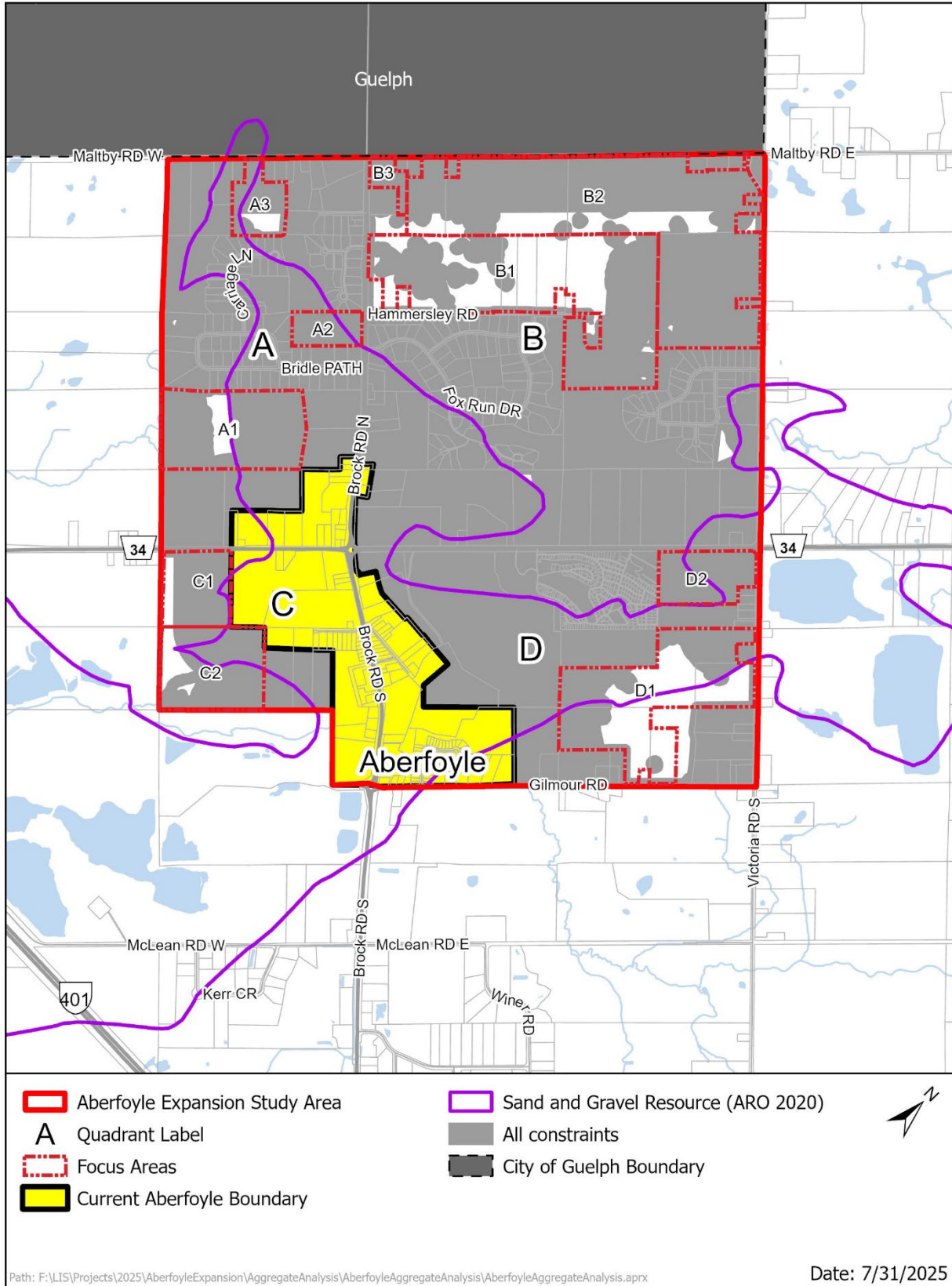
After identifying the various constraints, they were consolidated and mapped to determine their impact on the potential resources in the Study Area as shown in Figure 4. Table 1 provides an overview of the constraints utilized in this analysis and policy or regulatory references where they are applicable. Appendix A1 - A3 provides detailed mapping of each constraint layer.

Other potential constraints such as land fragmentation, access to resources and potential haul routes, are not easily mapped and are discussed further in Section 5.1.5 as additional considerations to the feasibility of extraction in unconstrained resource areas within the Study Area. There are still additional constraints that need to be reviewed on a site-by-site basis that have not been considered through this analysis. While not exhaustive, these other constraints can include potential areas of significant wildlife habitat and/or habitat of threatened and endangered species, cultural heritage and archaeological impacts, specific study recommendations addressing compatibility and impact to adjacent land uses and natural features and processes, and regulations applying to the control and operation of a pit and quarry under the *Aggregate Resources Act*. These constraints would likely result in a further reduction in the available resources within the Study Area.

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<sup>1</sup> Peel 2051 Discussion Paper (Draft) High Potential Mineral Aggregate Resource Areas: Mapping Methodology –May 2023; Supply and Demand Study of Aggregate Resources Supplying the Greater Golden Horseshoe -August 2016 - Ministry of Natural Resources and Forestry; and Provincial Policy Statement: Training Manual for Non-Renewable Resources, Version 1.1 – March 1997

**Figure 4 All Constraints vs. Unaltered Sand and Gravel Resource**



**Table 1 Mineral Aggregate Resource Constraints**

Type	Constraint	Description	Data Source
Pre-Emptive Land Uses/ Constraints	Urban Centres	The existing Aberfoyle urban centre and City of Guelph urban centre. A 300 m buffer is applied in accordance with County Official Plan policy 6.6.1.	County of Wellington Official Plan
	Country Residential Designations	Lands designated Country Residential in the County Official Plan. A 30 m setback was applied to this designation in accordance with O.Reg 244/97 - 0.13 (1) (10)(ii)(C).	County of Wellington Official Plan
	Existing Year-Round Lifestyle Communities	Lands within the PA7-2 and PA7-6 Policy Areas in the County Official Plan represent converted year-round residential communities. A 30 m setback was applied to the residentially zoned portion of these site in accordance with O.Reg 244/97 - 0.13 (1) (10)(ii)(C).	County of Wellington Official Plan
	Provincially Significant Wetlands	PPS 2024 states in section 4.1.4 - Development and Site alteration shall not be permitted in: a) significant wetlands in Ecoregions 5E,6E and 7E. A 30 m setback was applied to PSWs.	MNRF Land Information Ontario
	Opened Road Allowances	All opened and maintained local and County road rights-of-ways. A 30 m setback from the limit of the right-of-way has been applied in accordance with O.Reg 244/97 - 0.13 (1) (10)(ii)(A)	County Roads Data
Very Serious Constraints	Other Wetlands	Policy 5.4.1 of County Official Plan protects all other wetlands from development that would seriously impair their ecological function.	County of Wellington Official Plan
	Significant Woodlands	PPS 2024 states in section 4.1.5 - Development and Site alteration shall not be permitted in: significant woodlands in Ecoregions 6E and 7E. Policy 5.5.4 of the County Official Plan identifies significant woodlands in the rural area of the County to be woodlands over 4 ha in size and plantations over 10 ha.	County of Wellington Official Plan
	Environmentally Sensitive Areas (ESAs)	Policy 5.5.5 of the County Official Plan protects ESAs from development and site alterations which would negatively impact them or their ecological function. The ESA present in the study area is the Aberfoyle Woods.	County of Wellington Official Plan
	Waterbodies	Policy 5.5.6 of the County Official Plan protects existing natural water bodies including ponds, lakes, reservoirs. A 30 m setback was applied to the feature's limit in accordance with O.Reg 244/97 - 0.13 (1) (10)(iii).	GRCA Open Data License
	Streams	Policy 5.5.3 of the County Official Plan protects all streams from development and site alteration. A 30 m setback was applied to the feature's limit in accordance with O.Reg 244/97 - 0.13 (1) (10)(iii).	GRCA Open Data License
Competing land uses	Existing Rural Residential Groupings	Residential groupings were defined as a grouping of five or more small non-farm residential lots (generally less than 2 ha in size) located along existing local or County Road rights-of-ways. A 30 m setback from the limit of the residential grouping in accordance with O.Reg 244/97 - 0.13 (1) (10)(ii)(B).	County Analysis
	Small Isolated Fragments	Small, isolated fragments are removed that result once constraints are applied. These fragments generally meet the following:  1) small less than 5 ha); 2) isolated from other areas; and 3) long arrow deposits	County Analysis

#### 5.1.4 Step 3 - Calculating Total Level of Constraint and Amount of Potential Resource Area Remaining

To quantify the existing level of constraints on the potential resource areas within the Study Area each constraint was mapped and consolidated into a single constraint layer. This constraint layer was mapped against the potential resource areas within the Study Area to identify any unconstrained resource areas. One unconstrained resource area was identified and is shown in Figure 5. A summary of each constraint's impact on the potential resource area is provided in Table 2.

