FUTURE CALEDON

OUR OFFICIAL PLAN

Supplementary Aggregate Policy Study

Background Report
Project Report 1 of 3

May 2024

TABLE OF CONTENTS

Part 2: Overview of Existing Caledon Official Plan Mineral Resources Goals, Objectives, and Policies

1. Aggregate Resources Goals and Objectives
2. Aggregate Resource Operations Application requirements
3. Land Use Compatibility, Sensitive Land Uses, Human Health
4. Aggregate Resources and Aggregate Operations
5. Air Quality
6. Hydrology and Hydrogeology
7. Noise
8. Natural Heritage and Environment
9. Comprehensive Rehabilitation
10. Haul Roads
11. Aggregate Recycling
12. Adaptive Management Plans
13. Impacts of Quarry Blasting
14. Cumulative Impacts - Surface Water and Groundwater
15. Monitoring and Mitigation
16. Climate Change and Greenhouse Gases
17. Peer Review Process
18. Special Policies

Part 3: Background – Historic Perspective and Context

- 1940 to 1970 Period
- 1970 to 1982 Period
- 1982 to 1992 Period
- 1992 to 2000 Period
- 2000 to 2005 Period
- 2005 to 2015 Period
- 2015 to 2020 Period
- 2020 to 2024 Period

PREFACE

The Town of Caledon is undertaking an analysis of existing Mineral Resources policies in the existing Caledon Official Plan. The intent is to update the existing municipal planning policies including some of the relevant Caledon results from the Joint Aggregate Policy Review and to use the proposed revisions to the High Potential Mineral Aggregate Resource Areas (HPMARA): Mapping Methodology Discussion Paper prepared jointly with the Region of Peel, and the Transportation Technical Paper. The Study will also build upon the adopted Aggregate Rehabilitation Master Plan that must be considered in the update to the new Caledon Official Plan.

The existing Mineral Resources policies were approved by the former Ontario Municipal Board (OMB) on May 14, 2003, under Official Plan Amendment No. 161 (OPA 161) and ordered the final revised version approved on May 28, 2003. The Mineral Resources policies (Section 5.11) were later amended by Amendments No. 186 and No. 226.

This Supplementary Aggregate Resources Study will inform the Council of the Town of Caledon when it considers amendments to the Caledon Official Plan and the Caledon Zoning By-law. On October 18, 2022, Caledon Council enacted Interim Control By-law No. 2022-075 as a mechanism to control the establishment of new pits and quarries based on this Study. This By-law was later extended for one year.

This Study is divided into three Parts:

1. Facts and Issues Assessment (this “Background Report”)
2. A “Policy Options Report” that includes a review of the existing Caledon Official Plan Mineral Resources Goals, Objectives and Policies
3. A future “Recommendations Report,” including, if applicable, an Official Plan and Zoning By-law Amendment incorporating the recommendations of this study

In addition to public engagement through the statutory *Planning Act* process, Council additionally formed an Aggregate Resources Community Working Group. The purpose of the Aggregate Resources Community Working Group is to liaise with residents to bring a variety of community perspectives, and for public agencies to review and provide comments and data input during the Supplementary Aggregate Resources Policy Study.

The historic context within which to understand how the extraction of sand, gravel and stone evolved in Ontario and in the Town of Caledon is important in this Review. The physical aggregate resources, in a variety of forms of sand, gravel and stone, were laid down during millions of years in the sequence of Precambrian and Phanerozoic Eons and lately in the Quaternary Period of two million years during the glacial periods. The economic extraction of sand, gravel and stone in Southern Ontario has occurred during the past 150 years. These products were primarily used for the construction of infrastructure and buildings in southern Ontario. Construction is obviously tied to the growth in population, particularly after the conclusion of World War II in 1945.

Although zoning by-laws existed in cities since 1904 under the *Municipal Act,* the *Planning Act* came into effect in 1946 when some municipalities were enabled to adopt official

plans. This was the start of modern post-war land use planning in Ontario. (See Short Summary of Significant Events)

In 1946, there were 4.1 million people living in Ontario. The government's expectation was that growth in population would be rapid as young families increased and as housing and jobs were required. In 1956, the population increased to 5.4 million people. In 1976, the population increased to 8.3 million people and by 2006, the population increased to 12.2 million people.

In 2021, the census population in Ontario is 14.2 million people: more than three times greater than 1946.

Looking ahead, the Ontario Ministry of Finance forecasts a total population of 20.4 million people in 2046. The magnitude of future population growth in the future twenty years from 2021 to 2041 is projected to be in the order of 5.1 million people. Compared to the population growth of 2.8 million people in the past twenty years (2001 to 2021), the consequences if these forecasts are borne out are for more major housing, employment areas and infrastructure.

In the order of 70% of Ontario's population live within the Greater Golden Horseshoe. Within the Greater Golden Horseshoe, the population increased by 2.7 million people in the twenty years from 2002 to 2021. In the next twenty years to 2041, the population is forecast to increase by 3.3 million people.

Looking to 2046, the latest Ontario Ministry of Finance's projected increase from 2022 to 2046 in the Greater Golden Horseshoe is in the order of 4.8 million people or approximately 47%.

The third section of this Background Review explains how the regulation of land use including the aggregate resources regime evolved from the post-war era to 2024. It is evident that during this eighty-year period, the provincial government continuously took greater control over aggregate resource areas and the licensing and regulation of aggregate operations thereby reducing the municipal authority over how such operations are conducted. The result is a complex land use policy regime operating in the context of other regulatory regimes.

Before the 1970s, aggregate resource regulation was decentralized among the municipalities where the resource is found; after the 1970s, aggregate resource regulation became more and more centralized in the provincial government.

