

Lanark County Aggregate Resources Master Plan

DRAFT - December 4, 2024







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1. INTRODUCTION

Aggregates are required for virtually all types of construction and infrastructure and according to the Ontario Aggregate Resources Corporation in 2020, "the economic activity generated by the industry begins with the aggregate production itself but also feeds industries which receive and use the raw materials: including cement and concrete products, other aggregate-based products (asphalt, chemical, clay, glass, etc.) and construction." In 2022, there were 3,573 licenses for pits and quarries on private lands in southern and central Ontario and 173.5 million tonnes of aggregate was extracted, which equates to about 11.5 tonnes per person in Ontario. It is noted that this does not include the additional extraction that occurs on Crown land.

The establishment of new pits and quarries has long been a polarizing process in Ontario. While extraction is intended to be an interim use and aggregates are required for virtually all types of construction and infrastructure, opposition to almost every new pit or quarry is commonplace, even though there is a need for aggregates. In recognition of this need, Provincial land use policies are very supportive of aggregate extraction. However, the current application process for new or expanding resource uses in Ontario requires an investment of several years and significant resources for detailed technical studies, with most applications ending up at the Ontario Land Tribunal ('OLT').

The Planning Act identifies mineral aggregate resources as a matter of Provincial interest and requires that the Province and municipalities integrate consideration for such resources in land use planning decisions. The 2024 Provincial Planning Statement ('PPS 2024') requires municipalities to identify and protect deposits of mineral aggregate resources in their respective Official Plans for long-term use.

The PPS (2024) defines deposits of mineral aggregate resources as follows:

<u>Deposits of mineral aggregate resources</u>: means an area of identified mineral aggregate resources, as delineated in Aggregate Resource Inventory Papers or comprehensive studies prepared using evaluation procedures established by the Province for surficial and bedrock resources, as amended from time to time, that has a sufficient quantity and quality to warrant present or future extraction.

The above means that municipalities are required to identify deposits of mineral aggregate resources on a map and include a policy framework that establishes what can happen on lands that contain mineral aggregate resources as well as on adjacent lands.





On June 27, 2012, Lanark County adopted its first Official Plan (Sustainable Communities Official Plan - SCOP). However, the Official Plan did not identify deposits of aggregate resources, because their identification was not required by the Provincial Policy Statement that was in effect at the time - PPS (2005).

The development of an Aggregate Resources Master Plan (ARMP) provides the County with an opportunity to identify and protect known mineral and aggregate deposits for long-term use, while being proactive on what the County's expectations are in terms of where extraction is potentially anticipated to occur in the future and under what conditions. In addition, an opportunity exists for the County to take the lead on policy approaches to minimize social, economic and environmental impacts that reflect Lanark County objectives. In this regard, the County established a number of objectives for the ARMP and these include:

- a) review relevant provincial legislation (PPS (2024)), Planning Act, Aggregate Resources Act), County of Lanark Sustainable Communities Official Plan (SCOP) policies and local Official Plan policies related to mineral aggregates;
- use existing data and mapping, such as the Aggregate Resources Inventory Paper 189 for Lanark County, to review the location of mineral aggregate resources, including bedrock.
 This shall also include an overview of the mineral aggregate industry in the County of Lanark;
- assess the environmental, social and economic factors affecting mineral aggregate resources and examine and identify viable mineral aggregate resource deposits for protection and extraction;
- d) identify and discuss potential constraints to extraction of mineral aggregate resources;
- e) refine identified mapping of mineral aggregate resources in areas of potential conflict and potential non-viable deposits, if needed;
- f) identify existing licensed pits and quarries, known feasible deposits and known feasible bedrock, along with adjacent lands, which would be included on the land use schedule to the Sustainable Communities Official Plan;
- g) review local Official Plans to determine how each has mapped mineral aggregate resources; and
- h) review and update existing Official Plan policies for mineral aggregate resources, including bedrock, using current best practices land use policies.





The intent of the ARMP is to provide more certainty for the industry and the public when making property investment decisions and reduce conflict and the time and resources required to process individual applications.

There is also an opportunity to re-enforce a number of key policies in the Lanark County SCOP that have worked well for managing resource extraction. In addition to this is the opportunity to incorporate new policies that strike a balance between competing environmental, social and economic interests in order to ensure a high quality of life for current and future generations.

2. LEGISLATIVE AND POLICY CONTEXT

2.1 Planning Act

The Planning Act establishes the basic framework for making land use planning decisions in Ontario. Section 1.1 of the Planning Act states that the purposes of the Act are (in part):

- a) To promote sustainable economic development in a healthy natural environment within the policy and by the means provided under this Act;
- b) To provide for a land use planning system led by provincial policy;
- c) To integrate matters of provincial interest in provincial municipal planning decisions;
- d) To provide for planning processes that are fair by making them open, accessible, timely and efficient:
- e) To encourage co-operation and co-ordination among various interests;
- f) To recognize the decision-making authority and accountability of municipal councils in planning.

Sub-section (a) above is intended to support sustainable economic development while providing for a healthy natural environment. Sub-section (b) above clearly articulates the Provincial requirement that the 'land use planning system' in Ontario be 'led by Provincial policy'. Subsection (c) builds upon sub-section (b) by indicating that matters of Provincial interest should be integrated into Provincial and municipal planning decisions. Sub-section (d) provides for an open planning process while sub-section (e) encourages co-operation among various interests. This includes the Province, Lanark County, the lower tier municipalities, landowners,





industry and the broader public. Lastly, sub-section (f) recognizes the decision-making authority and accountability of municipal councils in making planning decisions.

Section 2 of the Planning Act sets out the responsibilities of the Council of a municipality and the OLT and it indicates the following:

The Minister, the council of a municipality, a local board, a planning board and the Tribunal, in carrying out their responsibilities under this Act, shall have regard to, among other matters, matters of provincial interest such as:

- (a) the protection of ecological systems, including natural areas, features and functions;
- (b) the protection of the agricultural resources of the Province;
- (c) the conservation and management of natural resources and the mineral resource base;
- (d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest;
- (e) the supply, efficient use and conservation of energy and water;
- (f) the adequate provision and efficient use of communication, transportation, sewage and water services and waste management systems;
- (g) the minimization of waste;
- (h) the orderly development of safe and healthy communities;
- (h.1) the accessibility for persons with disabilities to all facilities, services and matters to which this Act applies;
- (i) the adequate provision and distribution of educational, health, social, cultural and recreational facilities;
- (j) the adequate provision of a full range of housing, including affordable housing;
- (k) the adequate provision of employment opportunities;
- (I) the protection of the financial and economic well-being of the Province and its municipalities;
- (m) the co-ordination of planning activities of public bodies;
- (n) the resolution of planning conflicts involving public and private interests;
- (o) the protection of public health and safety;
- (p) the appropriate location of growth and development;





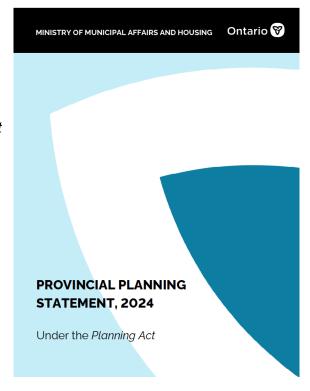
- (q) the promotion of development that is designed to be sustainable, to support public transit and to be oriented to pedestrians;
- (r) the promotion of built form that,
 - (i) is well-designed,
 - (ii) encourages a sense of place, and
 - (iii) provides for public spaces that are of high quality, safe, accessible, attractive and vibrant;
- (s) the mitigation of greenhouse gas emissions and adaptation to a changing climate.

Of particular relevance to the ARMP is sub-section (c) above, which speaks to the need to have specific regard to the conservation and management of natural resources and the mineral resource base. It is recognized that there are other Provincial interests that need to be considered, including 'the protection of ecological systems, including natural areas, features and functions', 'the orderly development of safe and healthy communities', 'the protection of public health and safety' and 'the appropriate location of growth and development'. Other Provincial interests may be relevant when assessing specific applications for development.

Lastly, Section 3(5)(a) of the Planning Act states the following:

A decision of the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government, including the Tribunal, in respect of the exercise of any authority that affects a planning matter, subject to a regulation made under subsection 6.1, shall be consistent with the policy statements issued under subsection (1) that are in effect on the date of the decision.

On the basis of the above, land use planning decisions are required to be consistent with the PPS (2024).







2.2 Provincial Planning Statement

The PPS (2024) came into effect on October 20, 2024 and it provides policy direction to municipalities on matters of Provincial interest related to land use planning and development. Chapter 1 (Introduction) of the PPS (2024) establishes the vision for Ontario's land use planning system and it clearly indicates that one of the keys to the long-term prosperity and social well-being of Ontario is a strong economy. Of particular relevance to the ARMP are the following paragraphs (paragraphs 1, 2, 3 and 5):

Ontario is a vast, fast-growing province that is home to many urban, rural and northern communities distinguished by different populations, economic activity, pace of growth, and physical and natural conditions. More than anything, a prosperous Ontario will see the building of more homes for all Ontarians. This is why the province has set a goal of getting at least 1.5 million homes built by 2031.

Ontario will increase the supply and mix of housing options, addressing the full range of housing affordability needs. Every community will build homes that respond to changing market needs and local demand. Providing a sufficient supply with the necessary mix of housing options will support a diverse and growing population and workforce, now and for many years to come.

A prosperous and successful Ontario will also support a strong and competitive economy that is investment-ready and recognized for its influence, innovation and diversity. Ontario's economy will continue to mature into a centre of industry and commerce of global significance. Central to this success will be the people who live and work in this province.

Ontario's vibrant agricultural sector and sensitive areas will continue to form part of the province's economic prosperity and overall identity. Growth and development will be prioritized within urban and rural settlements that will, in turn, support and protect the long-term viability of rural areas, local food production, and the agri-food network. In addition, resources, including natural areas, water, aggregates and agricultural lands will be protected. Potential risks to public health or safety or of property damage from natural hazards and human-made hazards, including the risks associated with the impacts of climate change will be mitigated.

The PPS (2024) was significantly updated in 2024 to place more of a focus on the building of new homes for Ontario residents. In addition, the vision indicates that aggregate resource areas will be protected. In this regard, there is an overall public interest in ensuring that sources of aggregate such as sand and gravel and bedrock are as close to market as possible to ensure costs are low and that there is competition in the marketplace. Given that it is the public that generally pays for infrastructure through taxation from one level of government or another, there





is a clear public interest in ensuring that the cost to the general public of infrastructure is kept low when feasible and practical.

Section 4.5 of the PPS (2024) includes policies that address mineral aggregate and petroleum resources. Section 4.5.1.1 requires the long-term protection of mineral aggregate resources and it reads as follows:

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.

The PPS (2024) defines deposits of mineral aggregate resources as follows:

Deposits of mineral aggregate resources: means an area of identified mineral aggregate resources, as delineated in Aggregate Resource Inventory Papers or comprehensive studies prepared using evaluation procedures established by the Province for surficial and bedrock resources, as amended from time to time, that has a sufficient quantity and quality to warrant present or future extraction.

The 'area of identified mineral aggregate resources' in Lanark County is found within Aggregate Resource Inventory Paper 189 ('ARIP 189'), which identifies a number of Selected Bedrock Resource Areas and Select Sand and Gravel Resource Areas within Lanark County.

There are two PPS (2024) policies in particular that have a significant impact on aggregate policy development and the review of applications since they require decision makers to consider how the Provincial interest in the "conservation and management of natural resources and the mineral resource base (Sec. 2 of the Planning Act)" will be balanced against other matters of Provincial interest that relate to the protection of ecological systems, the orderly development of safe and healthy communities and the appropriate location of growth and development, among others.

These two policies are Sections 4.5.2.1 and 4.5.2.2, both of which are reproduced below:

Section 4.5.2.1 - As much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible.

Demonstration of need for mineral aggregate resources, including any type of supply/demand analysis, shall not be required, notwithstanding the availability, designation or licensing for extraction of mineral aggregate resources locally or elsewhere.





Section 4.5.2.2 - Extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts.

Section 4.5.2.1 recognizes that mineral aggregate resources are an integral component of the economy and that the transportation of this resource to market is cost sensitive. There is no definition of "realistically possible" in the PPS (2024).

The use of the word 'shall' in the context of this policy makes it clear that planning authorities must take this direction into account when making planning decisions. The second component of the policy makes it clear that the demonstration of need for mineral aggregate resources is not a factor in the development of resource strategies or in the consideration of individual applications, regardless of the municipality or location.

Section 4.5.2.2 of the PPS (2024) then acts as the 'control' over where new resource uses are to be located and is intended to ensure that the policy in Section 4.5.2.1 is balanced against the expressed desire to minimize impacts. In this regard, Section 4.5.2.2 provides the basis for the establishment of criteria to identify potential resource areas and to assess applications to establish resource uses. It is noted that the word 'shall' is also used in this section.

This section also uses the word "minimize" with no definition of 'minimize' provided in the PPS (2024). As a result, the determination of whether extraction minimizes social, economic and environmental impacts is the most important consideration in making a decision on an application to establish a new resource use. It is also noted that the use of the word 'minimize' assumes and recognizes that some impacts will occur.

There are a number of other policies in the PPS (2024) that are directly or indirectly supportive of the mineral aggregate industry and the extraction of mineral aggregate resources, recognizing the important role that it plays in our economy and in the availability and efficient delivery of needed services and infrastructure. However, there are other policies that indicate that development and land use patterns which may cause environmental or public health and safety concerns should be avoided and that uses such as resource extraction activities and sensitive land uses are appropriately designed, buffered and/or separated from each other to prevent adverse effects.

The challenge in developing a policy framework relating to aggregates is determining how to apply the many policies in the PPS (2024) that potentially apply. For example, Section 4.1.4 indicates that development and site alteration <u>shall</u> not be permitted in certain natural heritage features. Section 4.2.2 indicates that development and site alteration <u>shall</u> be restricted in or near sensitive surface water features and sensitive ground water features such that these





features and their related hydrologic functions "will be protected, improved or restored." Section 4.5.2.1 of the PPS (2024) then indicates that, as much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible. It is then noted in Section 6.1.1 of the PPS (2024) that the PPS (2024) shall be read in its entirety and all relevant polices are to be applied to each situation. The use of the word 'shall' in each of these policies indicates that the policy is 'mandatory'.