**Table 2 Constraint Impact on Potential Resource Areas Within the Study Area**

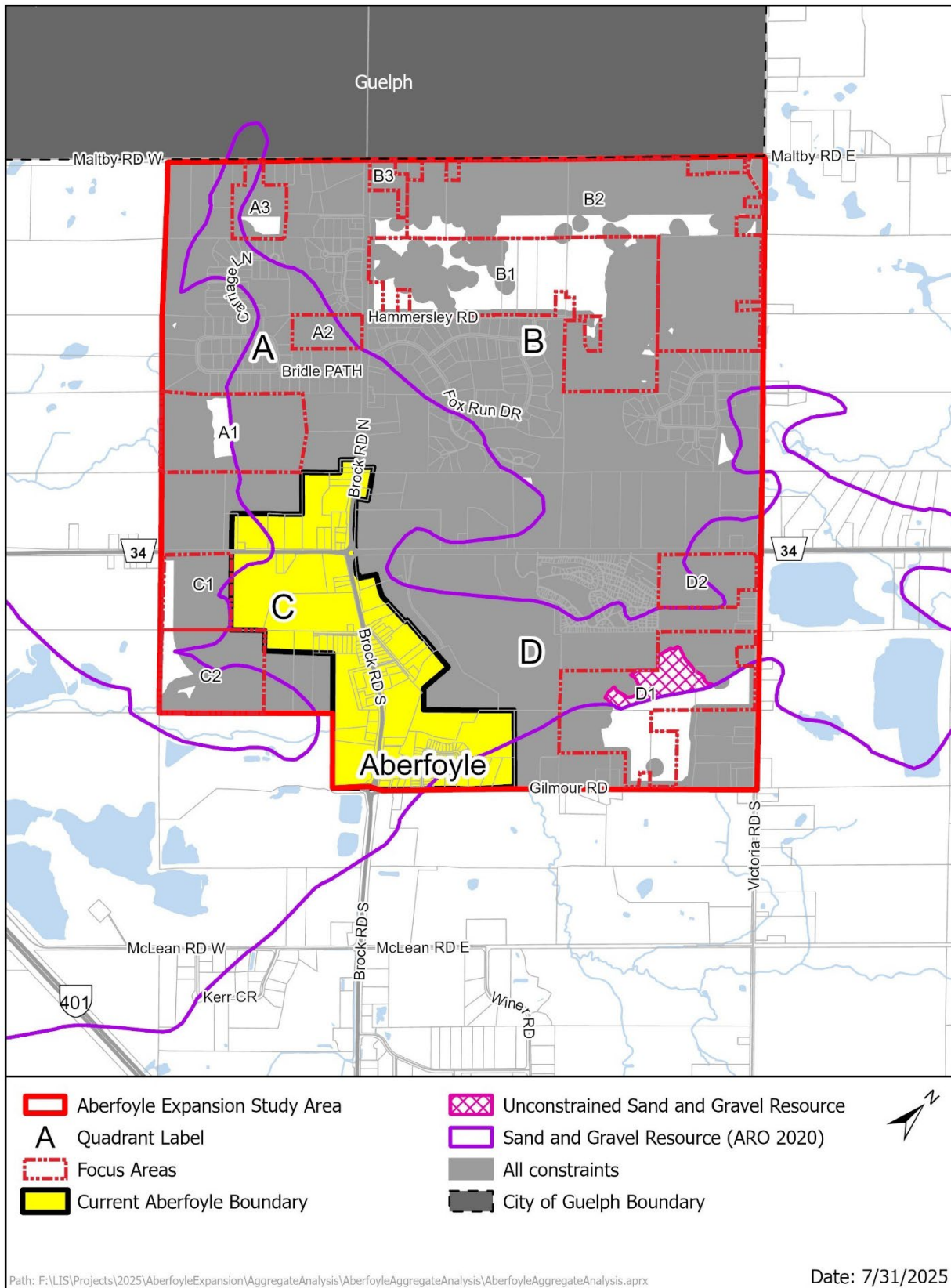
Constraint Type	Impact on Potential Resource Area	
	Hectares	% Impact
Urban Centres + 300 m	209.6 ha	56%
Country Residential Designations + 30 m	57.1 ha	15%
Existing Year-Round Lifestyle Communities + 30m	22.9 ha	6%
Provincially Significant Wetlands + 30 m	158.7 ha	42%
Opened Road Allowances + 30 m	61.5 ha	16%
Other Wetlands	85.8 ha	23%
Significant Woodlands	79.9 ha	21%
Environmentally Sensitive Areas (ESAs)	83.9 ha	22%
Waterbodies + 30 m	15.4 ha	4%
Streams +30 m	84.2 ha	22%
Existing Rural Residential Groupings + 30 m	10.4 ha	3%
<b>Constraint Summary</b>		
Area of Constraint **	352.9 ha	94%
Small, Isolated Fragments	14.4 ha	4%
Total Area of Constraint **	367.3 ha	98%
<b>Unconstrained Resource Area</b>		
Total Area of Primary Resource*	374.5 ha	100%
Total Area of Constraint **	367.3 ha	98%
Total Area of Unconstrained Resource	7.2 ha	2%

\*The total area of Primary resource is the area of the resource as mapped by the Province in the Study Area.

\*\* The total constrained area has been adjusted to account for an overlap between constraints.



**Figure 5 Identified Unconstrained Resource Area**



### 5.1.5 Step 4 – Summary of Results

Based on the results of the mineral aggregate constraint analysis, approximately 375 ha of potential resource area was identified in the Study Area. Approximately 352.9 ha of the potential resource area is encumbered by identified constraints, leaving approximately 21.6 ha of potential mineral resource area outside of constrained areas.

Several of these remaining unconstrained areas are small and in sporadic locations across the Study Area. Based on a further review of these areas, we have removed an additional 14.4 ha of small, isolated fragments, leaving a final total of 7.2 ha of unconstrained potential resource area in Quadrant D of the Study Area. The following can be concluded about the feasibility of resource development in Quadrant D of the Study Area:

The unconstrained resource in Quadrant D is the only unconstrained resource area identified within the Study Area. This area is fragmented across several parcels but is largely confined to the parcel at 4454 Victoria Road S. Using the generalized tonnage calculation from ARIP No. 162<sup>2</sup>, the potential amount of resource available in the unconstrained area is approximately 1.2 million tonnes. This equates to approximately 1% of the 143.4 million tonnes of possible resource identified through the ARIP No.162 assessments in Area 40 (ARIP No.162, Table 3).

Access to the unconstrained resource area is currently constrained through 4454 Victoria Road S by natural features and existing dwellings and may require consolidation of 4436 Victoria Road S to move material off site. Other options to access the resource area via Gilmour Road would also require land consolidation. If land consolidation does occur, further haul route constraints on Victoria Road and/or Gilmour Road exist. Through discussions with Township Staff and site visits to the area, there are sight line constraints that exist on Victoria Road for potential truck traffic entering the right-of-way. Township staff also advised that Gilmour Road is currently gravel and an undersized right-of-way which limits its ability to be upgraded for heavy truck traffic.

Sensitive receptors exist within 300 m of this resource area including several rural residential lots and the Mini Lake Residential Community, which permits up to 292 year-round dwellings or a total population of 450 people. These uses encircle the unconstrained resource area and would need to be investigated further to determine potential impacts and land use compatibility. It is noted that the Mini Lakes Community is serviced by communal water system (3 supply wells) and communal wastewater system on site. There are documented issues with the communal wastewater system servicing the community, which discharges treated effluent to one of the five subsurface disposal beds immediately adjacent to the potential resource area<sup>3</sup>. The impact of extraction in proximity to these large communal services needs to be specifically reviewed.

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<sup>2</sup> (Tonnage = Area (Ha) x deposit thickness x density factor). ARIP. No.162 utilized an estimated deposit thickness of 9 m and a density factor of 1,770 kg/m<sup>3</sup> for determining the potential aggregate resource in Area 40.

<sup>3</sup>GM Blue Plan - Wellington Common Elements Condominium Corporation No. 214, Annual Operations and Maintenance Report for the Wastewater Treatment System- 2022- Puslinch Council Agenda October 18, 2023.

Natural heritage features and areas are present and need to be further reviewed to fully understand potential impacts on the unconstrained resources in this area. Natural heritage features contribute to access constraints and limitations on the amount of resource development that can occur on site.

It is noted that CBM Aggregates recently stated its intent to submit planning applications to establish a licensed mineral aggregate operation on these lands. According to information submitted to the County, CBM is in the process of preparing necessary studies to justify extraction activities at this location and plans to submit applications by the end of the year (Appendix B).

Based on the review of the unconstrained resource in Area D and active interest by an established mineral aggregate operator, it is difficult to completely rule out the feasibility extraction in this area. The potential for resource development is still unclear and would need to be demonstrated through further detailed assessments. The relatively small area available for extraction, potential compatibility concerns to sensitive land use, and accessing the resource are all challenges to the feasibility of extraction at this location and need to be more fully addressed. Considering the above, it is recommended that the unconstrained resource area identified in Area D not be included in the boundary expansion of Aberfoyle at this time.

## 5.2 Land Use Compatibility Assessment

The purpose of this assessment is to determine if the introduction of sensitive land uses, through a potential expansion of the Aberfoyle urban boundary, will create land use compatibility concerns to adjacent mineral aggregate operations and potential resource areas. This includes the creation of impacts that would preclude or hinder their continued use/expansion or potential resource development.

The proposed Aberfoyle Expansion Study Area represents the potential limits of an expanded Aberfoyle. The identified focus areas within the Study Area represent areas where new low-density residential development could potentially occur. This phase of the analysis will focus on areas C and D of the Study Area, as these areas generally interface with active mineral aggregate operations and/or are contiguous with the identified sand and gravel resource of primary significance adjacent to the Study Area.

Quadrants A and B are generally removed from existing mineral aggregate operations and potential resource (over 1,000 m) areas and are not anticipated to generate or experience adverse effects.

### 5.2.1 Land Use Compatibility Guidance (D-Series Guidelines)

This assessment primarily relies on the Ministry of Environment, Conservation and Parks (MECP) Guideline D-6 “Compatibility Between Industrial Facilities and Sensitive Land Uses” (D-6 Guideline). The D-6 Guideline provides direction for land use planning to maximize compatibility of industrial uses with adjacent lands uses and prevent or minimize the encroachment of sensitive land uses upon industrial land use and vice versa. These land uses are normally incompatible due to possible adverse effects produced from point source and/or fugitive air emissions such as noise, vibration, odour, dust and others, either through normal operations, procedures, maintenance or storage activities, and/or from associated traffic/transportation.

The definition of “adverse effects” is included in the *Environmental Protection Act* (EPA) and PPS 2024, and means one or more of the following:

- Impairment of the quality of the natural environment for any use that can be made of it
- Injury or damage to property or to plant or animal life
- Harm or material discomfort to any person
- An adverse effect on the health of any person
- Impairment of the safety of any person
- Rendering any property or plant or animal life unfit for human use
- Loss of enjoyment of normal use of property; and
- Interference with the normal conduct of business



### 5.2.2 D-6 Guidelines Classification and Setbacks

The D-6 Guideline categorize industrial facilities into 3 broad classes based on their potential outputs, scale, processes and operations. While these guidelines don't typically apply to mineral aggregate operations, in the absence of site-specific studies, the province recommends that planning authorities use these guidelines when sensitive land uses are proposed to encroach on an existing mineral aggregate operation. The guidelines recommend pits and quarries be treated as a Class III industrial facility. Table 3. below provides the categorization criteria for a Class III industrial facility.

**Table 3 D-6-1 Industrial Categorization criteria**

Category	Outputs	Scale	Process	Operation/intensity	Possible Examples
<b>Class III – Large Scale Industrial</b>	Noise: sound frequently audible off property	Outside storage of raw and finished products	Open process	Continuous movement of products and employees	Manufacturing of paint and varnish
	Dust and/or Odour: Persistent and/or intense	Large production levels	Frequent outputs of major annoyances	Daily shift operations permitted	Organic chemicals manufacturing
	Vibration: Ground borne vibration can frequently be perceived off property		High probability of fugitive emissions		Breweries
					Solvent recovery plants Soaps and detergent manufacturing

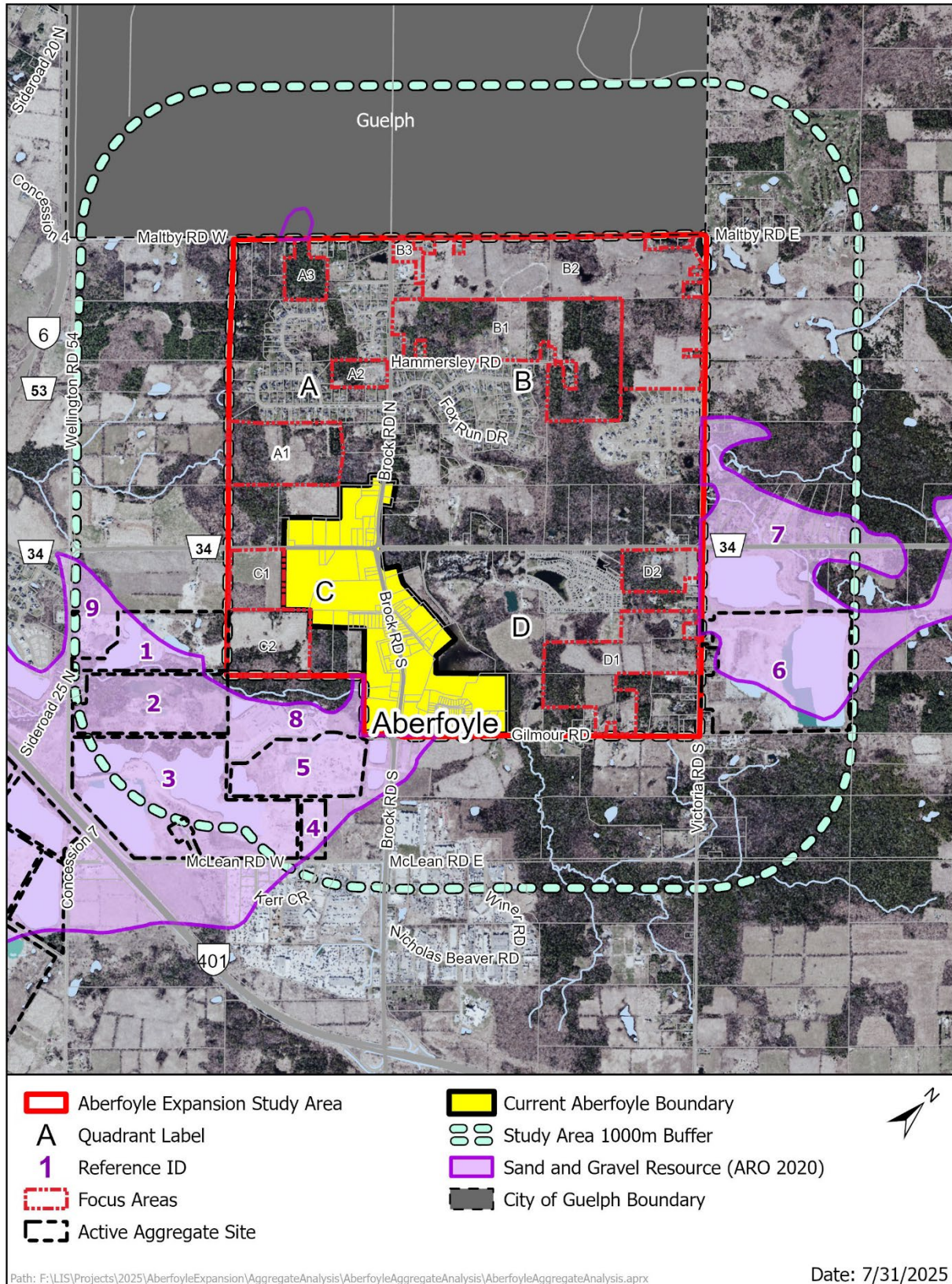
The D-6 Guidelines further establish specific setback criteria for the different classes of industrial facilities (Class I to Class III) to help planning authorities identify potential incompatibilities from encroaching land uses and mitigate potential adverse effects. The following table summarizes the recommended minimum setback distances and areas of potential influence which represents the distance within which adverse effects could potentially occur.

**Table 4 D-6 Recommended Separation & Influence Area**

Industry Classification	Minimum Separation Distances	Potential Areas of Influence
Class III	300 m	1,000 m

Based on the direction provided in the D-6 Guideline, existing mineral aggregate operations and potential resource areas within 1,000 m of the Aberfoyle Expansion Study Area were inventoried and assessed to identify potential adverse effects. Figure 6 provides an overview of the Study Area and the potential area of influence and identifies the location of existing mineral aggregate operations and potential resources areas reviewed through this compatibility assessment . Table 5 catalogues these areas and assigns a reference ID number.

**Figure 6 1,000 m Area of Influence and Identified Mineral Aggregate Resources**





**Table 5 Mineral Aggregate Operations and Resource Areas within 1,000 m of Study Area**

ID #	Operation Name	Type of License/ Resource Area	Licensed Area/Area	ARA License #
1	Capital Paving Inc. – Pit No.1	Class A licence > 20000 Tonnes (Pit) (Max. Annual Tonnage - not specified)	34 ha	5465
2	St. Mary's Cement Inc.- Coburn Pit	Class A licence > 20000 Tonnes (Pit) (Max. Annual Tonnage - 454,000)	22.3 ha	5563
3	St. Mary's Cement Inc.	Class A licence > 20000 Tonnes (Pit) (Max. Annual Tonnage - unlimited)	115.7 ha	5520
4	St. Mary's Cement Inc.	Class A licence > 20000 Tonnes (Pit) (Max. Annual Tonnage - 1,000,000)	8.1 ha	5631
5	Dufferin Aggregates- Aberfoyle Pit 1	Class A licence > 20000 Tonnes (Pit) (Max. Annual Tonnage - 500,000)	33.6 ha	5483
6	Dufferin Aggregates - Aberfoyle Pit 2	Class A licence > 20000 Tonnes (Pit) (Max. Annual Tonnage - 1,000,000)	78.1 ha	5609
7	Potential Resource Area	Sand and Gravel Resource of Primary Significance	39.2 ha	-
8	Potential Resource Area	Sand and Gravel Resource of Primary Significance	23.4 ha	-
9	Potential Resource Area	Sand and Gravel Resource of Primary Significance	5.8 ha	-