All of the 'shalls' mentioned above will need to be balanced in developing an updated policy framework.

As noted earlier, one of the main purposes of the ARMP is to identify suitable bedrock and sand and gravel resources on a schedule to the Official Plan so that there is some clarity on where resources are present. Once so identified, Section 4.5.2.5 of the PPS (2024) is then triggered. Section 4.5.2.5 of the PPS (2024) reads as follows:

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 resources 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 public interest; and c) issues of public health, public safety and environmental impact are addressed.

The above is known as the 'preclude or hinder' policy. It is noted that Section 4.5.2.5 is also triggered even if the resource areas are not shown on an Official Plan schedule, as is the case currently with the Lanark County SCOP.

This is because Section 4.5.2.5 of the PPS (2024) refers to known 'deposits of mineral aggregate resources', which as defined includes 'areas of identified mineral aggregate resources, as delineated in Aggregate Resource Inventory Papers'.

However, the area that would be subject to this policy would be restricted to those areas in an Official Plan, which is one of the purposes of the ARMP. A further discussion on the implications of Section 4.5.2.5 is found in Section 7.3 of the ARMP.





3. LOCATION OF RESOURCE USES IN THE COUNTY

A review of available Provincial mapping has been undertaken to determine the extent, location and tonnage permissions in the County as of June 2024. In this regard there are 82 active licenses in the County that include about 2,170 hectares of land area. Given that the County has a land area of 297,000 hectares, the amount of land that is licensed for extraction represents about 0.7 percent of the land area of the County.

In terms of the amount that can be extracted in accordance with the license information, up to 14,075,000 tonnes can be extracted per year. However, it is noted that 11 of the 82 licenses do not have tonnage limits associated with them, meaning that the amount that could be extracted could be higher. It is noted that in 2022, 2,600,000 million tonnes were extracted, which is significantly less than what is permitted.

According to the Ontario Aggregate Resources Corporation (TOARC) annual production reports, the production rates in the County have ranged from a low of 1.3 million tonnes in 1998 to a high of 2.9 million tonnes in 2010. **Table 1** below provides a summary of aggregate production in Lanark County between 1998 and 2022.

| • | Table 1 - Tonnage Extracted in Lanark County - 1998 to 2022 | | | | | | | | |
|------|---|------|--------------------------|--|--|--|--|--|--|
| Year | Tonnage (million tonnes) | Year | Tonnage (million tonnes) | | | | | | |
| 1998 | 1.3 | 2011 | 1.8 | | | | | | |
| 1999 | 1.5 | 2012 | 1.5 | | | | | | |
| 2000 | 1.6 | 2013 | 1.8 | | | | | | |
| 2001 | 1.7 | 2014 | 1.7 | | | | | | |
| 2002 | 2.0 | 2015 | 1.9 | | | | | | |
| 2003 | 2.4 | 2016 | 1.8 | | | | | | |
| 2004 | 2.4 | 2017 | 2.1 | | | | | | |
| 2005 | 2.3 | 2018 | 2.2 | | | | | | |
| 2006 | 2.3 | 2019 | 1.9 | | | | | | |
| 2007 | 2.3 | 2020 | 2.0 | | | | | | |
| 2008 | 1.9 | 2021 | 2.4 | | | | | | |
| 2009 | 2.5 | 2022 | 2.6 | | | | | | |
| 2010 | 2.9 | | | | | | | | |





In terms of location, Lanark Highlands is the location of about 50% of the licensed pits and quarries in the County as set out on **Table 2** below:

| | ALPS ID | CLIENT NAME | TYPE (Pit or Quarry) | CLASS (A or B) | PERMITTED TONNAGE PER YEAR | LICENSED AREA (HECTARES) | ABOVE OR BELOW WATER | LOCATION NAME (IF KNOWN) | LOWER TIER |
|----|---------|--|-------------------------|-------------------|----------------------------------|--------------------------------|-------------------------|-----------------------------|------------------|
| | | | | LANARK H | IGHLANDS | | | | |
| 1 | 4120 | LANARK COUNTY | P | В | 20,000 | 15.90 | NOT KNOWN | | LANARK HIGHLANDS |
| 2 | 4130 | LANARK COUNTY | P | В | 20,000 | 3.40 | NOT KNOWN | | LANARK HIGHLANDS |
| 3 | 4135 | WILLIAM HERBERT PAUL, RICHARD WALKER PAUL, TYLER WILLIAM PAUL | Р | В | 20,000 | 8.20 | ABOVE | PAUL'S PIT | LANARK HIGHLANDS |
| 4 | 4141 | JOAN S. PRETTY | P | В | 20,000 | 61.30 | NOT KNOWN | BOWDEN PIT | LANARK HIGHLANDS |
| 5 | 4142 | CARPENTER, GEORGE | P | В | 20,000 | 13.20 | NOT KNOWN | | LANARK HIGHLANDS |
| 6 | 4147 | PERRY AND JEFFREY JAMES STANSEL | P | В | 20,000 | 21.60 | NOT KNOWN | | LANARK HIGHLANDS |
| 7 | 4155 | ANDERSON, ROBERT | P | В | 20,000 | 41.70 | NOT KNOWN | CRAWFORD PIT | LANARK HIGHLANDS |
| 8 | 4156 | LANARK COUNTY | P | В | 20,000 | 15.20 | NOT KNOWN | | LANARK HIGHLANDS |
| 9 | 4230 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P AND Q | Α | 500,000 | 177.10 | NOT KNOWN | LANARK PIT AND QUARRY | LANARK HIGHLANDS |
| 10 | 4236 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P | Α | UNLIMITED | 39.60 | NOT KNOWN | | LANARK HIGHLANDS |
| 11 | 4237 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P | Α | 250,000 | 27.80 | ABOVE | | LANARK HIGHLANDS |
| 12 | 4238 | CRAIN, L. N. & A | P AND Q | Α | 500,000 | 36.50 | ABOVE | | LANARK HIGHLANDS |
| 13 | 4239 | NORMAN CRAIN | P | В | 20,000 | 24.00 | BELOW | ELPHIN PIT | LANARK HIGHLANDS |
| 14 | 4241 | OMYA CANADA | P | Α | 4,000,000 | 324.30 | NOT KNOWN | | LANARK HIGHLANDS |
| 15 | 4245 | MANSON, AUSTIN | P | В | 20,000 | 8.60 | ABOVE | | LANARK HIGHLANDS |
| 16 | 4247 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P | A | 500,000 | 47.80 | NOT KNOWN | PINE GROVE PIT | LANARK HIGHLANDS |
| 17 | 4255 | THOMPSON, MARY | P | В | 20,000 | 17.90 | NOT KNOWN | | LANARK HIGHLANDS |
| 18 | 4257 | TACKABERRY SAND AND STONE LTD. | P | Α | 500,000 | 63.50 | NOT KNOWN | | LANARK HIGHLANDS |
| 19 | 4258 | 1394706 ONTARIO INC | P | В | 20,000 | 6.50 | NOT KNOWN | | LANARK HIGHLANDS |
| 20 | 4267 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P | В | 20,000 | 4.60 | NOT KNOWN | | LANARK HIGHLANDS |
| 21 | 4269 | TACKABERRY SAND AND STONE LTD. | P | A | UNLIMITED | 20.60 | NOT KNOWN | | LANARK HIGHLANDS |
| 22 | 4272 | PLAYFAIR, JAY K. & M. ELAINE | P | В | 20,000 | 6.10 | ABOVE | | LANARK HIGHLANDS |
| 23 | 4278 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P | A | 250,000 | 71.50 | NOT KNOWN | | LANARK HIGHLANDS |
| 24 | 4283 | COLIN DONALD THOMAS | P | В | 20,000 | 9.40 | ABOVE | PARKS PIT | LANARK HIGHLANDS |
| 25 | 4285 | ARRISCRAFT CANADA | P | В | 20,000 | 1.10 | NOT KNOWN | | LANARK HIGHLANDS |
| 26 | 4286 | G. TACKABERRY & SONS CONSTRUCTION COMPANY LIMITED | Р | А | 45,000 | 10.00 | ABOVE | POOLE PIT | LANARK HIGHLANDS |
| 27 | 4289 | G. TACKABERRY & SONS CONSTRUCTION COMPANY LIMITED | P | Α | 150,000 | 69.40 | NOT KNOWN | COOK-ANDRE PIT | LANARK HIGHLANDS |
| 28 | 4291 | CRAIN VALLEY FARMS | P | В | 20,000 | 16.30 | BELOW | | LANARK HIGHLANDS |
| 29 | 4300 | OMYA CANADA | P | В | 20,000 | 47.90 | NOT KNOWN | | LANARK HIGHLANDS |
| 30 | 4312 | CROSBIE, PERCY | P | В | 20,000 | 2.30 | ABOVE | | LANARK HIGHLANDS |
| 31 | 4315 | MITCHELL, RANDY | Р | В | 20,000 | 13.90 | ABOVE | | LANARK HIGHLANDS |
| 32 | 4318 | 1394706 ONTARIO INC | P | Α | 100,000 | 6.50 | ABOVE | MILLAR PIT | LANARK HIGHLANDS |
| 33 | 9968 | BOURDEAU, ROBERT | Р | В | 20,000 | 13.40 | BELOW | | LANARK HIGHLANDS |
| 34 | 10796 | CROSBIE, PERCY | Р | В | 5,000 | 2.00 | ABOVE | | LANARK HIGHLANDS |
| 35 | 13620 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P | Α | 500,000 | 40.50 | NOT KNOWN | RODGERS PIT | LANARK HIGHLANDS |
| 36 | 15377 | ELAINE PLUMRIDGE IN TRUST | P | Α | 500,000 | 51.20 | BELOW | AMELL PIT | LANARK HIGHLANDS |
| 37 | 15485 | BRADLEY A. STEWART | P | Α | 500,000 | 40.14 | NOT KNOWN | | LANARK HIGHLANDS |
| 38 | 15752 | THOMAS CAVANAGH CONSTRUCTION LIMITED | Р | Α | UNLIMITED | 31.30 | NOT KNOWN | MADDEN PIT | LANARK HIGHLANDS |
| 39 | 67795 | THOMAS CAVANAGH CONSTRUCTION LIMITED | Р | Α | UNLIMITED | 16.90 | NOT KNOWN | | LANARK HIGHLANDS |
| 40 | 70220 | 1394706 ONTARIO INC | Р | В | 20,000 | 3.48 | ABOVE | | LANARK HIGHLANDS |
| 41 | 609261 | ARNOTT BROTHERS CONSTRUCTION LTD. | Р | Α | 150,000 | 34.30 | NOT KNOWN | CRAIN- MCKINNON PIT | LANARK HIGHLANDS |
| 42 | 626520 | THOMAS CAVANAGH CONSTRUCTION LIMITED | Р | Α | 25,000 | 19.50 | ABOVE | ARNOTT PIT | LANARK HIGHLANDS |
| | | | | TOTALS | 8,915,000 | 1,486.42 | | | |

 Table 3 below identifies the licensed areas in the Municipality of Mississippi Mills:

| | ALPS ID | CLIENT NAME | TYPE (Pit or Quarry) | CLASS (A or B) | PERMITTED TONNAGE PER YEAR | LICENSED AREA (HECTARES) | ABOVE OR BELOW WATER | LOCATION NAME (IF KNOWN) | LOWER TIER |
|---|---------|--------------------------------------|-------------------------|-------------------|----------------------------------|--------------------------------|-------------------------|-----------------------------|-------------------|
| | | | | MISSISSII | PPI MILLS | | | | |
| 1 | 4121 | STANLEY, PETER | P | В | 20,000 | 11.80 | ABOVE | | MISSISSIPPI MILLS |
| 2 | 4226 | WEST CARLETON SAND & GRAVEL INC. | P AND Q | Α | UNLIMITED | 84.90 | NOT KNOWN | BURNTLANDS QUARRY | MISSISSIPPI MILLS |
| 3 | 4231 | THOMAS CAVANAGH CONSTRUCTION LIMITED | Р | A | UNLIMITED | 22.40 | NOT KNOWN | | MISSISSIPPI MILLS |
| 4 | 4232 | THOMAS CAVANAGH CONSTRUCTION LIMITED | Q | A | UNLIMITED | 39.60 | ABOVE | | MISSISSIPPI MILLS |
| 5 | 4248 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P AND Q | В | 20,000 | 40.50 | NOT KNOWN | NEILSON QUARRY | MISSISSIPPI MILLS |
| 6 | 4249 | 13962571 CANADA INCORPORATED | P | В | 20,000 | 16.80 | NOT KNOWN | | MISSISSIPPI MILLS |
| 7 | 4276 | DEUGO, SHIRELY AND DEUGO, SCOTT | Р | В | 20,000 | 44.50 | ABOVE | FULTON PIT | MISSISSIPPI MILLS |
| 8 | 4288 | THOMAS CAVANAGH CONSTRUCTION LIMITED | Q | Α | UNLIMITED | 57.90 | NOT KNOWN | APPLETON QUARRY | MISSISSIPPI MILLS |
| | | | | TOTALS | 80,000 | 318.40 | | | |