### 5.2.3 MECP Environmental Compliance Approvals

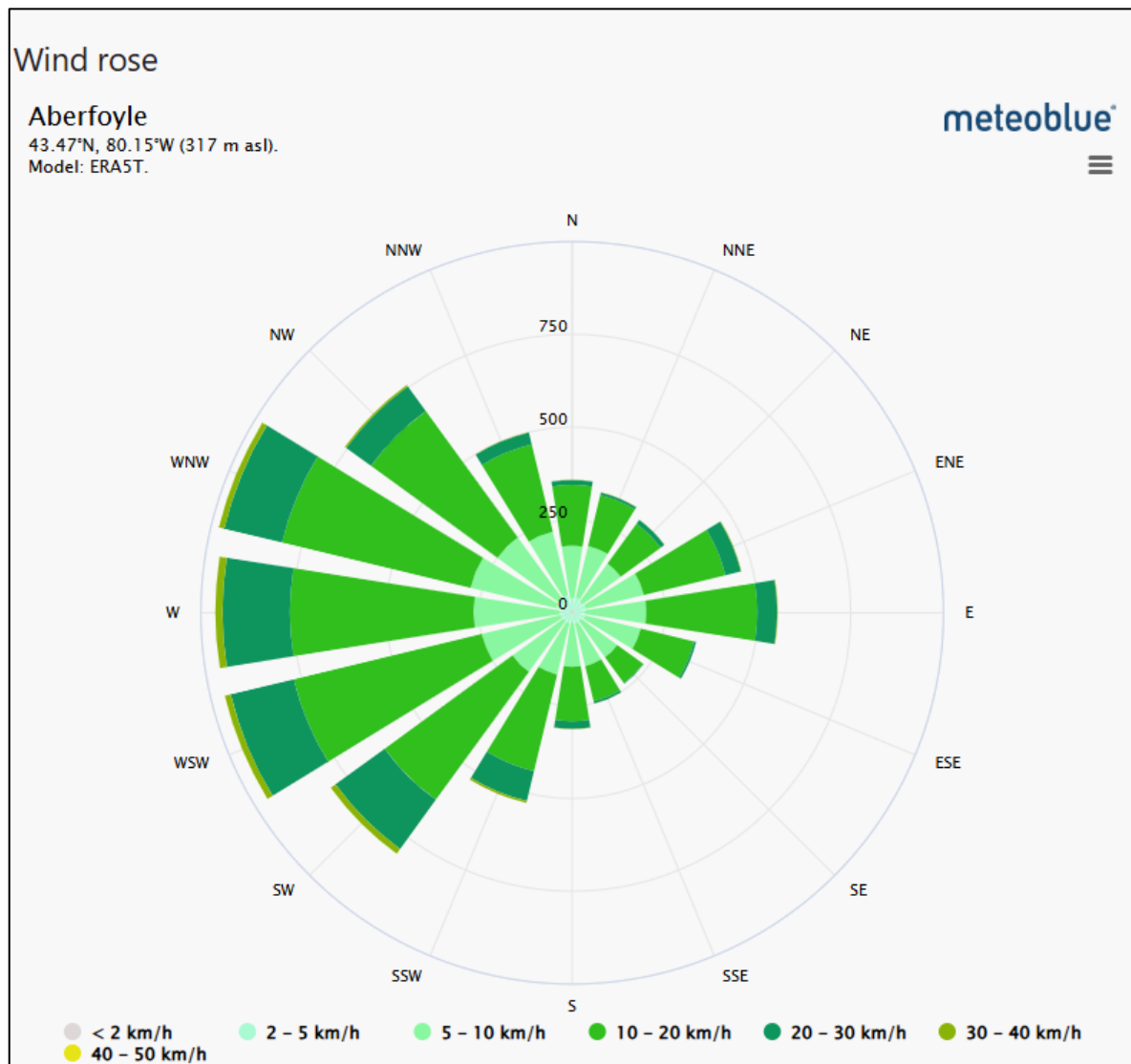
The MECP requires operators of industrial facilities to obtain and maintain Environmental Compliance Approvals (ECA) or submit an Environmental Activity and Sector Registry (ESAR) when facilities emit significant amounts of contaminants into the environment.

The ECA and ESAR ensures compliance with applicable limits for any potential off-site adverse effects and are intended to protect human health and the natural environment. Planning staff reviewed existing ECAs and the ESAR held by mineral aggregate operators within this area to help better understand existing conditions within the Study Area. Where an ECA or ESAR existed on the ministry's Environment Access website they are referenced and attached to this report.

### 5.2.3 Meteorological Data

Weather conditions in Aberfoyle were also reviewed, in particular wind speed and direction, to help understand potential impacts resulting from airborne contaminants like odour, noise and dust from surrounding mineral aggregate operations on the Study Area. The wind rose diagram for the area was retrieved from meteoblue.com, to determine prevailing wind direction and intensity. The wind rose diagram shown in Figure 7 shows that the prevailing wind direction in the Study Area is generally out of the west.

**Figure 7**      **Wind Rose Diagram - Aberfoyle**





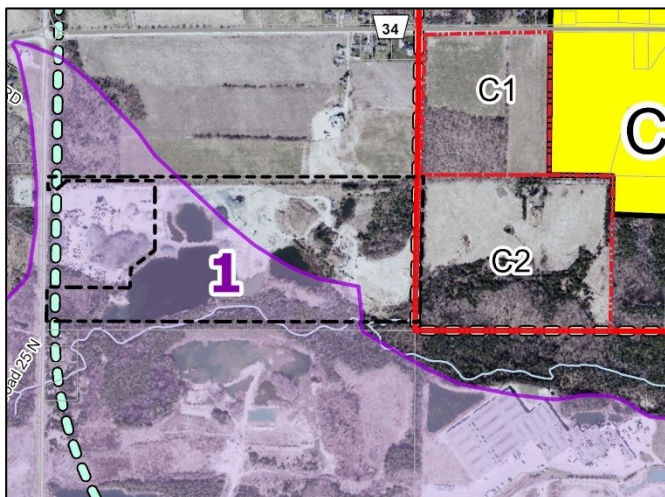
#### 5.2.4 Quadrant C Assessment

Quadrant C consists of two Focus Areas, C1 and C2, and are the locations where low rise development could be considered. Within 1,000 m of Quadrant C the following has been identified:

- Capital Paving Inc. - Pit No.1 (Reference ID # 1);
- St. Mary's Cement Inc. (Reference ID # 2,3, 4)
- Dufferin Aggregates – Aberfoyle Pit 1 (Reference ID # 5)
- Potential Resource Area (Reference # 8)
- Potential Resource Area (Reference # 9)

Potential land use compatibility impacts on the identified mineral aggregate operations and potential mineral aggregate resources are reviewed below.

##### 5.2.4.1 - Capital Paving Inc. – Pit No.1



<b>Address/ Legal Description</b>	4459 Concession 7, Puslinch
<b>Reference ID</b>	1
<b>Environmental Compliance Approval</b>	3642-7HAPLG (Air)

Capital Paving Inc. owns and operates Pit No.1 on land located directly west of the Study Area. This operation is a Licensed Class A pit, approved for below water table extraction with no annual maximum tonnage limit. The approved Aggregate Resources Act (ARA) site plan shows extraction is to occur in the western and central areas of the site. The site plan also indicates that extraction could occur in other portions of the site through amendments to the site plan and delineates an extraction limit 15 m away from the common lot line with Focus Area C2. Based on aerial imagery of the site it appears clearing and site preparation at the rear of the site has begun. The site plan also notes that processing activities, including stockpiling, blending, crushing, storage of recycled aggregate material and importation of off-site materials is permitted.

While outside of the licensed area of the property, Capital Paving's head office, as well as a permanent hot-mix asphalt plant, ready-mix concrete plant and associated asphalt recycling facility are also on the site. These uses are approximately 750 m away from the Study Area limit and are specifically zoned and regulated by an existing ECA.

Site access is via Concession 7 and an approved haul route using Concession 7/ Mclean Road to County Roads 34 and/or 46.

### **Noise/ Vibration**

Noise and vibration generated from on-site equipment and activities can be a potential concern given the nature of the mineral aggregate extraction. Capital Paving Inc's existing license provides consideration for extraction 15 m away from the common lot line with Focus Area C2. This is a concern for potential adverse effects from noise and vibration impacts on Focus Area C2 and new sensitive receptors.

Noise and vibration from the permanent hot-mix asphalt plant, ready-mix concrete plant and asphalt recycling facility also exist on-site. These uses are regulated through an existing ECA approval which requires specific mitigation measures related to noise and vibration to ensure compliance with regulatory requirements under the *Environmental Protection Act*. While a large separation distance and on-site mitigation exist, wind conditions are generally out of the west in the direction of Focus Area C2, raising potential conditions for noise to be carried off-site.

The concern for noise and vibration impacts on Focus Area C1 are not the same as Focus Area C2. Focus Area C1 is diagonally adjacent, at the rear of Capital Paving Inc's property, limiting exposure to extraction activities. The site plan also identifies a large (approx. 4 ha) maple stand, within Focus Area C1, that provides buffering to extraction and processing activities. This woodlot establishes most of the developable area in Focus Area C1 over 300 m away from the licensed boundary. Topography in this area also slopes from the rear of the site down toward Wellington Road 34 providing additional buffering from Pit. No 1's activities. Given the above we do not anticipate noise, or vibration impacts in Focus Area C1.

### **Dust**

The excavation and stockpiling of material together with the transport of the material through internal roads and processing activities can create conditions for dust emissions. It is noted that the site plan for Pit No.1 does not include any notes about dust suppression. However, the ECA regulating the permanent processing facilities on the site requires specific mitigation measures for fugitive dust emissions. Given the integrated nature of these processing activities and the aggregate operation, it is assumed broader dust management practices exist for the site. During a site visit on July 23, 2025, to the area, dust emissions were observed from material stockpiles centrally located on Pit No.1. These emissions were being carried west towards Focus Area C2.