Table 4 below identifies the licensed areas in the Township of Beckwith:

| | ALPS ID | CLIENT NAME | TYPE (Pit or Quarry) | CLASS (A or B) | PERMITTED TONNAGE PER YEAR | LICENSED AREA (HECTARES) | ABOVE OR BELOW WATER | LOCATION NAME (IF KNOWN) | LOWER TIER | | | |
|---|----------|--------------------------------------|-------------------------|-------------------|----------------------------------|--------------------------------|-------------------------|-----------------------------|------------|--|--|--|
| | BECKWITH | | | | | | | | | | | |
| 1 | 4132 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P AND Q | Α | 100,000 | 7.50 | NOT KNOWN | | BECKWITH | | | |
| 2 | 4233 | UNKNOWN | UNKNOWN | UNKNOWN | UNKNOWN | UNKNOWN | UNKNOWN | UNKNOWN | BECKWITH | | | |
| 3 | 4234 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P AND Q | Α | 2,000,000 | 25.70 | NOT KNOWN | WILSON QUARRY | BECKWITH | | | |
| 4 | 4235 | UNKNOWN | UNKNOWN | UNKNOWN | UNKNOWN | UNKNOWN | UNKNOWN | UNKNOWN | BECKWITH | | | |
| 5 | 4250 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P AND Q | Α | 50,000 | 32.60 | UNKNOWN | | BECKWITH | | | |
| 6 | 4301 | RABB, RODERICK & MARK | P | В | 20,000 | 13.20 | NOT KNOWN | | BECKWITH | | | |
| 7 | 18986 | NOLAN, LYLE | P | В | 20,000 | 14.40 | NOT KNOWN | | BECKWITH | | | |
| | | | | TOTALS | 2,190,000 | 93.40 | | | | | | |
| | | | | | | | | | | | | |

Table 5 below identifies the licensed areas in the Township of Drummond North Elmsley:

| | ALPS ID | CLIENT NAME | TYPE (Pit or Quarry) | CLASS (A or B) | PERMITTED TONNAGE PER YEAR | LICENSED AREA (HECTARES) | ABOVE OR BELOW WATER | LOCATION NAME (IF KNOWN) | LOWER TIER |
|---|---------|---|----------------------|-------------------|----------------------------------|--------------------------------|-------------------------|-----------------------------|------------------------|
| | | | DI | RUMMOND N | ORTH ELMSLE | Υ | | | |
| 1 | 4123 | G. TACKABERRY & SONS CONSTRUCTION COMPANY LIMITED | P AND Q | Α | 250,000 | 16.50 | NOT KNOWN | RICHMOND QUARRY | DRUMMOND NORTH ELMSLEY |
| 2 | 4146 | ROBERTSON, ROBBIE | P | В | 20,000 | 6.20 | NOT KNOWN | | DRUMMOND NORTH ELMSLEY |
| 3 | 4264 | MCGUIRE, MICHAEL H. | P | В | 20,000 | 27.70 | NOT KNOWN | | DRUMMOND NORTH ELMSLEY |
| 4 | 4268 | MAUREEN ARMSTRONG | P | В | 20,000 | 14.90 | NOT KNOWN | ARMSTRONG PIT | DRUMMOND NORTH ELMSLEY |
| 5 | 4298 | THOMAS CAVANAGH CONSTRUCTION LIMITED | P | В | 20,000 | 8.00 | ABOVE | | DRUMMOND NORTH ELMSLEY |
| 6 | 4313 | CAMPBELL'S TRUCKING LTD. (734230 ONTARIO LTD.) | Р | В | 20,000 | 9.90 | NOT KNOWN | SCHOULER PIT | DRUMMOND NORTH ELMSLEY |
| 7 | 4314 | TACKABERRY SAND AND STONE LTD. | P AND Q | Α | 250,000 | 27.00 | NOT KNOWN | | DRUMMOND NORTH ELMSLEY |
| 8 | 626155 | TACKABERRY SAND AND STONE LTD. | Q | Α | 400,000 | 15.70 | NOT KNOWN | PERTH QUARRY WEST | DRUMMOND NORTH ELMSLEY |
| 9 | 626156 | TACKABERRY SAND AND STONE LTD. | Q | Α | 400,000 | 17.60 | NOT KNOWN | PERTH QUARRY EAST | DRUMMOND NORTH ELMSLEY |
| | | | | TOTALS | 1,400,000 | 143.50 | | | |
| | | | | • | • | • | - | | • |

Table 6 below identifies the licensed areas in the Township of Tay Valley:

| | ALPS ID | CLIENT NAME | TYPE (Pit or Quarry) | CLASS (A or B) | PERMITTED TONNAGE PER YEAR | LICENSED AREA (HECTARES) | ABOVE OR BELOW WATER | LOCATION NAME (IF KNOWN) | LOWER TIER | | |
|---|------------|-------------------------------------|-------------------------|-------------------|----------------------------------|--------------------------------|-------------------------|-----------------------------|------------|--|--|
| | TAY VALLEY | | | | | | | | | | |
| 1 | 4139 | HOWARD BURNS EQUIPMENT RENTALS LTD. | Р | В | 20,000 | 5.50 | ABOVE | | TAY VALLEY | | |
| 2 | 4140 | CAMPBELL'S TRUCKING LTD. | P | Α | 125,000 | 47.60 | BELOW | | TAY VALLEY | | |
| 3 | 4145 | DOBBIE, ALVIN | P | Α | 100,000 | 57.30 | ABOVE | | TAY VALLEY | | |
| 4 | 4284 | TAY VALLEY TOWNSHIP | Р | В | 20,000 | 24.00 | ABOVE | | TAY VALLEY | | |
| 5 | 4310 | DEACON, GERALD AND DAVID | P | В | 20,000 | 14.90 | ABOVE | | TAY VALLEY | | |
| 6 | 9597 | JERRY AND CHARLOTTE THOMPSON | P | В | 20,000 | 5.70 | ABOVE | | TAY VALLEY | | |
| | | | | TOTALS | 305,000 | 155.00 | | | | | |
| | | | | | | | | | | | |

Table 7 below identifies the licensed areas in the Township of Montague:

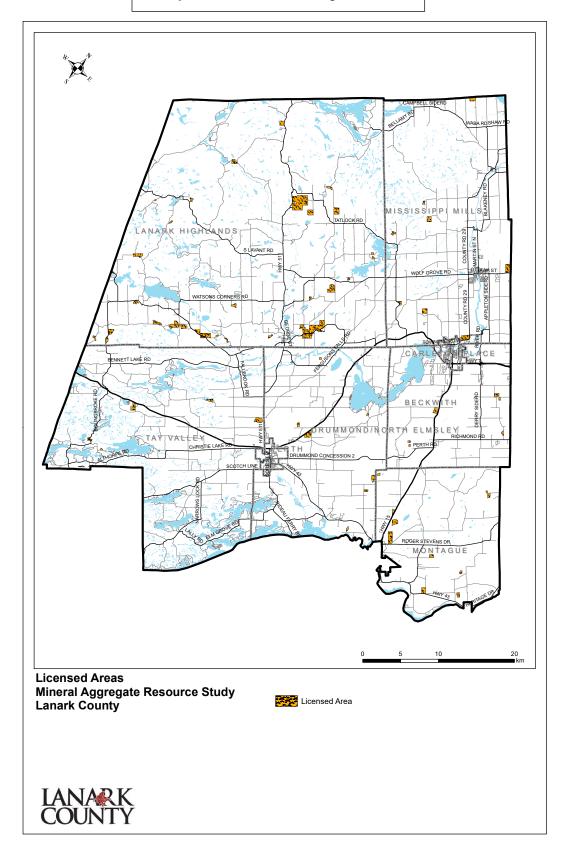
| | ALPS ID | CLIENT NAME | TYPE (Pit or Quarry) | CLASS (A or B) | PERMITTED TONNAGE PER YEAR | LICENSED AREA (HECTARES) | ABOVE OR BELOW WATER | LOCATION NAME (IF KNOWN) | LOWER TIER |
|----|---------|---|----------------------|-------------------|----------------------------------|--------------------------------|-------------------------|---------------------------------|------------|
| | | | | MON | TAGUE | | | | |
| 1 | 4131 | CAMPBELL'S TRUCKING LTD. | P | В | 20,000 | 16.60 | NOT KNOWN | | MONTAGUE |
| 2 | 4225 | LAFARGE CANADA INC. | Q | Α | UNLIMITED | 85.50 | NOT KNOWN | BISONETTE QUARRY | MONTAGUE |
| 3 | 4242 | G. TACKABERRY & SONS CONSTRUCTION COMPANY LIMITED | Q | Α | 500,000 | 41.70 | NOT KNOWN | | MONTAGUE |
| 4 | 4254 | G. TACKABERRY & SONS CONSTRUCTION COMPANY LIMITED | Q | Α | 150,000 | 18.40 | NOT KNOWN | | MONTAGUE |
| 5 | 4259 | MCCONNELL, DONALD | P | В | 20,000 | 7.60 | NOT KNOWN | | MONTAGUE |
| 6 | 4261 | MCCONNELL, DONALD | P | В | 20,000 | 12.70 | NOT KNOWN | | MONTAGUE |
| 7 | 4263 | 734230 ONTARIO LIMITED | P | В | 20,000 | 19.80 | NOT KNOWN | | MONTAGUE |
| 8 | 18501 | BENCAN CORPORATION | P AND Q | Α | 115,000 | 30.72 | NOT KNOWN | STREIT PIT & QUARRY | MONTAGUE |
| 9 | 111386 | J.A. GALLIPEAU CONSTRUCTION LIMITED | P | В | 20,000 | 13.60 | NOT KNOWN | GALLIPEAU PIT | MONTAGUE |
| 10 | 625031 | CAMPBELL'S TRUCKING LTD. (734230 ONTARIO LTD.) | Q | А | 400,000 | 45.10 | NOT KNOWN | MAC CAMPBELL MEMORIAL QUARRY | MONTAGUE |
| | | | | TOTALS | 1,265,000 | 291.72 | | | |
| | | | | | | | | | |

Map A showing the location of all licensed areas by ID number is on the next page:





Map A: Location of Existing Licenses







4. OVERVIEW OF ARIP 189

The Ontario Geological Survey ('OGS') is responsible for the Aggregate Resources Inventory Program ('ARIP'), the purpose of which is to provide the basic geological information required to include potential mineral aggregate resource areas in land-use planning strategies and decision-making processes.

In 2013, the OGS released ARIP 189 that includes an inventory and evaluation of sand, gravel and bedrock resources in the County.

The ARIP 189 indicates that a greater dependence on crushed bedrock for use as coarse aggregate is expected as sand and gravel supplies near depletion and the demand

Aggregate Resources Inventory of the
County of Lanark
Southern Ontario

Ontario Geological Survey
Aggregate Resources Inventory
Paper 189

for higher quality products increases. The aggregate production in sand and gravel-dominated municipalities has decreased, whereas production in Paleozoic bedrock-dominated municipalities has increased significantly. Historically, aggregate production in the County has supplied the local market, providing basic aggregate products for local construction projects. Many of the small pits throughout the County produce pit-run sand products to meet local construction needs. This type of production will likely continue at current levels into the future. This suggestion from the ARIP 189 appears to be correct based on the production rates published in the TOARC production statistic reports.

With respect to the quantity of aggregate within the County, ARIP 189 also noted that:

A greater dependence on crushed bedrock for use as a coarse aggregate is expected as sand and gravel supplies near depletion and the demand for higher quality products increases.

With respect to the location of mineral aggregate deposits, the ARIP 189 indicates the following:

Although mineral aggregate deposits are plentiful in Ontario, they are fixed-location, nonrenewable resources that can be exploited only in those areas where they occur. Mineral aggregates are characterized by their high bulk and low unit value so that the economic value of





a deposit is a function of its proximity to a market area as well as its quality and size. The potential for extractive development is usually greatest in areas where land use competition is extreme. For these reasons the availability of adequate resources for future development is now being threatened in many areas, especially urban areas where demand is the greatest.

The ARIP 189 then indicates that:

The report is a technical background document based for the most part on geological information and interpretation. It has been designed as a component of the total planning process and should be used in conjunction with other planning considerations, to ensure the best use of an area's resources.

The ARIP 189 identifies selected resource areas in the County that represent areas in which a major resource is known to exist and while some screening of the areas identified has been carried out (to eliminate areas where extraction is not feasible), further screening is possible based on additional inputs. Below is an overview of the Selected Sand and Gravel Resource Areas and the Selected Bedrock Resource Areas as detailed in the ARIP 189.

4.1 Selected Sand and Gravel Resource Areas

Map 1 in the ARIP 189 provides an inventory and evaluation of Selected Sand and Gravel Resource Areas in the County. The ARIP 189 indicates the following with respect to this map:

Each area of primary significance is coloured red on Map 1 and identified by a deposit number that corresponds to numbers in Table 3. ... Selected
Sand and Gravel Resource Areas of primary significance are not permanent, single land use units. They represent areas in which a major resource is known to exist and may be reserved wholly or partially for extractive development and/or resource protection. In many of the recently approved municipal Official Plans, all or portions of resources of primary significance, and in some cases resources of secondary significance, are identified and protected.

SAND AND GRAVEL RESOURCES Selected Sand and Gravel Resource Area, primary significance; deposit number (see Table 3) Selected sand and gravel resource area, secondary significance Sand and gravel deposit, tertiary significance Other surficial deposits or exposed bedrock

Deposits of secondary significance are coloured orange on Map 1. Such deposits are believed to contain significant amounts of sand and gravel. Although deposits of secondary significance are not considered to be the best resources in the report area, they may contain large quantities





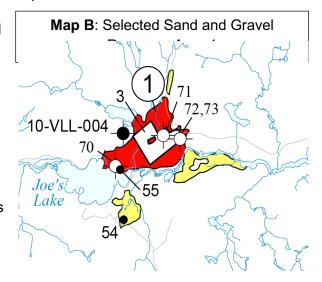
of sand and gravel and should be considered as part of the overall aggregate supply of the area.

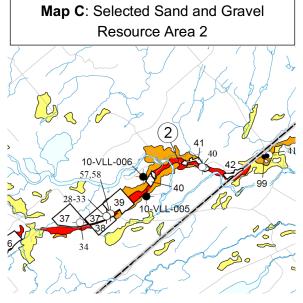
Deposits of tertiary significance are coloured yellow on Map 1. They are not considered to be important resource areas because of their low available resources or because of possible difficulties in extraction. Such areas may be useful for local needs or extraction under a wayside permit, but are unlikely to support large-scale development.