### **Odour**

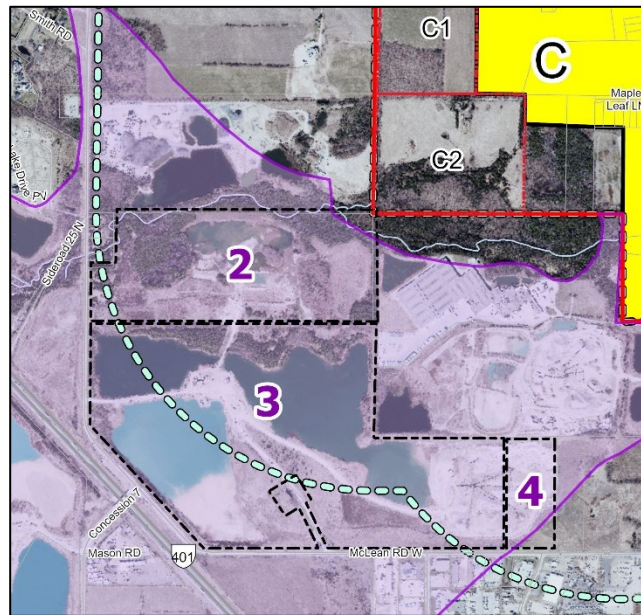
Odour from typical extraction activities is not anticipated to be an issue. Odour emissions from the permanent hot-mix asphalt plant, ready-mix concrete plant and asphalt recycling facility are generated on site. These uses are regulated through an existing ECA and require appropriate measures to minimize odour emissions in compliance with regulatory requirements under the *Environmental Protection Act*. While a large separation distance and on-site mitigation exist, wind conditions are generally out of the west in the direction of Focus Area C2, raising potential conditions for odour to be carried off-site.

### **Summary**

Focus Area C1 is largely outside of the 300 m separation distance recommended by the D-6 Guidelines and benefits from an intervening woodlot and a sloping grade helping to mitigate potential adverse effects from neighbouring extraction and processing activities. It is recommended that independent compatibility assessments be required for new residential development proposed in Focus Area C1 so development can be designed to be consistent with provincial guidelines, standards and procedures.

Focus Area C2 is largely within the 300 m minimum separation distance recommend by the D-6 Guidelines, and directly down wind of Pit No. 1's extraction and processing activities. The conditions at Pit No.1 and flexibility for future extraction at the site create potential for adverse effects to occur on new development in Focus Area C2. The introduction of new sensitive receptors near the active operation also creates the potential to hinder or preclude potential expansion on the site. At this time, it is recommended that Focus Area C2 not be included in an Aberfoyle boundary expansion given the heightened potential for adverse effects on residential development and impacts of existing and future operations at Pit. No1.

#### 5.2.4.2 - St. Mary's Cement Inc. (3 licenced sites)



<b>Address/ Legal Description</b>	4397 Concession 7, Puslinch
<b>Reference ID</b>	2, 3 & 4
<b>Environmental Compliance Approval</b>	n/a

St. Mary's Cement Inc. owns and operates a large mineral aggregate operation, under three separate ARA licences, on a parcel south of the Study Area. The licenses permit Class A pits and approval for below water table extraction. The approved ARA site plan shows extraction is proposed to occur in phases across the site resulting in 3 lakes. Based on aerial imagery it appears below water extraction has begun in licensed area 5563 (Reference ID # 2) diagonally adjacent of Focus Area C2. The site plan also notes that processing activities, including stockpiling, blending, crushing, storage of recycled material and importation of off-site materials are permitted. A significant portion of the processing activities occur at a portable processing area at the southeast corner of the property along Mclean Rd W. Site access is via Concession 7 and Mclean Road. The approved haul route uses Concession 7 and Mclean Road to County Road 46.

#### **Noise/Vibration/Dust/Odour**

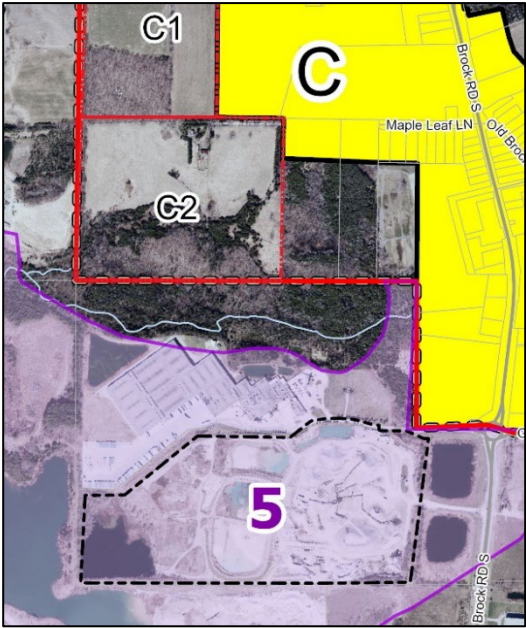
Noise, vibration, dust and odour generated from on-site equipment and activities can be a potential concern given the nature of the mineral aggregate extraction. The approved ARA site plan indicates below water table extraction is to occur within 300 m of the Study Area and on-site processing areas are identified over 1,000 m away from the Study Area. Most of the developable areas in Quadrant C are beyond the 300 m minimum setback recommended by D-6 Guidelines and are buffered by Aberfoyle Creek. The creek is heavily vegetated with mature trees providing additional mitigation from extraction activities south of the Study Area. Further, on-site processing facilities are outside of the potential area of influence recommended by the



Guidelines. Site access and haul route activities are also well removed from the Study Area, minimizing potential impacts from these activities.

### **Summary**

Impacts from noise, vibration, dust and odour emissions from St. Mary's Cement operations are not anticipated to be an issue for Quadrant C. It is recommended that independent compatibility assessments be required for new residential development proposed in Quadrant C so development can be designed and mitigated to be consistent with provincial guidelines, standards and procedures.

<b>5.2.4.3 - Dufferin Aggregates – Aberfoyle Pit 1</b>	
	
<b>Address/ Legal Description</b>	125 Brock Road S, Puslinch
<b>Reference ID</b>	5
<b>Environmental Compliance Approval</b>	n/a

Dufferin Aggregates owns and operates Aberfoyle Pit 1 on lands south of the Study Area. This operation is a Licensed Class A pit, approved for below water table extraction with an annual maximum tonnage limit of 500,000 tonnes. The approved ARA Site Plan indicates that processing activities, including stockpiling, blending, crushing, washing, screening and importation of off-site materials are permitted on site, with processing activities occurring at central location on the site. A separate ready-mix concrete plant also exists in the south-eastern corner of the property. Material is shipped on and off the site by truck along an approved haul route on County Road 46 (Brock Road S).

### **Noise/Vibration/Dust/Odour**

Noise, vibration, dust and odour generated from on-site equipment and activities can be a potential concern given the nature of the mineral aggregate extraction. The site plan and aerial imagery indicate extraction and significant processing operations are occurring on-site. The large central processing area has potential for fugitive emissions to be generated. While no ECA was identified for this operation, the approved ARA site plan indicates that dust suppression is required in accordance with M.O.E dust control requirements.

The developable areas in Focus Area C1 and C2 are approximately 850 m and 650 m away respectively, from the licenced boundary of Aberfoyle Pit 1, well beyond the minimum separation distance recommended by the D-6 guidelines. Quadrant C of the Study Area is further buffered by a significant deciduous wood lot associated with Aberfoyle Creek corridor and the meteorological conditions in the area indicate that the prevailing wind is out of the west, likely directing most fugitive emissions away from the Study Area.

It is noted that the ready-mix concrete plant on site is over 1,000 m from the developable area of Focus Area C2.

### **Summary**

While portions of Focus Area C1 and C2 are within the Potential Area of Influence for a Class III facility, the potential developable areas are well outside the minimum separation distance recommended in the D-6 compatibility guidelines. A large natural wood lot provides additional buffering between operations at Aberfoyle Pit 1 and Quadrant C and prevailing winds in the area generally direct fugitive emissions away from the Study Area. Based on the above we do not anticipate that the proposed expansion would preclude or hinder the ongoing operations at Aberfoyle Pit 1.

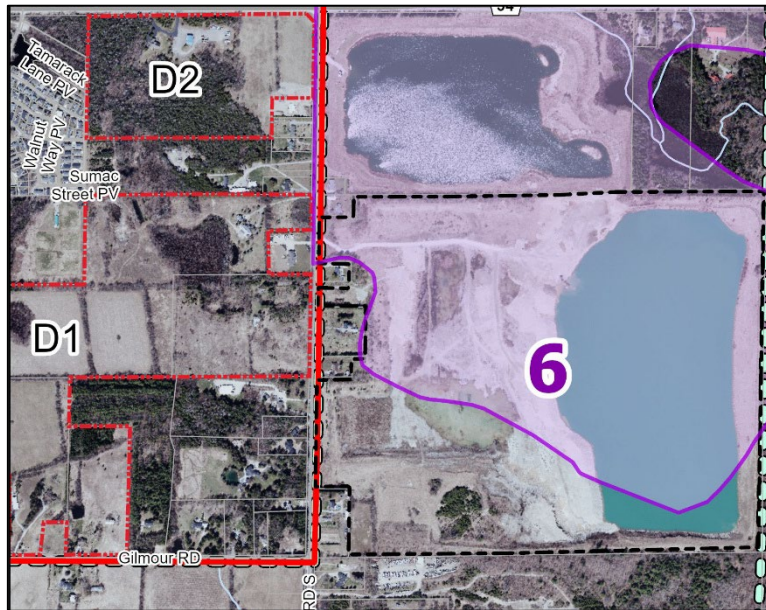
### **5.2.5 Quadrant D Assessment**

Within 1,000 m of Quadrant D the following has been identified:

- Aberfoyle Pit 2 (Reference # 6); and
- Potential Resource Area (Reference # 7)

Quadrant D consists of two Focus areas D1 and D2 where low rise development could be considered. Potential land use compatibility impacts on the identified mineral aggregate operations and potential mineral aggregate resources are reviewed below.

#### 5.2.5.1 - Dufferin Aggregate – Aberfoyle Pit 2



<b>Address/ Legal Description</b>	CON 9 FRONT PT LOTS 22 TO 23; RP 61R1113 PART 1 PART 2
<b>Reference ID</b>	6
<b>Environmental Compliance Approval</b>	n/a

Dufferin Aggregate operates Aberfoyle Pit 2 on land located directly east of the Study Area, across Victoria Road S. This operation is a Licensed Class A pit, approved for below water table extraction with an annual maximum tonnage limit of 1,000,000 tonnes. Material is shipped off-site by truck along an approved haul route. Focus Area D1 is approximately 20 m from the closet portion licensed area and Focus Area D2 is approximately 200 m from the closet limit of the licensed area.

#### **Noise/Vibration**

Noise and vibration generated from on-site equipment and activities can be a potential concern given the nature of the mineral aggregate extraction. The approved ARA site plan for the operation indicates that blasting is not permitted on site and extraction will be carried out by conventional methods (excavators, loaders, trucks and draglines). There is no processing on site as the operation is a feeder pit to Aberfoyle Pit No.1, where material is processed then shipped to market. These operational limitations reduce the potential for noise and the potential for vibration off-site. Further, the approved ARA site plan indicates that there are significant berming and vegetative plantings along the Victoria Road S frontage and site entrance, providing attenuation and buffering to the several adjacent residential homes and the adjacent Study Area (Areas D1 and D2).

The approved haul route for the operation directs truck traffic north along Victoria Road S to Wellington Road 34, then west on Wellington Road 34 to Brock Road, and south on Brock Road

to Aberfoyle Pit No. 1. The haul route passes Focus Area D2 on Victoria Road S and Wellington Road 34 and has minimal interaction with Focus Area D1. Truck traffic along the haul route may contribute to elevated noise during operational hours at this site. However, Wellington Road 34, accommodates high volumes of traffic and truck traffic, and likely establishes higher background noise levels in the D2 Focus Area. Independent assessment would need to be completed, but concerns can typically be mitigated through buffering, construction techniques and warning clauses.

### **Dust**

Dust emissions generated on site can also be a concern. The excavation and stock piling of material together with the transport of the material off site through internal roads can create conditions for dust emissions. The approved ARA site plan indicates that dust suppression is required in accordance with M.O.E dust control requirements and the meteorological conditions in the area indicate that the prevailing wind is out of the west, generally directing fugitive dust away from the Study Area. It is further noted that Ontario Regulation 419/05 of the *Environmental Protection Act*, also provides limits on dust emissions. Under this regulation air quality limits must be met at the property line.

### **Odour**

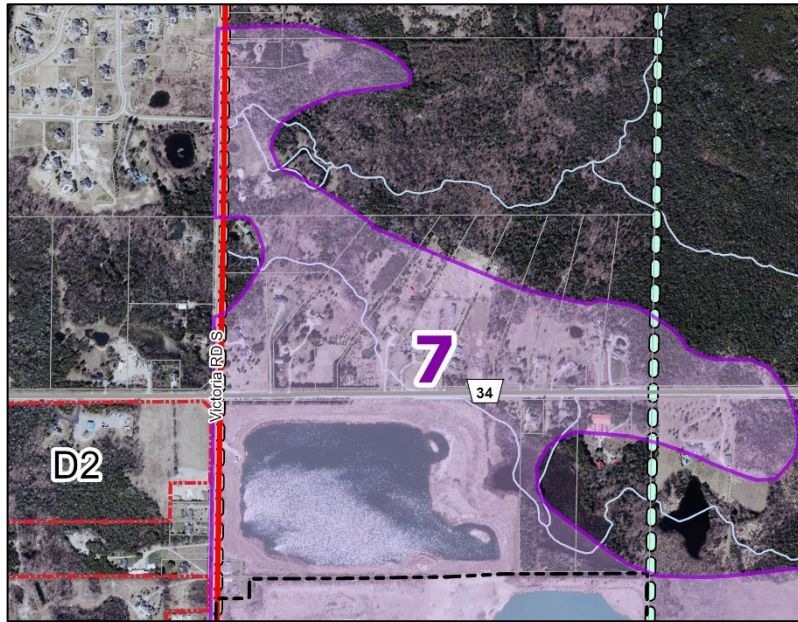
Odour emissions are not anticipated to be a concern given the nature of the operation and no additional processing or secondary production occurring on the Aberfoyle Pit 2 site. Again, the prevailing wind in this area would generally carry potential odour away from the Study Area.

### **Summary**

While portions of Focus Area D1 and D2 are within the recommended minimum separation distance for a Class III facility, there are several existing residential properties in equal or closer proximity to Aberfoyle Pit 2 than the Aberfoyle Expansion Study Area. It is therefore not anticipated that the proposed expansion would preclude or hinder the ongoing operations at Aberfoyle Pit 2. The operation would have been designed to ensure compliance to existing residential properties in the area with regards to emissions, odour, noise or vibration.

It is recommended that independent compatibility assessments be required for new residential development proposed in Focus Areas D1 and D2 to ensure development can be designed to be consistent with provincial guidelines, standards and procedures.

### 5.2.5.2 – Potential Resource Area



<b>Location</b>	West of Vitoria Road S and North of Wellington 34
<b>Reference ID</b>	7
<b>Resource Type</b>	Sand and Gravel Resource of Primary Significance

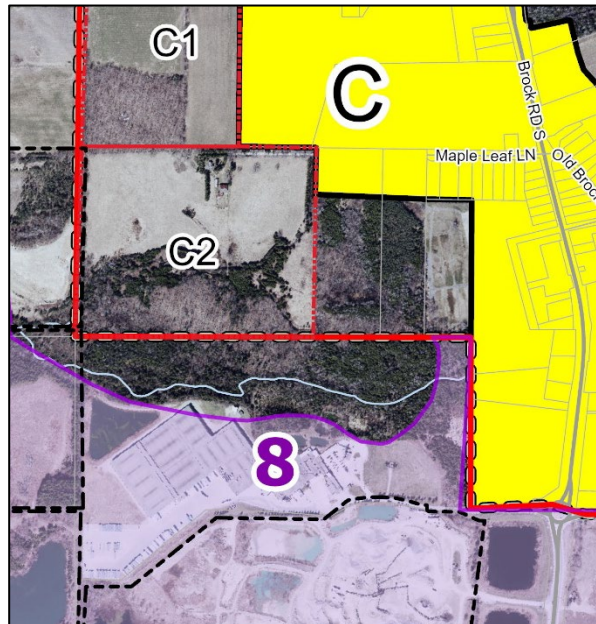
Within 1,000 m of Quadrant D there is an area of sand and gravel resource of primary significance that is captured and is located west of Victoria Road S along Wellington Road 34, and is identified with reference ID # 7 . Resource development in the area north of Wellington Road 34 is already precluded by twelve existing rural residential lots that significantly fragment this area. Further, resource extraction, south of Wellington Road 34, has already occurred, with site rehabilitation completed, and the ARA license surrendered.

#### **Summary**

Potential resource development in this area is already precluded by existing residential development or has been previously extracted and rehabilitated. Therefore, an expanded Aberfoyle urban boundary is not anticipated to preclude or hinder the establishment of new operations or access to potential resources in this area.



### 5.2.5.3 - Potential Resource Area



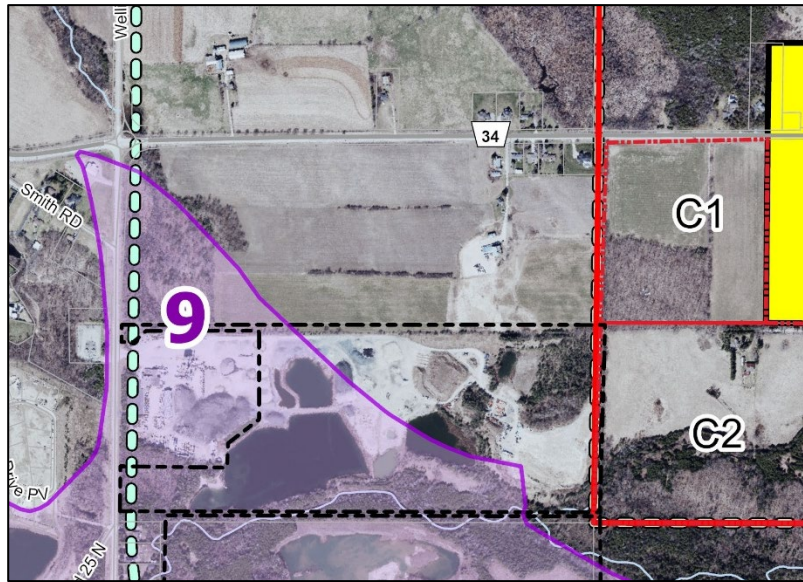
<b>Location</b>	101 Brock Road S, Puslinch
<b>Reference ID</b>	8
<b>Resource Type</b>	Sand and Gravel Resource of Primary Significance

Within 1,000 m of Quadrant C there is an area of sand and gravel resource of primary significance that is captured and is located immediately south of quadrant C and is identified with reference ID # 8. This resource area is on the former Nestle site and is already precluded for resource development. Much of this site is covered by large industrial buildings associated with the water bottling facility and natural heritage features associated with Aberfoyle Creek.

#### **Summary**

Potential resource development in this area is already precluded by existing industrial development and natural heritage features. An expanded Aberfoyle urban boundary is not anticipated to preclude or hinder the establishment of new operations or access to potential resources in this area.

#### 5.2.5.4 – Potential Resource Area



<b>Location</b>	7335 Wellington Road 34, Puslinch
<b>Reference ID</b>	9
<b>Resource Type</b>	Sand and Gravel Resource of Primary Significance

Within 1,000 m of Quadrant C there is an area of sand and gravel resource of primary significance that is captured and largely contained on the property at 7335 Wellington Road 34 and is identified with reference ID # 9. This resource area is already precluded for resource development, as almost all the resource is contiguous with natural heritage features, including provincially significant wetlands and significant woodlands.