Below is a brief description of the four sand and gravel resource areas of primary significance from ARIP 189, all of which are located in Lanark Highlands:

Selected Sand and Gravel Resource Area 1 is located at along the northeastern edge of Joes Lake and extends to Little Joes Lake and includes lands on both sides of Lavant Darling Road in in the Township of Lanark Highlands as shown Map B. It has an area of about 100 hectares (unlicensed). The deposit is a large glaciolacustrine deltaic deposit according to ARIP 189 and after considering physical, cultural and environmental constraints, the area available for extraction is approximately 51 hectares and assuming an average thickness of 6 metres, the area is estimated to contain a possible aggregate resource of 5.5 million tonnes.

Selected Sand and Gravel Resource Area 2 is located along the southern border of the Township of Lanark Highlands and extends across the Mississippi River along McDonalds Corners Road, Sheridan Rapids Road and Iron Mine Road as shown **Map C**. It has an area of about 110 hectares (unlicensed). The selected area consists of an east-trending glaciofluvial





ice-contact—esker ridge approximately 6 kilometres long and only about 300 metres wide. After considering physical, cultural and environmental constraints, the area available for extraction is

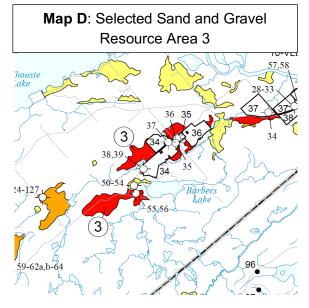


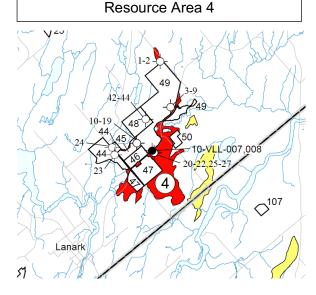


approximately 43 hectares and assuming an average thickness of 6 metres, the area is estimated to contain a possible aggregate resource of 4.6 million tonnes.

<u>Selected Sand and Gravel Resource Area 3</u> is located in the southern portion of the Township of Lanark Highlands and west of Sand and Gravel Resource Area 3. This area is located to the north and west of Barbers Lake in the vicinity of Highland Line as shown on Map D. It has an area of about 207 hectares (unlicensed). The selected area consists of 2 glaciofluvial icecontact deposits. After considering physical, cultural and environmental constraints, the area available for extraction is approximately 79 hectares and assuming an average thickness of 6 metres, the area is estimated to contain a possible aggregate resource of 8.4 million tonnes. It is noted that a portion of the Highland Line Pit proposal is included within the Selected Sand and Gravel Area 3.

Selected Sand and Gravel Resource Area 4 is a glaciofluvial complex located north and east of the hamlet of Lanark along Pine Grove Road as shown on **Map E**. It has an area of about 393 hectares (unlicensed). This deposit is a combination of various depositional environments, including eskers, esker beads, deltas and fans. After considering physical, cultural and environmental constraints, the area available for extraction is approximately 107 hectares and assuming an average thickness of 6 metres, the area is estimated to contain a possible aggregate resource of 11.3 million tonnes.





Map E: Selected Sand and Gravel

ARIP 189 indicates that the total area of primary significance is about 810 hectares and indicates that after considering physical, cultural and environmental constraints, there are a





possible 281 hectares that remain for possible resource extraction. The ARIP 189 then concludes that this land area is estimated to include approximately 30 million tonnes of aggregate material.

The ARIP 189 also identifies a number of sand and gravel deposits as resource areas of secondary significance. The areas of secondary significance are primarily located in Lanark Highlands in the vicinity of the areas of primary significance with a few small areas identified in Tay Valley and Drummond North Elmsley. A detailed description of these areas is included in ARIP 189. The estimated tonnage available in these areas has not been calculated. Resource areas of tertiary significance have also been identified in the ARIP 189 and they are scattered throughout the County.

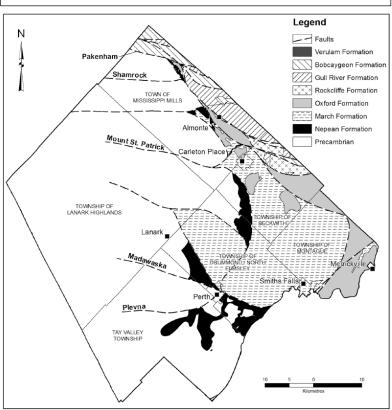
4.2 Selected Bedrock Resource Areas

Map 2 in the ARIP 189 provides an inventory and evaluation of Bedrock Resource Areas in the County. The ARIP 189 indicates the following with respect to this map:

Map 2 is an interpretative map derived from bedrock geology, drift thickness and bedrock topography maps, water well data from the Ministry of the Environment (MOE), oil and gas well data from the Ministry of Natural Resources (MNR), and from geotechnical test hole data from various sources.

It is noted that the geology in Lanark County is complex and is the site of a number of formations

Map F: Geologic Formations in the County



and faults as shown on **Map F** (which is Figure 5 from ARIP 189).

ARIP 189 indicates that the western and central portions of Lanark County are underlain by rocks of Precambrian age belonging to the Grenville Province. The eastern and southeast





portions of the County are underlain by a succession of relatively flat-lying Paleozoic strata consisting of sandstones, limestones, dolostones and shales. The Paleozoic strata are cut by a number of faults creating escarpments. ARIP 189 goes on to indicate that no specific areas of Precambrian bedrock have been selected for possible resource protection because Paleozoic bedrock is considered the preferred source of bedrock-derived aggregates in the area. It is then indicated that of the Paleozoic rock formations that underlie the County, which area the March, Oxford, Gull River and Bobcaygeon formations, are best suited for aggregate extraction and production.

Based on the quality of the aggregate produced, ARIP 189 indicates that areas of the March, Oxford, Gull River and Bobcaygeon formations that are covered by less than 8 metres of overburden have been identified as Selected Bedrock Resource Areas and are identified on Map 2 to ARIP 189. These areas have a combined area of 59,514 hectares and have a possible aggregate resource of 23,648,000 tonnes.

The ARIP 189 indicates the following with respect to Map 2:

The darkest shade of blue indicates where bedrock crops out or is within 1 m of the ground

surface. These areas constitute potential resource areas because of their easy access. The medium shade of blue indicates areas where drift cover is up to 8 m thick. Quarrying is possible in this depth of overburden and these zones also represent potential resource areas. The lightest shade of blue indicates bedrock areas overlain by 8 to 15 m of overburden. Outside of these delineated areas, the bedrock can be assumed to be covered by more than 15 m of overburden, a

Paleozoic bedrock outcrop (see Table 4); areas of exposed bedrock partially covered by a thin veneer of drift. Drift thickness is generally less than 1 m (3 feet).

Paleozoic bedrock covered by drift (see Table 4); drift thickness is generally 1 to 8 m (3 to 25 feet).

Bedrock outcrops may occur.

Paleozoic bedrock covered by drift (see Table 4); drift thickness is generally 8 to 15 m (25 to 50 feet). Isolated bedrock outcrops may occur.

Paleozoic bedrock covered by drift, drift thickness is generally greater than 15 m (50 feet); or areas underlain by Precambrian bedrock.

DRIFT THICKNESS

depth generally considered to be too great to allow economical extraction.

On the basis of the above, four selected bedrock resource areas have been identified. Below is a description of each from ARIP 189:

Areas with less than 8 m of overburden overlying the March Formation have been chosen as <u>Selected Bedrock Resource Area 1.</u> These areas occur throughout the eastern portion of the county (Town of Mississippi Mills and Townships of Lanark Highlands, Drummond / North Elmsley, Beckwith and Montague). The most extensive portion of the formation occurs in the





southeast corner of the county. The March Formation is best known as a source of skidresistant aggregate, but can be used in the production of a variety of other aggregate products.

Areas with less than 8 m of overburden overlying the Oxford Formation have been chosen as <u>Selected Bedrock Resource Area 2</u>. These areas occur along the eastern boundary of the county (Town of Mississippi Mills and the townships of Beckwith and Montague) in segmented sections that are often delineated by faults. The Oxford Formation is a significant aggregate resource and is used to manufacture a wide variety of aggregate products.

Areas with less than 8 m of overburden overlying the Gull River Formation have been chosen as <u>Selected Bedrock Resource Area 3</u>. These areas occur along the eastern boundary of the county (Town of Mississippi Mills and the Township of Beckwith). Although there are no operations in the study area currently extracting the formation, the Gull River Formation is a significant source of aggregate in adjacent municipalities (i.e., City of Ottawa) and throughout southern Ontario.

Areas with less than 8 m of overburden overlying the Bobcaygeon Formation have been chosen as <u>Selected Bedrock Resource Area 4.</u> These areas occur along the eastern boundary of the county (Town of Mississippi Mills and the Township of Beckwith) in segmented sections that are delineated by faults. The formation is a significant source of aggregate resources and has been used in the manufacturing of a variety of aggregate products throughout eastern and southern Ontario

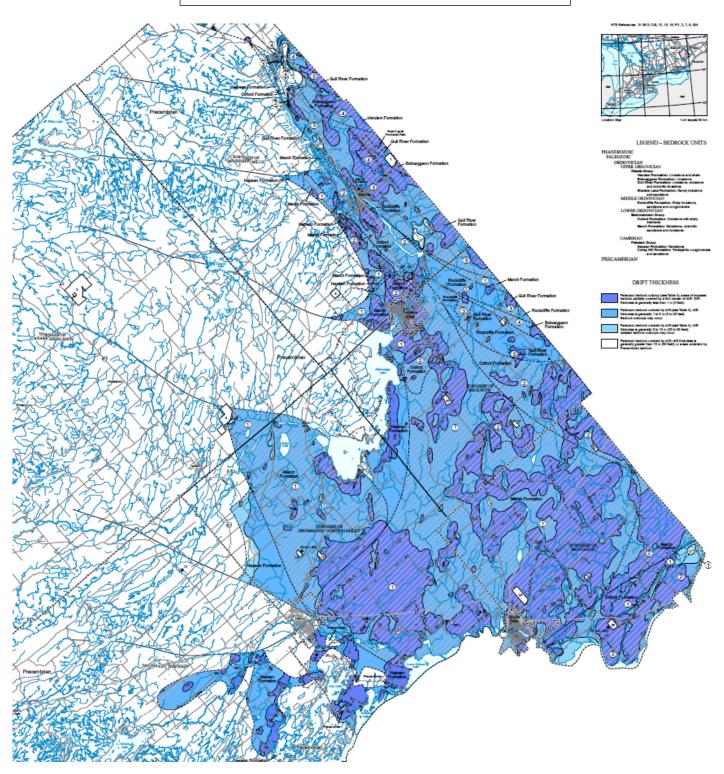
The selected bedrock resource areas are shown on **Map G** on the next page, which is an extract from Figure 2 from ARIP 189.

In addition to the above, the ARIP 189 further notes that:

Selected Bedrock Resource Areas shown on Map 2 are not permanent, single land use units. They represent areas in which a major bedrock resource is known to exist and may be reserved wholly or partially for extractive development and/or resource protection, within an Official Plan.



Map G: Select Bedrock Resource Areas in the County

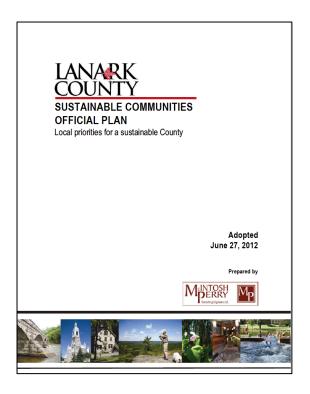






5. OVERVIEW OF THE LANARK COUNTY SUSTAINABLE COMMUNITIES OFFICIAL PLAN

The County Sustainable Communities Official Plan ('SCOP') provides policy direction on matters of County-wide significance, such as mineral aggregate resources, and it is intended to provide policy direction to the 8 local municipalities that comprise Lanark County. With respect to mineral aggregate resources, Section 6.0 of the SCOP states the following:



The management of natural resources is a key component of Lanark County's economy. Our resources include agricultural land, aggregate resources such as sand, gravel and limestone, minerals and vast forested areas. Appropriate land use policies are required to ensure the wise use and conservation of these resources for future generations.

Section 6.2.2 of the SCOP then states:

Mineral and aggregate resources are important to all facets of development in the County as these materials are used in the construction of roads, water and sewer infrastructures, homes, schools and commercial buildings and landscaping projects. As such the identification and long term protection of aggregate resources is important to the County's well-being.

Schedule 'A' to the SCOP designates all licensed mineral aggregate resource uses as 'Licensed Aggregate Extraction Operation'. The SCOP then directs that local Official Plans identify the following:

- 1. Mineral Aggregate Resource Licensed Pit
- 2. Mineral Aggregate Resource Licensed Quarry





- 3. Mineral Aggregate Resource Sand and Gravel Reserve
- 4. Mineral Aggregate Resource Bedrock Reserve

The SCOP does not identify sand and gravel or bedrock reserves and the expectation is that the local Official Plans will do that instead.

Section 6.2.2.2 sets out permitted uses in the Mineral Aggregate Resources designation:

- 1. licensed pits and quarries;
- 2. licensed wayside pits and guarries;
- 3. portable asphalt plants and concrete plants;
- 4. agricultural uses excluding any accessory building or structure;
- 5. forestry uses excluding any accessory building or structure;
- 6. conservation and natural resource management uses excluding any accessory building or structure;
- 7. uses accessory to an aggregate extraction operation such as crushing and screening operations, machinery storage facilities and office space;
- 8. Permanent asphalt and concrete plants may be permitted subject to site specific municipal planning control.

Section 6.2.2.3 then sets out prohibited uses on lands in mineral aggregate resource areas and it indicates the following:

Development, including changes in land use and the creation of new lots for residential, commercial, institutional, recreational or industrial development which has the potential to preclude or hinder future aggregate extraction or the expansion of existing extraction operations or resource use shall be prohibited in mineral aggregate resource areas.

It is assumed that this policy applies to mineral aggregate resource areas identified in local Official Plans.