#### Summary

Potential resource development in this area is already precluded by significant natural heritage features. An expanded Aberfoyle urban boundary is not anticipated to preclude or hinder the establishment of new operations or access to potential resources in this area.

### 5.3 Land Use Compatibility Assessment Conclusions

A Land Use Compatibility Assessment has been conducted in order to assess the potential for adverse impacts in terms of noise, vibration, dust and odour on the Aberfoyle Expansion Study Area from adjacent mineral aggregate operations. This included assessing potential impacts on existing operations and potential resource areas.

Site visits were conducted to assess the actual perceived effects of fugitive dust, odour, noise, and vibration emissions in the area. Existing mineral aggregate operations were researched in order to gain a comprehensive understanding of the processing taking place at each site. Further, where they existed, MECP Environmental Compliance Approvals were examined in order to assess the mitigation measures already put into place, as well as to gain further understanding of the processes at these sites.

All the above investigations cumulatively conclude that:

- Quadrants A and B of the Study Area, and their associated Focus Areas, are well removed from any existing mineral aggregate operations or potential resource areas outside of the Study Area. It is not anticipated that any adverse effects would result on identified mineral aggregate operations adjacent to the Study Area. Further, it is not anticipated that existing operations or identified potential resource areas would be precluded or hindered, by an expansion of Aberfoyle into these areas.
- Quadrant D of the Study Area and the associated Focus Areas are not anticipated to experience adverse effects from operations at Aberfoyle Pit No. 2 or preclude or hinder its continued use. The potential resources areas adjacent to Quadrant D are not impacted. Existing development already precludes resource development in this area. Independent land use compatibility assessments should be completed for development proposals in Quadrant D to ensure development is designed to be consistent with provincial guidelines, standards and procedures.
- Portions of Quadrant C, particularly Focus Area C1, are not anticipated to experience adverse effects from adjacent aggregate extraction or preclude or hinder its continued use or access to potential resources. Independent land use compatibility assessments should be completed for development proposals in Focus Area C1 to ensure development is designed to be consistent with provincial guidelines, standards and procedures.
- Portions of Quadrant C, particularly Focus Area C2, are expected to experience adverse effects because of adjacent aggregate extraction activities at Capital Paving Inc's Pit No. 1. The introduction of new sensitive land uses in this area creates the potential to preclude or hinder ongoing and future extraction activities at Pit No.1. It is recommended that Focus Area C2 not be included in an expansion to the Aberfoyle Urban boundary.

## 6.0 Recommendation

Based on the results of the two assessments carried out in this report, it is recommended at this time that:

- The unconstrained resource area identified in Area D not be included in the boundary expansion of Aberfoyle; and
- Focus Area C2 not be included in the boundary expansion of Aberfoyle.

Respectfully submitted  
County of Wellington Planning and Development Department



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Jameson Pickard, RPP, MCIP  
Senior Policy Planner

## 7.0 References

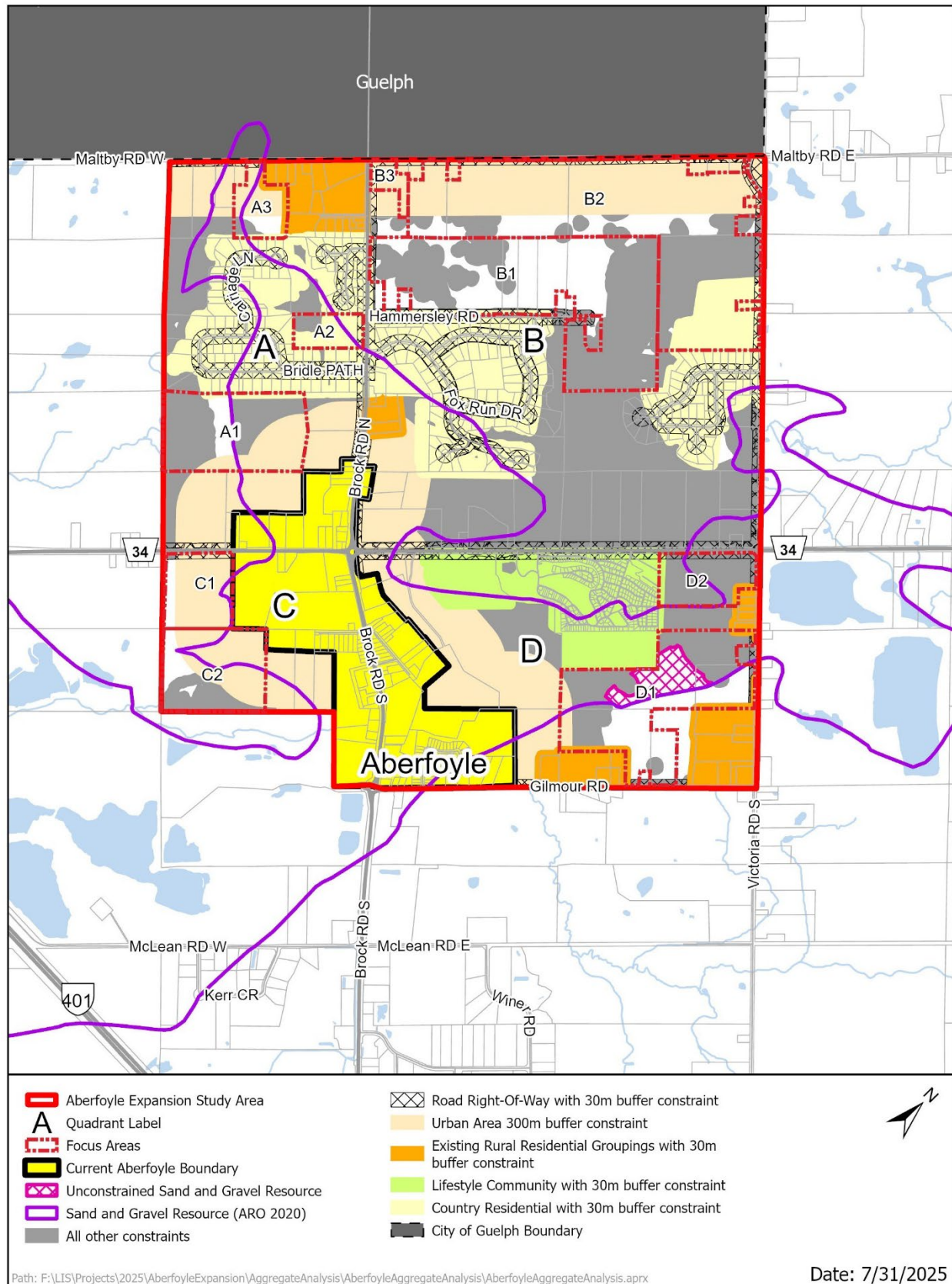
- Ontario Geological Survey, 1999. Aggregate Resources Inventory Paper 162, Wellington County, Townships of Minto, Arthur, West Luther, Maryborough, Peel, West Garafraxa, Pilkington, Nichol, Guelph, Eramosa, Erin, Puslinch and the City of Guelph. <https://prd-0420-geoontario-0000-blob-cge0eud7azhvfsf7.z01.azurefd.net/lrc-geology-documents/publication/ARIP162/ARIP162.pdf>
- Golder and Associates Ltd, August 2016. Supply and Demand Study of Aggregate Resources Supplying the Greater Golden Horseshoe. [1540982 RPT Final 2016Aug18 MNRF Study Agg Resources No App](#)
- Region of Peel, May 2023. Peel 2051 Discussion Paper (Draft) High Potential Mineral Aggregate Resource Areas: Mapping Methodology. [HPMARA-Methodology-May-2023-v5 Clean Appendices.pdf](#)
- Meteoblue.com, July 2025. Aberfoyle Windrose Diagram. [Simulated historical climate & weather data for Aberfoyle - meteoblue](#)
- Township of Puslinch (Council Agenda), October 2023. Wellington Common Elements Condominium Corporation No. 214, Annual Operations and Maintenance Report for the Wastewater Treatment System- 2022- GM Blue Plan. <https://puslinch.ca/wp-content/uploads/2023/10/October-18-2023-Council-Meeting-Agenda-Final.pdf>
- Ontario Ministry of Environment, November 2008. Certificate of Approval (Air) Number 3642-7HAPLG – Guelph Hot-Mix Asphalt and Ready-Mix Concrete Plant, Capital Paving Inc. <https://www.accessenvironment.ene.gov.on.ca/instruments/6507-747LGZ-14.pdf>