Section 6.2.2.4 of the SCOP deals with adjacent lands and it indicates the following:





In areas located within 300 metres of an area intended or utilized for a licensed pit operation below the water table and 150 metres of an area intended or utilized for a licensed pit operation above the water table as well as in areas located and 500 metres from an area intended or utilized for a licensed quarry operation, incompatible development, including the creation of new lots shall only be permitted subject to the following criteria:

- 1. That it is demonstrated that the resource use would not be feasible or that the proposed use or development would serve a greater long term public interest;
- 2. That the proposed non extraction development can be adequately serviced by water and wastewater services in a manner which will not impede continued existing and proposed extraction operations;
- 3. Any other investigation as required by the development approval authority such as traffic studies, noise studies, vibration studies, slope stability studies, air quality impact studies etc. are carried out and demonstrate that the proposed development can proceed without impeding the continued operation of the existing licensed operations and future operations on reserves. Such studies are to carried out by qualified professionals;
- 4. When a license for aggregate extraction or operation ceases to exist policies 1, 2 and 3 above shall continue to apply.

Since the SCOP has been prepared, it has been amended a number of times. The following amendments (approved and proposed) dealt with mineral aggregate resources:

- a) OPA #1 Remove "Licensed Aggregate Extraction Operation" designation and replace with "Rural " designation – Pt. Lot 26 Conc. 2 geographic Township of Pakenham, now in the Municipality of Mississippi Mills.
- b) OPA #2 Remove "Licensed Aggregate Extraction Operation" designation and replace with "Rural" designation Pt. Lot 9 Conc. 1 Township of Montague.
- OPA#6 Re-designate "Aggregate Resource Pit" to "Rural" in the Township of Mississippi Mills for a rehabilitation of a former Class B Pit (MM OPA#20)
- d) OPA#10 Re-designate "Rural" to "Licensed Aggregate Extraction Operation" in the Township of Lanark Highlands (LH OPA#7)
- e) <u>Proposed</u> OPA#13 Re-designate "Rural Area" to "Licensed Aggregate Extraction Operation" in the Township of Lanark Highlands Highland Line Pit *(Decision not yet*





made)

- f) <u>Proposed</u> OPA#14 Re-designate "Rural Area" to expand the "Licensed Aggregate Extraction Operation" in the Township of Lanark Highlands McKinnon Pit Expansion (*Decision not yet made*)
- g) <u>Proposed</u> OPA#15 Re-designate "Rural Area" to "Licensed Aggregate Extraction Operation" in the Township of Lanark Highlands - Cooney Pit (*Decision not yet made*)

6. REVIEW OF LOCAL OFFICIAL PLANS

Given the direction in the SCOP for local municipal Official Plans to identify mineral aggregate resource areas, each local Official Plan has been reviewed. It is noted that once the SCOP is updated to implement the recommendations of the ARMP, each of the local Official Plans will need to be updated to conform to the SCOP. There are 8 local municipalities that comprise Lanark County, which are:

- a) Township of Beckwith;
- b) Town of Carleton Place;
- c) Township of Drummond/North Elmsley;
- d) Township of Lanark Highlands;
- e) Municipality of Mississippi Mills;
- f) Township of Montague;
- g) Town of Perth; and
- h) Tay Valley Township.



The following subsections include an overview of each of the local Official Plans that have rural areas and which therefore have policies on mineral aggregate resources. It is not the intent of the subsections to provide a detailed review of all mineral aggregate policies, however each subsection identifies:





- a) The mineral aggregate resource designation(s) that applies;
- b) The map(s) that shows the location of the mineral aggregate resource designation(s);
- c) The uses permitted on lands within the mineral aggregate resource designation(s); and,
- d) Other policies that address circumstances that require an Official Plan Amendment, alternative uses in resource areas as well as influence areas, which are those areas adjacent to mineral aggregate operations and/or deposits of mineral aggregate resources.

On the basis of the above, the following sections provide an overview of the local Official Plans (not including the Towns of Carleton Place and Perth, which are the urban areas in the County).

6.1 Township of Beckwith

On November 15, 1989, the Township of Beckwith adopted its Official Plan ('Beckwith OP'). The Township Official Plan was updated by OPA 29 in 2017.

The current Beckwith OP identifies 'Mineral Aggregate Pits' and 'Mineral Aggregate Quarries' on Schedule 'A'. Most of the land in this designation is the site of a licensed pit or quarry. However, there are a number of areas included in this designation that are not the site of a

license and these would be considered as

'reserve' areas.

Based on a review of ARIP 189, these areas have been identified as Sand and Gravel Deposits of Tertiary Significance. However, not all of the Sand and Gravel Deposits of Tertiary Significance shown in ARIP 189 have been identified as reserve areas on Schedule 'A' and no information is available on why certain areas were selected and others were not. No bedrock areas have been identified on Schedule 'A'

Section 6.2.2 of the Beckwith OP indicates that a range of aggregate-related uses are permitted on lands designated as 'Mineral Aggregate Pits' and 'Mineral Aggregate Quarries' which include both existing licensed operations as well as reserve areas:





In the areas identified as Mineral Aggregate – Pit, only pit operations together with accessory uses such as crushing facilities, stockpiles and screening operations will be permitted. Within the areas identified as Mineral Aggregate – Quarry, pit and quarry operations will be permitted together with accessory uses such as crushing facilities, stockpiles and screening operations.

The above means that an Official Plan Amendment would not be required to the Beckwith OP to establish a new pit or quarry on lands designated 'Mineral Aggregate Pits' and 'Mineral Aggregate Quarries' on Schedule 'A'. Notwithstanding the above, an Amendment to the County Official Plan would still be required. In addition to the above, asphalt plants, ready-mix concrete plants and aggregate transfer stations may be permitted within the land designated as Mineral Aggregate – Quarry but require site specific zoning in the Zoning By-law.

The Beckwith OP further provides that within the reserve areas, interim land uses such as agriculture, forestry and outdoor recreation uses may be permitted provided that these do not include buildings or activities which would preclude the establishment of a pit or quarry.

Section 6.2.3 of the Beckwith OP includes policies that apply to Mineral Aggregate – Quarry. In this regard, any proposal to expand beyond the boundaries of the designation shown on Schedule 'A' requires an Official Plan Amendment.

Section 6.2.3 of the Beckwith OP includes policies that apply to Mineral Aggregate – Pit. In this regard, the area to be zoned or licensed may extend beyond the boundaries of the designation shown on Schedule 'A' provided such expansion is reasonable, respects any separation distances and does not encroach on existing uses in the area.

In addition to the above, Section 6.2.4 of the Beckwith OP establishes an influence area in relation to existing or proposed mineral aggregate operations near sensitive land use and it reads as follows:

The concept of an influence area is recognized as a means to provide mutual protection from encroachment by incompatible uses for either sensitive land uses or existing or proposed mineral aggregate operations. The extent of the influence area from the boundary of an existing or proposed Mineral Aggregate designation shall be at least 300 metres for a pit and 500 metres for a quarry. These distances may be increased without amendment to this Plan in order to address public health and safety concerns, environmental impacts, land use impacts, and any other adverse effects. In these areas, development which would preclude or hinder the establishment of new mineral aggregate operations or access to the resources will only be permitted if a Land Use Compatibility Study is undertaken.





Section 6.2.10 of the Beckwith OP also permits small pit operations (Class B licence) which remove up to a maximum of 20,000 tonnes of material per year, within the Rural Land and Agriculture categories in the Official Plan without a requirement for an OPA.

Section 6.2.11 and 6.2.12 of the Beckwith OP provide that the removal of part of the Mineral Aggregate designation from the Schedule and the establishment of any new Mineral Aggregate Areas requires an amendment to the Official Plan.

Section 6.2.14 of the Beckwith OP also permits extraction of mineral aggregates as an interim use in the Agriculture designation, provided that the site is rehabilitated with substantially the same area and soil capability for agriculture being restored. This section appears to permit resource extraction without requiring an Official Plan Amendment provided certain criteria are satisfied.

6.2 Township of Drummond/North Elmsley

The Township of Drummond/North Elmsley Official Plan ('Drummond/North Elmsley OP') came into effect on July 25, 2012. The Drummond/North Elmsley OP establishes an Aggregate Resource designation that is divided into 'Pit' and 'Quarry' components on Schedule 'A'. The lands designated on Schedule 'A' include licensed pits and quarries and sand and gravel resource areas that have not been licensed. A 300 to 500 metre wide influence area around each of the pits and quarries identified on Schedule 'A' is shown on Schedule 'B'. While

Schedule 'A' includes reference to Mineral Resources in the legend box, no such lands are designated on Schedule 'A'. In this regard mineral resources are intended to include underground and open pit mining operations, and not mineral aggregate resources.

Based on a review of ARIP 189, the areas designated on Schedule 'A' that are not the site of a pit or quarry have been identified as Sand and Gravel Deposits of Tertiary Significance.

However, not all of the Sand and Gravel Deposits of Tertiary Significance shown in ARIP 189 have been identified as reserve areas on Schedule 'A' and no information is available on why certain areas were selected and others were not. No



Official Plan of the Township of Drummond/North Elmsley

> Official Township Consolidation Adopted by Council May 2011 Approved with Minister's Modifications July 2012

> > DELCAN CORPORATION TO-1248-TOK





bedrock areas have been identified on Schedule 'A'

Section 2.3 sets out a number of objectives, with two dealing with mineral aggregate resources:

2.3.2 To protect the natural resources and natural heritage features of the Township, such as prime agricultural lands, wetlands, forestry resources, aggregate resources, sensitive waterfront areas, and other identified environmental features which have contributed to the natural character of the Township;

2.3.3 To protect existing land uses from the impacts of incompatible development;

Section 3.11.2 establishes the Influence Areas shown on Schedule 'B' as follows:

- a) 500 metres from an open quarry and from the boundary of land designated Aggregate Reserve-Quarry
- b) 300 metres from an open pit and from the boundary of land designated Aggregate Reserve-Pit
- c) 1,000 metres from a designated Mineral Resource area

Based on a review of Schedule 'B', no 1,000 metre influence areas from 'designated Mineral Resource areas have been identified.

Section 3.11.2 indicates the following with respect to what is permitted in influence areas:

Development may be permitted within the Influence Areas in accordance with the policies of the land use designation shown on Schedule A, subject to regulation under the Ministry of the Environments D-Series Guidelines or any other applicable legislation, regulation or guideline and subject to the following additional policies.

- 1. The permitted uses shall be restricted to those uses which are permitted in the underlying land use designation and which are considered to be compatible with the adjacent designated land uses. This policy generally prohibits residential uses within the influence areas; however, residential uses may be permitted in consultation with the public agency having an interest in the influence area.
- 2. Prior to approving any development within the influence areas, Council shall require the applicant to undertake a study in order to identify the impact of the proposed development on the adjacent designated land use, and vice versa. The study shall also





- identify what measures can be undertaken to mitigate the impact. Any such study shall be undertaken in accordance with the requirements of the Province and Township.
- 3. Where the designated land use ceases operation, either by the closing of a waste disposal site or the surrendering of a license to operate a pit or quarry, the policies of this Section will continue to apply to the extent that the study referred to above shall be required, with necessary modifications, prior to the approval of any development.

Section 4.8 deals with the Aggregate Resource designation. Section 4.8.2 sets out permitted uses in this designation:

The permitted uses include aggregate extraction by means of pits and quarries as defined in the Aggregate Resources Act, as well as associate uses such as aggregate storage, stone crushing plants, concrete batching plants, asphalt batching plants and accessory uses. Forestry, open air recreation and agriculture are also permitted uses.

Section 4.8.3.3 and 4.8.3.4 below set out the process under which new pits and quarries will be approved:

- 4.8.3.3 Existing licensed pits and quarries shall be zoned for such use in the implementing Zoning By-law. However, where lands are reserved for future pit or quarry use, they shall be placed in a separate zone category in the implementing Zoning By-law. No new pit or quarry, except a wayside pit or quarry, shall be permitted except by an amendment to the Zoning By-law. Where a proposed amendment to the Zoning By-law is required, Council may require supporting studies such as those listed in Section 4.8.3.6 below.
- 4.8.3.4 In areas designated Aggregate Resource Quarry, any future application to rezone the land to permit the establishment of a quarry shall not extend the quarry operation beyond the limit of the Aggregate Resource Quarry designation. In the case of lands designated Aggregate Resource Pit, however, any future application to rezone the land to permit the establishment of a pit may extend the pit operation beyond the limit of the Aggregate Resource Pit designation, provided the general intent of this Plan is maintained.

The two above policies indicate that if lands are identified as reserve areas for gravel pit development, only an Amendment to the Zoning By-law is required to establish a new pit. If there is a desire to establish a new gravel pit on lands not identified as a reserve area, an Official Plan Amendment would be required. Applications to expand or develop a new quarry would require an Official Plan Amendment.





Section 4.8.3.5 establishes an additional policy on Influence Areas and it indicates the following:

This Plan will protect aggregate operations from 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. As provided in the Influence Areas policies of Section 3.11, lands adjacent to existing pits and quarries and areas reserved for future extraction are limited to uses which are compatible with aggregate extraction activities. Development which would preclude or hinder the establishment of new operations or access to resources in the Influence Area requires an Official Plan Amendment and will only be permitted if the following criteria are addressed:

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

The Township is currently undertaking an Official Plan Review and in a draft of the proposed Amendment dated June 2023, it was proposed to:

- d) Reduce the width of the influence area from bedrock resource areas from 1,000 metres to 500 metres in Section 3.13.2;
- e) Refine the list of permitted uses in the Aggregate Resource designation in Section 4.8.2;
- f) Make it clear that an Amendment to the Official Plan is required to establish a non-resource use on lands designated Aggregate Resources and require only a Zoning By-law Amendment for non-resource uses in the influence area shown on Schedule 'B'; and
- g) Add a new section on Bedrock Aggregate Resources in Section 4.8.4 as set out below:

Mapped bedrock information has been provided to the Township through the Ministry of Natural Resources and Forestry. Vast areas of the Township are predominated by the Oxford and March bedrock formations. From the mapping supplied, the Township has identified areas of the municipality where there are potential sources of bedrock aggregate that could be exploited. The Oxford formation, a bedrock resource that is generally suitable for all industry uses, is considered to be the most probable bedrock source of aggregate that has the potential to be quarried to serve local aggregate needs. The potential bedrock aggregate resource identified by the Province has been included on Schedule B, Constraints. An Official Plan amendment will be required to development





these bedrock resources and will be expected the amendment criteria set out in this Plan.