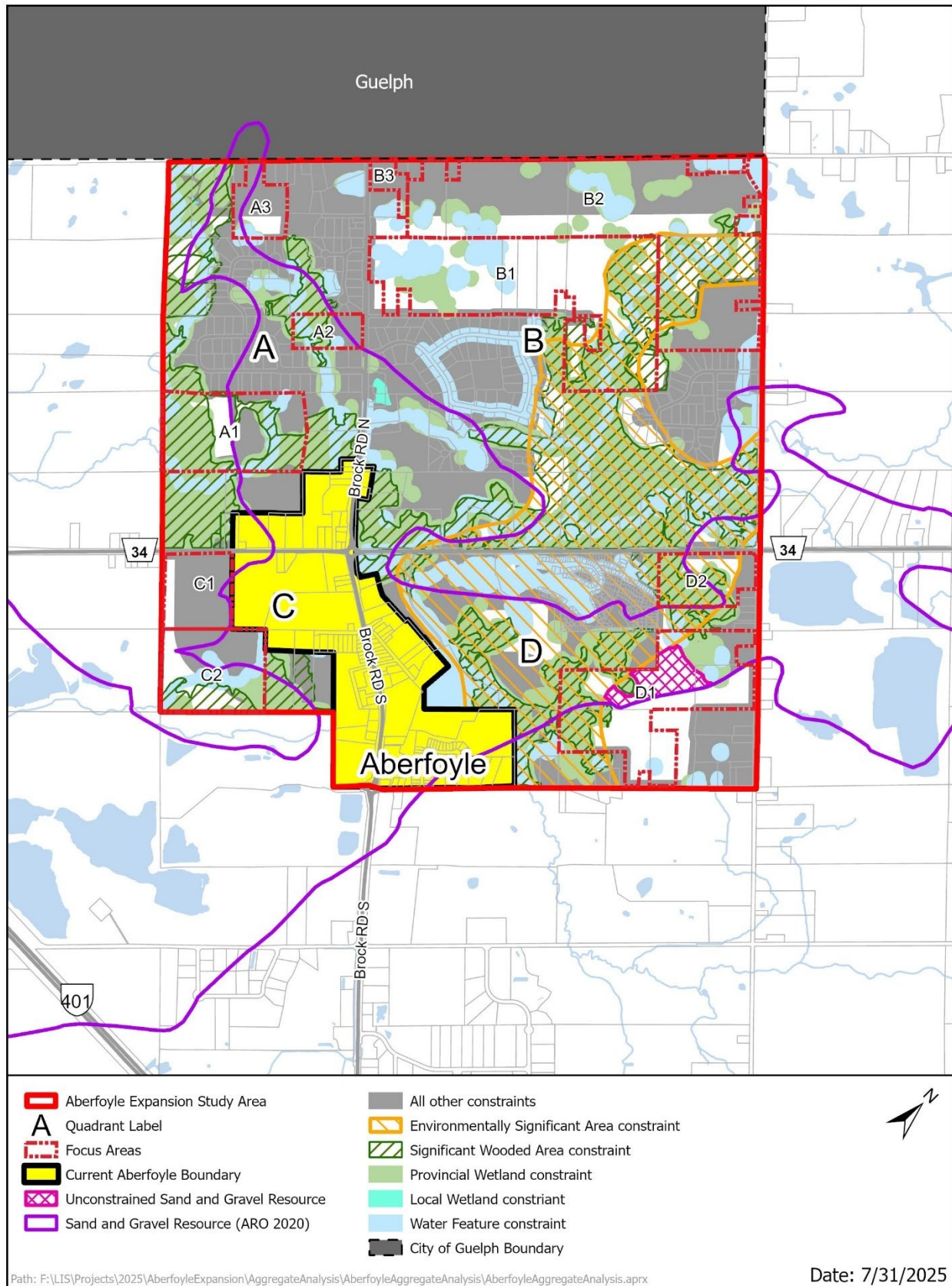
# Appendix A

## Constraint Maps

## Appendix A1 Built Constraints

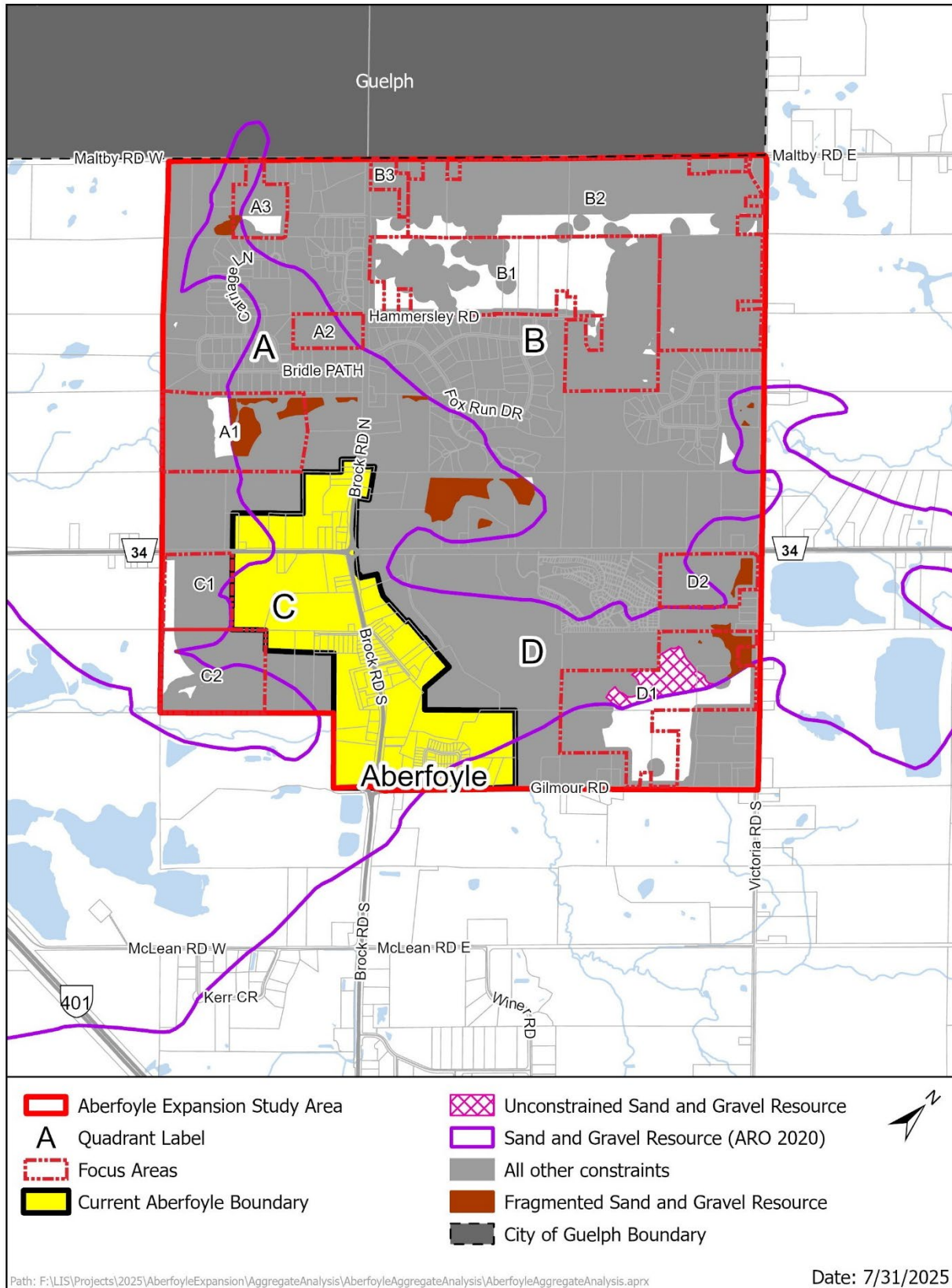


## Appendix A2 Natural Constraints





## Appendix A3 Small, Isolated Fragments



## **Appendix B**

### CBM Aggregates Correspondence





back to agriculture. This is subject to change, however, as the technical studies and further assessment are still being completed.

The Aggregate Resource Inventory Paper (ARIP 162) for the County of Wellington identifies the subject lands within a Sand and Gravel Resource of Primary Significance in Selected Resource Area 40.<sup>1</sup> ARIP 162 states that this selected resource area has a considerable thickness of useable material. Portions of the deposit are up to 18 m in depth with 40 to 80% gravel content. Data from the MTO indicate that the material is determined to be acceptable for Granular A, B Type 1 and M, hot-mix asphaltic paving and Portland cement concrete coarse and fine aggregates.

The County of Wellington Official Plan incorporates the primary significance identification of the subject lands in Schedule D, Mineral Aggregate Resource Overlay. The majority of the subject lands are located within the 'Sand and gravel resources of primary and secondary significance' of Schedule D of the County Official Plan.

To assess on-site resource quality and quantity, and to confirm the primary significance identification in the ARIP mapping, CBM undertook site-specific resource testing. There are approximately 1.2 million tonnes of high quality sand and gravel resources located within the preliminary extraction area.

The sand and gravel resources found on the property range in depth from approximately 15 to 22 m. Grain size analysis data indicate the gravel size generally ranged from fine to coarse, while the sand size generally ranged from medium to coarse. These sand and gravel soils are typically well graded (i.e., uniformity coefficient greater than 10%) and contain trace amounts of fines (i.e., silt and clay). These findings are based on the ongoing hydrogeological assessment for the pit application.

A geological cross section of the property is attached to this letter.

As the subject lands contain a known deposit of mineral aggregate resources as confirmed through ARIP 162, the County's Official Plan and the on-site resource testing, PPS 4.5.1.1 and 4.5.2.5 would apply and should be taken into account as part of the Aberfoyle urban expansion project.

Please notify us of any future meetings or decisions regarding the pending Official Plan Amendment related to the Aberfoyle urban expansion project.

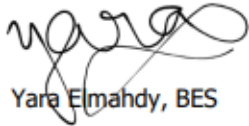
If you have any questions or require further information, please let us know.

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<sup>1</sup> Ontario Geological Survey, 1999. *Aggregate Resources Inventory Paper 162, Wellington County, Townships of Minto, Arthur, West Luther, Maryborough, Peel, West Garafraxa, Pilkington, Nichol, Guelph, Eramosa, Erin, Puslinch and the City of Guelph.*

Yours truly,

**MHBC**



Yara Elmahdy, BES



Neal DeRuyter, BES, MCIP, RPP

cc: *Courtenay Hoytfox, Township of Puslinch*  
*Steve May, CBM*

End.



**Figure 1 - Context Plan**

-  Boundary of Area to be Licensed
-  Limit of Excavation
-  Aggregate Site Authorized Active
-  Municipal Boundary
-  Settlement Area