Where development is proposed within or adjacent to an area of potential bedrock source as identified on Schedule B, the policies of the Influences Area section of the Plan shall apply.

With respect to the last change, it does appear as if Schedule 'B' is proposed to be modified to identify additional resource area, however, additional analysis is required to understand the nature of the resource areas identified. It is noted that the last available information on the municipal website is that a public meeting was held on September 5, 2023.

6.3 Township of Lanark Highlands

In December 2012, the Province approved the Lanark Highlands Official Plan. The Official Plan establishes three mineral aggregate resource-related designations on Schedules 'A' and 'A2': 'Pit', 'Quarry' and 'Pit and Quarry'. These designations appear to apply only to licensed properties; although it appears if some of the properties so designated are no longer licensed as of 2024.

Schedule 'B' identifies lands that are the site of 'Mineral Aggregate Reserves'. Based on a

review of ARIP 189, some of these areas have been identified as Sand and Gravel Deposits of Primary and Secondary Significance. However, not all of the Sand and Gravel Deposits of Primary and Secondary Significance shown in ARIP 189 have been identified as reserve areas on Schedule 'B' and no information is available on why certain areas were selected and others were not. In addition, the shapes of the areas so identified differ from ARIP 189 in some cases.

Section 4.0 of the Official Plan is entitled 'Our Resource Lands'. Section 4.1 establishes how these lands have been so identified:

For the purposes of this Plan, lands designated for mineral aggregate extraction shall be identified as Mineral Resource Policy Area and



OFFICIAL PLAN

Office Consolidation

As approved by the Ministry of Municipal Affairs and Housing (December 17, 2012) and Ontario Municipal Board (August 4, 2016)

and

As amended by Official Plan Amendments No 1 and 2

August 2016





categorized in accordance to extraction type ("pit", "quarry" or "pit and quarry") on Schedule A and A2 – Land Use and Transportation.

Section 4.1.1 establishes the following permitted uses in the Mineral Aggregates designation:

- Pits and quarries
- Wayside pits and quarries
- Portable asphalt plants and concrete plants
- Agricultural uses excluding any accessory building or structure
- Conservation and natural resource management uses excluding any accessory building or structure
- Uses accessory to an aggregate extraction operation such as crushing and screening operations, machinery storage facilities and office space;
- Permanent asphalt and concrete plants may be permitted subject to site specific zoning and site plan control pursuant to the provisions of Section 41 of the Planning Act, R.S.O. 1990, as amended.

Section 4.1.2.1 states the following with respect to prohibited uses in this designation:

Development, including changes in land use and the creation of new lots for residential, commercial, institutional, recreational or industrial development which has the potential to preclude or hinder future aggregate extraction or the expansion of existing extraction operations or resource use shall be prohibited within the Mineral Aggregate Resource Policy Area.

The above policy only applies to lands that designated on Schedules 'A' and 'A2' and not to the reserve areas identified on Schedule 'B'.

Sections 4.1.3.1 requires only a Zoning By-law Amendment if a new pit or quarry is proposed on lands that are already designated. Section 4.1.3.2 requires an amendment to the Official Plan to facilitate the establishment or addition of previously unlicensed area to a licensed extraction operation and it also identifies study requirements.

Section 4.1.4 deals with the reserve areas identified on Schedule 'B' and it indicates the following in the introductory paragraph:





Potential pit and quarry resources are identified as Mineral Aggregate Reserve on Schedule B – Development Constraints as a constraint overlay. It is the intent of this Plan that these areas be protected by directing permanent development away from them, and from adjacent land as set out in Section 4.1.5. Development and activities which would preclude or hinder the establishment of new extractive operations or access to the resources shall only be permitted if it is demonstrated that:

- 1. The resource use would not be feasible; or
- 2. The proposed land use or development serves a greater long-term public interest; and
- 3. Issues of public health, public safety and environmental impact are addressed.

Section 4.1.4.1 then indicates that any application to establish a pit or quarry on the reserve lands shall require an Official Plan Amendment.

Section 4.1.5 establishes adjacent land areas, which are areas located within 300 metres (984 feet) of a Mineral Aggregate Resource Policy Area intended or utilized for a licensed pit operation and 500 metres (1640 feet) from a licensed quarry operation. Within these areas, incompatible development, including lot creation shall only be permitted subject to the following criteria:

- 1. Hydrogeological investigations conducted by a qualified professional conclusively demonstrate that the proposed non extraction development can be adequately serviced by water and sewer services in a manner which will not impede continued existing and proposed extraction operations.
- 2. Any other investigation as required by the development approval authority such as traffic studies, noise studies, vibration studies, slope stability studies, air quality impact studies etc. are carried out and demonstrate that the proposed development can proceed without impeding the continued operation of the existing licensed operations and future operations on reserves. Such studies are to be carried out by a qualified professional.

It is noted later in the Official Plan in Section 8.4.14 that a 'Mineral Aggregate Study' is required where development is proposed within 300 metres of an identified pit, 500 metres of an identified aggregates operation or 500 metres of any lands identified as Bedrock Constraints. No areas of Bedrock Constraints are identified on the schedules to the Official Plan.





On December 6, 2022 the Township adopted Official Plan Amendment 3 (now known as Official Plan Amendment 8), which was the culmination of an Official Plan update process. The following changes were made to the introductory paragraph of Section 4.0:

Aggregate resources such as sand, gravel and limestone have been evaluated and appropriate land use policies have been developed to ensure the wise use and conservation of these resources for future generations. Aggregate resources such as sand, gravel and limestone and mineral resources such as high-purity marble extracted at the Tatlock Quarry for industrial mineral applications have been evaluated and appropriate land use policies have been developed to ensure the wise use and conservation of these resources for future generations.

The most significant bedrock mineral resource in the Township is the Tatlock marble deposit, quarried by OMYA Canada Ltd. and processed at the company's plant in Perth. This is not technically an aggregate deposit, although the quarry operates under the Aggregate Resources Act. It is a world-class industrial mineral (calcium carbonate) deposit, significant for its high purity, brightness and whiteness from which a range of ground products are made for use in the paper, paint, and plastics industries.

It should be noted that there has been past production of iron from several magnetite deposits and there is current exploration for gold in the Township. Iron mining falls under the policies of the Mining Act. There is potential for development of magnetite and other non-aggregate minerals on both Crown Land, through recording of mining claims, and on private land under the policies of the Mining Act.

It is noted that the above section deals with both mineral aggregate resources (which is the subject of the ARMP) and mineral mining and deposits. Minor changes were also made to the uses permitted such that it is now proposed to read as follows:

The following uses are permitted:

- Pits and quarries;
- Agricultural uses excluding any accessory building or structure;
- Conservation and natural resource management uses excluding any accessory building or structure;





- Uses accessory to an aggregate extraction operation such as crushing, screening and recycling operations, production of secondary related products, machinery storage facilities and office space;
- Permanent and portable asphalt and concrete plants.

Minor changes were also proposed to Sections 4.1.3.1 and 4.1.3.2 to strengthen the intent of the policies such that the policies are proposed to read as follows:

- 4.1.3.1 An amendment to the Official Plan is required for the establishment of a new licensed operation, for the enlargement of an existing licensed operation beyond the limits of the areas shown on Schedules A and A2, and for a previously unlicensed area to a licensed extraction operation and shall be subject to the requirements of the Aggregate Resources Act and an amendment to the Zoning By-Law.
- 4.1.3.2 Where an Official Plan amendment is proposed which could result in the redesignation of lands to Mineral Aggregate Resource Policy Area in order to facilitate the establishment or addition of previously unlicensed area to a licensed extraction operation under either the Aggregate Resources Act or the Mining Act, depending upon the commodity to be extracted, and where the limits of the extraction operation could ultimately be located within 300 metres (984 feet) of a residential, institutional or commercial use on another lot for a licensed pit and, 500 meters (1640 feet) for a licensed quarry, and 1000 metres (3280 feet) for a mining operation under the Mining Act, such proposed amendment shall be supported by the following:
- 1. Hydrogeological investigations, in accordance with either the Aggregate Resources Act or the Mining Act, depending upon the commodity to be extracted, conducted by a qualified professional, which demonstrate conclusively that the extraction operation will not result in negative impacts on the existing non-extraction development's water and sewer services:
- 2. Any other investigation as required by the approval authority such as traffic studies, noise studies, vibration studies, slope stability studies etc. are carried out and demonstrate conclusively that the proposed extraction operation can proceed without negative impacts on the existing non-extraction development. Such studies are to carried out by qualified professionals.

Lastly, Section 4.1.4.1 dealing with Mineral Aggregate Reserves was replaced with the following:





Residential and other sensitive land uses shall not be located within 300 metres of areas intended or used for a licensed pit operation or within 500 metres of areas intended or used for a licensed quarry operation unless it can be demonstrated, in accordance with Section 4.1.4 that such uses will not preclude or hinder existing and future extractive operations.

Schedule 'B' was also replaced by Official Plan Amendment 8 such that now includes all Sand and Gravel Resource Areas of Primary, Secondary and Tertiary Significance in line with the mapping that exists in ARIP 189. Official Plan Amendment 8 was approved by the County with modifications in July 2024.

Municipality of Mississippi Mills

On June 26, 2018, the Council for the Municipality of Mississippi Mills adopted the Community Official Plan ('Mississippi Mills OP') and it was later approved by Lanark County on December 4, 2019.

The Mississippi Mills OP includes an Aggregate Resource land use designation that applies to licensed operations. The location of land use designation are determined by reviewing interactive mapping on the municipal website and no differentiation between pits and quarries is

provided. Section 3.5.2 of the Official Plan also indicates that lands within this designation include 'reserve areas'. A review of the interactive mapping indicates that a few of the Sand and Gravel Resource Areas of Tertiary Significance identified in ARIP 189 have been identified. However, other such areas in ARIP 189 have not.

Section 3.5 of the Official Plan states the following with respect to the location of mineral aggregate resources:

In Mississippi Mills, there are only small reserves of sand and gravel and these are generally of low quality. Mississippi Mills does contain large areas of good bedrock resources east of the Canadian Shield.

MUNICIPALITY OF MISSISSIPPI MILLS COMMUNITY OFFICIAL PLAN

AS ADOPTED BY COUNCIL December 13, 2005 AND APPROVED WITH MODIFICATIONS BY THE MINISTER OF MUNICIPAL AFFAIRS AND HOUSING August 29, 2006

OPA 21 Five-Year Review, By-law 18-67 AS ADOPTED BY COUNCIL June 26, 2018 AND APPROVED WITH MODIFICATION BY LANARK COUNTY (By-law No. 2019-38) December 4, 2019 Including: OPA 24

- Subject to Appeal PL200045 (Burnt Lands ANSI) appeal withdrawn

With respect to the importance of mineral aggregate resources, Section 3.5 further states the following:





This Plan recognizes that aggregate resources are necessary and valuable and has established policies which protect the viable sand and gravel resources and licensed bedrock resources. At the same time, the Plan recognizes that the utilization of aggregate resources has an impact on other land uses and the environment and has sought to ensure adequate protection for both the aggregate industry, the environment and surrounding land owners in the vicinity of the resource.

Section 3.5.1 establishes a goal and a number of objectives as they relate to mineral aggregate resources and they are below:

It is a goal of this Plan to: Protect a sufficient supply of the non-renewable aggregate resources and to ensure proper utilization of the resource. The following objectives are designed to implement the goal:

- 1. Designate the resources on the Land Use Schedule so that resource areas are clearly identified.
- 2. Ensure that the utilization of the resources takes place in an orderly and controlled manner.
- 3. Protect legally existing extractive operations.
- 4. Restrict development on and adjacent to known aggregate deposits to those uses which are compatible with and/or supportive of the aggregate industry.
- 5. Prohibit new residential lots on aggregate deposits or within the influence area of the Aggregate Resource designation.
- 6. Require that development within rural areas is buffered and set back a minimum distance from aggregate deposits.
- 7. Require that extraction and processing of aggregate deposits has a minimal impact on the natural and built environments.
- 8. Require the timely and satisfactory rehabilitation of lands once the resource is exhausted in accordance with the Aggregate Resources Act licences and site plans.

In areas of Aggregate Resource - Pit, Section 3.5.2.1 permits pit operations together with accessory uses, such as crushing facilities, stockpiles, offices, open and enclosed storage and screening operations. Asphalt plants, ready-mix concrete plants and aggregate transfer stations are permitted within Class A pit operations and prohibited in Class B pit operation. In areas of





Aggregate Resource - Quarry, Section 3.5.2.2 permits pit and quarry operations together with accessory uses, such as crushing facilities, stockpiles, offices, open and enclosed storage and screening operations. Asphalt plants, ready-mix concrete plants and aggregate transfer stations may also be permitted.

For areas designated Aggregate Resource - Quarry, Section 3.5.3.4 requires an Official Plan Amendment for any proposal to expand beyond the boundaries of the designation shown on the Schedule. Section 3.5.3.6 also permits small pit operations (Class B licence) which excavate up to a maximum of 20,000 tonnes of material per year, within lands designated Rural or Agriculture without requiring an Official Plan Amendment.

In addition to the above, Section 3.5.4.1 establishes influence areas for pits and quarries and it reads as follows:

The concept of an influence area is recognized as a means of protecting sensitive land uses from pits and quarries and protecting existing pits and quarries and lands designated Aggregate Resource from encroachment by incompatible land uses. The Zoning By-law shall incorporate the following separation distances from sensitive land uses:

- 150 m for licensed pits above the water table
- 300 m for licensed pits below the water table
- 300 m for Aggregate Resource-Pit reserve areas
- 500 m for licensed quarries above or below the water table
- 500 m for Aggregate Resource-Quarry reserve areas

This section also indicates that the distances mentioned above apply both to pits and quarries from sensitive land uses and from sensitive land uses to pits and quarries. Section 3.5.4.2 indicates that if a vacant lot is located in this separation distance, then the approval of development on such vacant lot shall require the approval of the Committee of Adjustment, who will need to be satisfied that:

- The resource use would not be feasible; or
- The proposed land uses, or development serves a greater long-term public interest; and
- Issues of public health, public safety and environmental impact are addressed.





With respect to the matters to be considered in cases such as these, this section goes on to state the following:

The proposal will also be assessed in terms of availability of natural vegetative screening, level and type of aggregate activity taking place on the abutting lands, characteristics of surrounding agricultural activities and the likelihood for negative impact. The Committee of Adjustment may impose a condition on the decision including the registration of a covenant on the title of the property stating that the lot is adjacent to an aggregate resource and may therefore be subjected to noise, dust, odours and other nuisances associated with aggregate activities.

Section 3.5.5.1 establishes a number of criteria that need to be considered if an application to remove lands from the designation is submitted. This section states the following:

The removal of part of the Aggregate Resource designation from the Land Use Schedule shall require an amendment to this Plan. Such an amendment shall provide justification for the change in designation and clearly demonstrate and document the need for the alternate land use. In considering such amendments, Council shall take into account the following:

- i. evidence provided by the applicant that aggregate extraction is not feasible due to quality, quantity or other development constraints;
- ii. the necessity of the alternate land use in comparison to the necessity of the aggregate resource:
- iii. the reason for the choice of the location and consideration given to alternate locations on non-aggregate lands;
- iv. the consideration given to the option of sequential land use in which the aggregate is removed prior to development of land for the proposed use; and, the aggregate resource has been depleted and the site fully rehabilitated in accordance with the conditions of the Aggregate Resources Act license and site plans.

6.5 Township of Montague

On August 3, 2010, the Council for the Township of Montague adopted its Official Plan and it was later updated on April 18, 2023. Schedule 'A' designates all existing licensed pits and quarries as 'Mineral Resource - Aggregate' and identifies each licensed property as a pit or quarry. Schedule 'B' identifies 'Potential bedrock Sources of Mineral Aggregate'. The area identified does not include lands within 500 metres of the Rideau River and Canal, Provincially significant wetlands or any settlement area. The area identified also does not include lands





within varied distances from some but not all watercourses and other environmental features; however some of the boundaries of the area so identified do cross watercourses shown on the schedule. Based on a review of ARIP 189, it would appear that only areas with a drift thickness of 8 metres or less have been identified.

Section 3.2 of the Official Plan deals with the Mineral Resource designation. In this regard, the following is stated in Section 3.2.1 (Intent of the Designation):

The importance of mineral aggregates and minerals and their protection for long term use is recognized through the Mineral Resource designation. This designation is intended to be assigned to lands occupied by licensed pits or quarries, as well as lands containing deposits of mineral aggregates or minerals. Lands have been designated on the basis of information on the extent of resources and existing operations supplied by the Ministry of Mines.

This section goes on to describe the resources in the Township:

Lands designated on the basis of existing

licensed pits and existing licensed quarries are designated as Mineral Resource – Aggregate on Schedule A. In general, the Township is virtually devoid of natural granular material, and it is recognized that as surficial sand and gravel aggregate resources within and adjacent to the Township are exhausted, bedrock sources may become of interest. Official Plan Amendment applications to develop these bedrock aggregate resources may, therefore, be expected.

The source of the bedrock mapping in the Official Plan is identified below:

Mapped bedrock information has been provided to the Township through the Ministry of Natural Resources and Forestry. Vast areas of the Township are predominated by the Oxford and March bedrock formations. From the mapping supplied, the Township has identified areas of the municipality where there are potential sources of bedrock aggregate that could be exploited.







The Oxford formation, a bedrock resource that is generally suitable for all industry uses, is considered to be the most probable bedrock source of aggregate that has the potential to be quarried to serve local aggregate needs. After having given regard to environmental constraints imposed by the presence of significant wetlands, settlement areas and major water bodies such as the Rideau River, this potential bedrock aggregate resource has been identified on Schedule B. Accordingly, Official Plan amendment applications to develop these bedrock resources may be expected and will be generally supported by the Township, subject to meeting the amendment criteria set out in this Plan. Where development is proposed within or adjacent to an area of potential bedrock source as identified on Schedule B, the policies of the Land Use Compatibility section of the Plan shall apply.

In this regard, Section 2.17.1.1 of the Official Plan applies and it states the following in part:

It is a policy of this Plan that existing or potential mineral aggregate resources will be protected from activities that would preclude or hinder their establishment, expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact.

These policies apply to lands that are designated 'Mineral Aggregate Resources' and lands adjacent to the designation and to lands that are within or adjacent to potential bedrock sources of mineral aggregate as shown on Schedule 'B'.

The policies of Section 2.1.7.1.1 go onto state the following:

The development of an incompatible or conflicting land use such as residences, day care centres and educational and health facilities in the foregoing development contexts shall be permitted only if it can be demonstrated to the satisfaction of the approval authority that all issues relating to public health, public safety and environmental impacts can be addressed through setbacks or other mitigation measures without precluding or hindering the use of, or access to, the mineral resource.

Section 2.17.1.2 deals with influence areas and it states the following in part:

The concept of an influence area is recognized as a means of protecting against incompatible land uses in the vicinity of mineral resources and to protect existing pits and quarries from the encroachment of incompatible land uses. Although an influence area is that area where impacts may occur or be experienced, it is not a strict buffer or setback area where development adjacent to the Mineral Aggregate Resource designation or operations is automatically prohibited. The proponent of a mineral or mineral aggregate operation, or the proponent of a proposed encroaching incompatible land use, as applicable, shall be required to identify the





potential impacts and to assess whether they can be mitigated to an appropriate level when measured against Provincial standards. The influence area applies between an incompatible or conflicting land use and extractive operations and vice versa.

The influence area policies apply to lands within 300 metres of Class A and B below water table pits, 150 metres from Class B above water table pits, 500 metres from a quarry, 300 metres from identified sand and gravel resources areas (which are not identified in the Township) and 500 metres from bedrock resource areas.

Section 2.17.1.3 then includes the relevant 'preclude or hinder' policy from the PPS (2024):

Development which would preclude or hinder the establishment of new operations or access to mineral or mineral aggregate resources will only be permitted if:

- Resource use would not be feasible due to qualitative, quantitative or other constraints;
 or
- 2. The proposed land uses or development serves a greater long term public interest; and
- 3. Issues of public health, public safety and environmental impact can be addressed.

Section 3.2.2 sets out permitted uses and indicates that the aggregate-related uses permitted include pits and quarries, as well as all associated facilities used in extraction, transport, beneficiation, processing or recycling of mineral aggregate, or the production of secondary related products. These uses include extractive operations, crushing facilities, stockpiles, washing and screening operations, asphalt plants, concrete plants and aggregate transfer stations, as well as accessory uses to extractive operations including asphalt plants, concrete batching plants, recycle stockpile areas for glass, asphalt, and concrete and aggregate transfer stations.

Section 3.2.3.3 indicates that any new designation or significant expansion proposal involving lands beyond the limits of the designated area shall require an amendment to the Official Plan. This section also includes a 'notwithstanding provision' that states the following:

Lands within the Mineral Resource designation that are not zoned for mineral aggregate or mineral mining operations shall be placed in an appropriate zoning category in the Zoning Bylaw which will allow rurally-oriented uses, but which will not allow sensitive land uses such as residences, day care centres and educational and health facilities. Notwithstanding the foregoing, sensitive uses may be permitted, subject to the agreement of the Ministry of Mines, as applicable, and the Township and provided further that:





- A mineral resource use would not be feasible due to qualitative, quantitative, or other constraints; or
- 2. The proposed land use serves a greater long term public interest; and
- 3. All issues related to public health and safety, as well as environmental impact, can be addressed.

The above section permits sensitive uses within mineral resource areas subject to essentially meeting the 'preclude or hinder' test set out in the PPS (2024).

6.6 Tay Valley Township

On February 3, 2016, the Council for Tay Valley Township adopted its Official Plan ('Tay Valley OP'). Given the size of the Township, the Tay Valley OP has three land use schedules (Schedule 'A'), with each applying to the former Bathurst, South Sherbrooke and North Burgess Townships. On all Schedules, active gravel pits are shown in yellow and aggregate resource areas that are considered to be 'inactive' are shown in red. Based on a review of ARIP 189 some of these areas have been identified as Sand and Gravel Deposits of Secondary and Tertiary Significance. However, not all of the Sand and Gravel Deposits of Secondary and

Tertiary Significance shown in ARIP 189 have been identified as reserve areas on Schedule 'A' and no information is available on why certain areas were selected and others were not. In addition, the shapes of the areas so identified differ from ARIP 189 in some cases.

Section 3.3 deals with the Mineral Resource designation and the following is stated in Section 3.3.1 (Intent of the Designation):

The most significant aggregates are sand, granite, gravel and sandstone (for silica production), while the only significant mineral is graphite. The location of Aggregates and other Mineral Resources is shown on Schedule A. In certain cases, areas having mineral aggregate or mineral potential have been excluded from the Mineral Resource







designation due to contextual considerations such as proximity to existing incompatible land uses or the shorelines of water bodies.

In certain areas designated Mineral Resource, there are soils designated as Classes 1 to 3 in the Canada Land Inventory for Agricultural Capability. It is the intent of the Plan that agricultural activities can occur in the Mineral Resource designation, but that the long term protection of the mineral resource should take precedence.

In some areas designated Mineral Resource on the basis of the extent of potential mineral resources, non-mineral development may occur, provided that such development would not compromise the broader objectives with respect to mineral resource protection and extraction.

It is also the intent of this Plan that where lands designated Mineral Resource have a soil capability rating such that Classes 1 to 3 soils predominate, mineral aggregate and mineral mining operations be conducted in such a manner so as to allow, where feasible, for the subsequent agricultural use of such lands. Aggregate areas are often important recharge areas for groundwater and decisions regarding aggregates should consider this important function.

Section 3.3.2 indicates that the aggregate-related uses permitted include pits and quarries, as well as all associated facilities used in extraction, transport, beneficiation, processing or recycling of mineral aggregate, or the production of secondary related products. These uses include crushing facilities, stockpiles, washing and screening operations, asphalt plants, concrete plants and aggregate transfer stations.

Section 3.3.3 indicates that any expansion proposal involving lands beyond the limits of the designated area requires an amendment to the Official Plan. Section 3.3.3.3 states the following with respect to alternative uses on lands that are not zoned for extraction uses within the Mineral Resource designation:

Lands within the Mineral Resource designation that are not zoned for mineral aggregate or mineral mining operations shall be placed in an appropriate zone category in the Zoning By-Law which may allow non-mineral-oriented uses under circumstances such as historical existing land use patterns, an absence of existing mineral-oriented uses in the area, or a low likelihood of future extraction either occurring in the vicinity or being adversely affected by non-mineral uses in the event that it were to occur. Where such lands also have a soil capability rating such that Classes 1 to 3 soils predominate, the Zoning By-Law may permit agricultural uses, including associated buildings and structures.





Section 3.3.3.6 then deals with a circumstance where an Amendment to the Official Plan is proposed to remove the Mineral Resource designation:

In evaluating an amendment to the Official Plan to change the designation from Mineral Resource to another designation, the Township shall be satisfied that a mineral resource use would not be feasible due to qualitative, quantitative or other constraints.

Alternatively, it must be demonstrated that the proposed use for which the amendment is sought is required in the longer term public interest and that issues related to public health and safety, as well as environmental impact, can be addressed. In addition, the impact of such redesignation on the potential to use adjacent lands designated Mineral Resource for mineral or mineral aggregate uses shall be considered.

While the Tay Valley OP does not identify influence areas on a schedule, Section 3.3.3.10 states the following:

It is a policy of this Plan that existing sensitive land uses such as residences, day care centers and educational and health facilities shall be protected from the establishment of new mineral aggregate and mining operations or expansions where such establishment or expansion would be incompatible for reasons of public health, public safety or environmental impact. Influence areas in relation to pits typically range from 150 to 300 meters, depending upon the license classification of the pit, as well as whether the pit excavation extends above or below the water table. The influence area in relation to quarries is generally 500 meters.

6.7 Summary of Mapping in the Local Official Plans

Section 6.2.2.1 of the County SCOP indicates that:

The identification of mineral aggregate resources in local Official Plans shall be based on areas which are currently licensed or areas with known high quality aggregate deposits as follows:

- 1. Mineral Aggregate Resource Licensed Pit
- 2. Mineral Aggregate Resource Licensed Quarry
- 3. Mineral Aggregate Resource Sand and Gravel Resource
- 4. Mineral Aggregate Resource Bedrock Reserve





Table 8 below summarizes how each of the local municipalities with rural areas have mapped aggregate resources.

| Table 8: Summary of Mapping of Aggregate Resources in Local Official Plans | | | | |
|--|---|--|--|--|
| Local Municipality | Does the OP identify Pits and Quarries on a Schedule? | Does the OP identify Mineral Aggregate Reserve areas on a Schedule and/or in policy? | Does the OP identify influence areas on a Schedule and/or in policy? | |
| Beckwith | Yes | Schedule 'A' identifies a number of Sand and Gravel Deposits of Tertiary Significance - however, not all such areas from ARIP 189 are identified. No bedrock resources are identified in the text or on the schedules | Influence areas are not identified on a schedule. Influence areas are established through policy and they are 300 metres from a pit and 500 metres from a quarry | |
| Drummond / North Elmsley | Yes | Schedule 'A' identifies a number of Sand and Gravel Deposits of Tertiary Significance - however, not all such areas from ARIP 189 are identified. No bedrock resources are identified in the text or on the schedules | Schedule 'B' identifies a 300 to 500 metre influence area around each of the pits and quarries in the Township | |
| Lanark Highlands | Yes | Schedule 'B' identifies a number of Sand and Gravel Deposits of Primary and Secondary Significance - however, not all such areas from ARIP 189 are identified and the shapes of some areas differ from ARIP 189. No bedrock resources are identified on the schedules - however, there is a reference in policy to bedrock constraints | Influence areas are not identified on a schedule. Influence areas are established through policy and they are 300 metres from a pit and 500 metres from a quarry | |
| Mississippi Mills | Yes | The interactive mapping identifies a number of Sand and Gravel Deposits of Tertiary Significance - however, not all such areas from ARIP 189 are identified. No bedrock resources are identified in the text or on the schedules | Influence areas are not identified on a schedule. Influence areas are established through policy and they are 300 metres from a pit and 500 metres from a quarry | |
| Montague | Yes | Schedule 'B' identifies Potential Bedrock Sources of Mineral Aggregate based on a constraint analysis | Influence areas are not identified on a schedule. Influence areas are established through policy | |





| Table 8: Summary of Mapping of Aggregate Resources in Local Official Plans | | | | |
|--|---|--|--|--|
| Local Municipality | Does the OP identify Pits and Quarries on a Schedule? | Does the OP identify Mineral Aggregate Reserve areas on a Schedule and/or in policy? | Does the OP identify influence areas on a Schedule and/or in policy? | |
| | | | and they are 300 metres from a | |
| | | | pit and 500 metres from a quarry | |
| Tay Valley | Yes | Schedule 'A' identifies 'inactive aggregate resource areas that are considered to be Sand and Gravel Deposits of Secondary and Tertiary Significance - however, not all such areas from ARIP 189 are identified. | Influence areas are not identified on a schedule. Influence areas are established through policy and they are 300 metres from a pit and 500 metres from a quarry | |

7. OPTIONS TO CONSIDER MOVING FORWARD

The purpose of this section of the ARMP is to identify a number of options respecting potential mapping and text changes to the Lanark County SCOP to ensure that it is consistent with the PPS (2024).

7.1 Options for the Mapping of Licensed Pits and Quarries

Section 4.5.2.4 of the PPS (2024) states the following:

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 or operation ceases to exist, policy 4.5.2.5 continues to apply.

At the present time, Schedule 'A' to the SCOP designates all licensed mineral aggregate resource uses as 'Licensed Aggregate Extraction Operation'. Each of the six local municipalities with rural areas also designate or identify licensed pits or quarries as well on schedules to their Official Plans. The Lanark County SCOP requires that an Official Plan Amendment be obtained to either designate lands for mineral extraction purposes or to remove





the 'Licensed Aggregate Extraction Operation' from the schedule. While most of the local Official Plans also require Official Plan Amendments, not all do in all circumstances.

Moving forward, there are two alternatives to the current situation of requiring amendments to two Official Plans to establish a new pit or quarry and they are presented below for discussion purposes:

Alternative 1 - The Lanark County SCOP does not designate licensed pits and quarries and instead requires that new pits and quarries be designated in local municipal Official Plans only. This means that the responsibility for approving requests to establish new pits and quarries would be the responsibility of the local municipality, with the County ultimately being responsible for the approval of the local Official Plan Amendment. If this alternative were selected, the SCOP could include County-wide policies to guide the review of applications on a consistent basis.

Alternative 2 - The Lanark County SCOP does not designate licensed pits and quarries and instead requires that new pits and quarries only require a re-zoning in the applicable local municipality. This means as per Alternative 1 that the responsibility for approving requests to establish new pits and quarries would be the sole responsibility of the local municipality and only a re-zoning would be required in these circumstances. In this case, the County would only be a commenting agency. If this alternative were selected, the SCOP could include County-wide policies to guide the review of applications on a consistent basis.

7.2 Options for the Mapping of Resource Areas

Section 4.5.1.1 of the PPS (2024) requires the long-term protection of mineral aggregate resources and it reads as follows:

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.

The PPS (2024) defines deposits of mineral aggregate resources as follows:

Deposits of mineral aggregate resources: means an area of identified mineral aggregate resources, as delineated in Aggregate Resource Inventory Papers or comprehensive studies prepared using evaluation procedures established by the Province for surficial and bedrock resources, as amended from time to time, that has a sufficient quantity and quality to warrant present or future extraction.





The above means that <u>all Official Plans</u>, including the Lanark County SCOP, are required to 'identify' deposits of mineral aggregate resources, including sand, gravel and bedrock resources to be consistent with the PPS (2024). Currently, only the local municipalities do this to some extent in their Official Plans as discussed in Section 6 of the ARMP.

Before reviewing mapping options, it is important to note that the <u>primary purpose for mapping resource areas</u> is to identify those resource areas where the 'preclude or hinder' test will apply. As noted in Section 2 of the ARMP, when deposits of mineral aggregates are identified in an Official Plan, Section 4.5.2.5 of the PPS (2024) is triggered and this section reads as follows:

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 resources 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 public interest; and
- c) issues of public health, public safety and environmental impact are addressed.

In addition to the above, the mapping of deposits of aggregate resources is also intended to ensure that the mineral aggregate resources are protected for long-term use, which is also a requirement of Section 4.5.1.1 of the PPS (2024).

However, it is important to note that the mapping:

- does not establish the principle of establishing a resource use on the lands that are mapped;
- does not mean that the use of lands for a mineral aggregate operation is a preferred land use over other land uses; and
- does not establish an easier or less rigorous approval process for new pits and quarries, since the application requirements are the same regardless of location.

In terms of how the mapping is incorporated in Official Plans, the preferred approach is to identify the mapped area on a schedule, where it would be identified as sand and gravel or bedrock resource areas. The areas so mapped would not constitute a land use designation, meaning that the mapped areas would 'sit on top' of the primary land use designations that typically apply to agricultural, rural and environmental areas.





Mapping Decision 1

The first decision to make is on the source information for what could be mapped in the SCOP. In this regard, ARIP 189 recommends that only Sand and Gravel Resource Areas of Primary and Secondary Significance be identified and protected where possible. Given the recommendations made in ARIP 189, and the reliance placed on ARIP 189 in the PPS (2024), this would be the minimum requirement. However, a number of local municipalities have also identified certain Sand and Gravel Resource Areas of Tertiary Significance in their Official Plans, and this could be considered in the SCOP as well. As a result, a decision will need to be made through the ARMP process on whether Sand and Gravel Resource Areas of Tertiary Significance should also be identified in the SCOP.

With respect to Bedrock Resource Areas, ARIP 189 recommends that Select Bedrock Resource Areas in four geologic formations that have a drift thickness of 8 metres or less also be identified as per the extract of ARIP 189 below:

Based on the quality of the aggregate produced, areas of the March, Oxford, Gull River and Bobcaygeon formations that are covered by less than 8 m of overburden have been identified as Selected Bedrock Resource Areas and are identified on Map 2.

Given the recommendations made in ARIP 189, and the reliance placed on ARIP 189 in the PPS (2024), this would be the minimum requirement. However, this does not prevent the SCOP from identifying other bedrock resource areas, based on local knowledge. As a result, a decision will need to be made through the ARMP process on whether additional bedrock resource areas beyond those identified as Selected Bedrock Resource Areas by ARIP 189 should also be identified in the SCOP.

Mapping Decision 2

Once Mapping Decision 1 has been made, the second decision to make is whether all or some of the resource areas are to be mapped in the SCOP. In this regard, there are a number of options to consider:

Option 1 - Apply the ARIP 189 mapping as-is without any refinements. If this option were selected, all of the lands that have been identified by ARIP 189 would be mapped without regard to whether aggregate extraction was feasible or not. This also means that the 'preclude or hinder' policy test would need to be satisfied in all mapped areas when alternative land uses are proposed.





Option 2 - Apply the ARIP 189 mapping as-is except to lands within settlement areas. While this in of itself would not preclude the consideration of an application to develop a pit or quarry in a settlement area, this option would recognize that the primary purpose of settlement areas is to accommodate housing and employment.

Option 3 - Building upon Option 2, this option entails applying the ARIP 189 mapping as-is except to lands within settlement areas <u>and</u> within Provincially significant wetlands. Given that development and site alteration is not permitted by the PPS (2024) in Provincially significant wetlands, implementing this option would recognize that aggregate extraction is not feasible in these areas. It is recognized that there a number of other significant natural heritage features and areas in the County. However, it is only within Provincially significant wetlands where extraction is prohibited without exception. For all other features, extraction may be permitted subject to satisfying the no negative impact test or except in accordance with provincial and federal requirements (as it relates to fish habitat and the habitat of endangered species and threatened species).

Option 4 - Building upon Option 3, this option entails identifying other areas that should not be mapped because the feasibility of establishing a new mineral aggregate resource operation is reduced due to the nature of the existing and permitted land uses in the following areas:

- Developed shoreline residential areas; and
- Existing rural residential clusters.

Development in these areas has for the most part already occurred and establishing a new mineral aggregate resource operation within and adjacent to these areas is less feasible. In this case, there would be no public interest in requiring proponents to prepare 'preclude or hinder' studies when the feasibility of extraction is more limited.

Option 5 - this option entails identifying other lands that should not be mapped because of their sensitivity to development and/or their remote location. Such areas could include:

Lands a certain distance from an existing haul route - which would recognize that the
feasibility of extraction is affected by the distance the proposal is from an existing haul
route, either because of the high cost of the improvements required to the roads leading
to the existing haul route and/or because of the number of potential sensitive land uses
along the road leading to the haul route;





 Other lands that are considered to be sensitive to the development of a new mineral aggregate operations, such as lands within a certain distance from lakes and major rivers or a certain distance from the boundaries of settlement areas.

The feasibility of not including the above areas would need to be explored further.

7.3 Options for Implementing the 'Preclude or Hinder' Test

Section 4.5.2.5 of the PPS (2024) reads as follows:

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 resources 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 public interest; and
- c) issues of public health, public safety and environmental impact are addressed.

As set out in Section 2.2 of this report, the above is known as the 'preclude or hinder' policy. An assessment of the impacts of proposed development on the feasibility of resource extraction is required to be carried out whenever development is proposed within the deposit or adjacent to it with development being defined as development requiring a Planning Act approval (such as a Plan of Subdivision or consent).

It is noted that items a) and b) in Section 4.5.2.5 are separated by the word "or". This means that it is possible for a proposed land use or development to serve a greater long-term public interest than a proposed resource use even if it is determined that resource use would be feasible. This means that the potential exists as part of the review of any planning application to make a determination on what use is in the greater long-term public interest. No direction is provided on what could be in the greater long term public interest; however, the development of a hospital would be an example.

In addition to the above, it is noted that one of the tests is: "The resource use would not be feasible". In this regard, the presence of a resource is not in of itself a determinant of whether it is feasible to extract.

On the basis of the above, below are a number of options to consider:





Option 1 - this option entails requiring a 'preclude or hinder' study from a qualified professional when an alternative land use requiring a Planning Act approval in a mapped area is submitted. There would be no exceptions to this requirement and therefore no discretion afforded on whether such a 'preclude or hinder' study was required or not based on the context of the application and location.

Option 2 - This option involves the pre-identification of Planning Act applications that would not be subject to the 'preclude or hinder' study. The types of applications that could be exempt could include:

- a) Any form of development within settlement areas because this is where growth and development is to be directed;
- b) The establishment of one or two additional residential units because of the Provincial focus on developing additional dwelling units in response to the housing crisis;
- c) The development and/or expansion of an agricultural use, an agriculture-related use and/or an on-farm diversified use, whether it involves the development of buildings or structures or not because such uses are strongly supported by the PPS (2024) to support the viability of agricultural and rural areas;
- d) The creation of a lot to accommodate an existing habitable farm dwelling that has become surplus to a farming operation because the consolidation of farm operations is often required to support the viability of a farm;
- e) The adjustment of a lot line for legal or technical reasons because this is typically a minor adjustment;
- f) The re-zoning of land for the development or expansion of a commercial, industrial or recreational use in the Agricultural Lands and Rural Area designations provided an amendment to the local Official Plan is not required and provided the use does not include the establishment of dwelling units or accommodation units because the principal of the use has already been established by the Official Plan and because residential uses are not proposed;
- g) The expansion of a legal non-conforming use, provided such an expansion meets all of the other tests in the local Official Plan because in cases like these, the development already exists; and
- h) Any application for site plan or minor variance, regardless of location because in cases





like these, the development already exists or has already been permitted.

Option 3 - This option builds upon Option 2 and entails the establishment of a set of factors that would be assessed at the time of application to determine whether a 'preclude or hinder' study is actually required. These factors would be used to assess whether it is feasible for resource extraction to occur in the area. In this regard, the factors below can be considered to determine feasibility:

- a) The nature and location of other aggregate and non-aggregate resource uses in the area and their potential impact on the feasibility of establishing a mineral aggregate operation on the subject lands and adjacent lands;
- b) The nature and location of the potential land uses in the area based on the land use policies in the local Official Plan and zoning bylaw particularly if the land uses have yet to be established;
- c) The nature of the current road network in the area, consideration of future roads being added to the road network in the area and the ability to potentially accommodate mineral aggregate operations in the future (it is recognized the provincial highway network is the main transportation route to markets);
- d) The configuration of the parcels of land in the area and whether the parcels are individually or collectively large enough and of a shape that would support mineral aggregate operations;
- e) The depth of the overburden on the subject lands and on adjacent lands and whether the depth precludes the economical extraction of the mineral aggregate resource;
- f) The quality of the mineral aggregate resource on the subject lands and in the immediate area;
- g) The nature and potential impact of natural heritage features and areas in the immediate area on the potential for mineral aggregate operations in the area in the future;
- h) The nature and location of any sensitive surface water and ground water features in the area and its impact on mineral aggregate operations; and,
- i) The presence of significant built heritage resources, protected heritage properties, significant cultural heritage landscapes and significant archaeological resources on the subject lands or in the immediate area.





It is noted that the specific circumstances of any application will be different based on context. This is because in addition to the nature of the development proposal, the arrangement, location and nature of other land uses in the area are all site-specific considerations. With respect to the resource itself, the nature of the resource is also potentially different each time with factors such as the quality of the resource, the type of the resource, limitations on the extraction of the resource for environmental or access reasons all being conceivably different each time as well.