The existing governance model includes a mix of statutes, regulations policies, guidelines and a plethora of upper-tier and lower-tier official plan policies and zoning by-laws. This complex regime creates contradictions between the policies and controls at all levels of governance and tends to give precedence to the aggregate industry and operations over the municipal and public interests.

From the review of the historic context, there is a sense of a tug of war between the provincial and other public and municipal interests with the residents and communities

stuck in the middle. Individuals and communities frequently express opposition and concerns with respect to new applications. Where individuals and communities do participate in provincial consultation and object to aggregate proposals, including planning amendments, the provincial and private aggregate interests too often seem to “win” the argument in a dispute.

Underlying the historic context is the reality that during the past eighty years, people in communities have found to advocate for their interests and concerns with regard to existing and proposed aggregate operations and with respect to the rehabilitation of worked out sites.

The aggregate industry is unlike most industrial land uses that exist in municipalities. Industrial operations, such as manufacturing, warehousing, and distribution, coexist without much concern within designated employment areas. There is rarely a dispute when a new industry is proposed and there are no required comprehensive review and assessment of these industries compared to the aggregate industry.

The aggregate industry is a business that extracts natural resources from the earth, processes the material on a site and sends the product to markets that are intended to be close by. The evolution of the aggregate regime during the past eighty years focused on protecting the aggregate resource close to markets. Balancing the externalities created and the human and natural area impacts imposed with these operations.

The people in communities, the sensitive land uses, and natural heritage features and functions where aggregate operations are occurring and are planned, are often affected by and are part of the externalities and impacts.

This is the context that will put pressure on the mineral aggregate industry, the Province of Ontario and the municipalities when considering additional mineral aggregate extraction for growth in the Greater Golden Horseshoe. Communities will continue to be concerned with the multiple impacts of the extraction, production and transportation of mineral aggregates. The issue of the lasting legacy of worked-out pits and quarries will need to be addressed by all parties in final rehabilitation.

SHORT SUMMARY OF SIGNIFICANT EVENTS

1962 to 1969

Provincial Ministries concerned that aggregate resources are not protected, and municipalities are restricting pits and quarries.

1970 to 1980

Niagara Escarpment Protection Act comes in effect as a provincial interim control of aggregate extraction.

In 1971, the Pits and Quarries Control Act came into effect.

In 1972, the Environmental Protection Act comes into effect.

In 1973, the Niagara Escarpment Planning and Development Act came into effect.

Province produced several reports that considered the protection of mineral aggregates and established provincial regulation of pits and quarries.

1981 to 1995

In 1982, the Province produced the first mineral aggregate resource policy.

In 1983, the Planning Act was amended to deem a pit or quarry as a land use.

In 1986, the Province produced the policy statement on mineral aggregate resources.

In 1990, the Aggregate Resources Act came into effect.

In 1995, the first Comprehensive Set of Policy Statements came into effect, including the Aggregate Resources Policy.

1996 to 1999

Provincial Policy Statement 1996 came into effect.

In 1997, the Non-Renewable Resources Training Manual was produced by the Province.

In 1999, the Caledon Community Resource Study, Phase 3 was adopted.

2000 to 2006

Provincial Plans, Oak Ridges Moraine Conservation, Greenbelt, Growth Plan came into effect.

Provincial Policy Statement 2005 came into effect.

Ministry published Manual of Policies and Procedures.

2007 to 2015

In 2010, the State of the Aggregate Resource Study in Ontario (SAROS) was produced.

In 2013, the Legislature Committee produced the Report on the Review of the Aggregate Resources Act.

In 2014, the Ministry presented its response to the Committee Report.

In 2014, Provincial Policy Statement 2014 came into effect.

In 2015, the Ministry presented A Blueprint for Change.

2016 to 2020

In 2016, the Ministry produced the report on Supply and Demand of Aggregate Resources Supply in the Greater Golden Horseshoe.

In 2017, significant amendments were made to the Aggregate Resources Act.

In 2017, the revised Growth Plan came into effect.

In 2017, the Greenbelt Plan and Oak Ridges Moraine Conservation Plan were modified.

In 2019, a significant amendment to the Aggregate Resources Act came into effect regarding the depth of extraction.

In 2020, Provincial Policy Statement 2020 came into effect.

In 2020, the Ministry published four new Aggregate Resources in Ontario Standards.

In 2020, several amendments to the Aggregate Resources Act regulation came into effect.

2021 to 2024

In 2022, a new amendment to the Regulation regarding blasting came into effect.

In 2023, the Province posted a new Provincial Policy Statement for consultation.

In 2023, a new Regulations came into effect allowing Aggregate Site Plans to be modified by operators without the approval of the Ministry.

In October 2023, the Province posted proposed regulatory amendments to the Excess Soils regulation. The proposal would exempt topsoil and landscaping reuse depots, aggregate reuse depots, and small liquid soil depots from obtaining an Environmental

Compliance Approval (ECA), all up to a maximum volume and time of materials stored. If approved, it would also increase reuse opportunities for salt-impacted soil, enhance the ability of Class 2 Soil Management Sites to manage excess soil while retaining their ECA exemption, and exempt some landscaping projects in certain areas where there are no potentially contaminating activities and no known reason to suspect the presence of contaminants. The amendments were ultimately approved and did not include aggregate reuse depots in its scope.

In 2024 the Province introduced Bill 185, the Cutting Red Tape to Build More Homes Act, 2024 which proposed significant reforms to Ontario's Planning Act and the Municipal Act, 2001 among other legislation which will, if passed, bring about substantial changes to the Province's planning and land development process. It also includes a provision to revoke legislation intended to dissolve Peel Region, while maintaining a streamlining review of roles and responsibilities of the two tiers of municipal government. It also included a draft 2024 Provincial Planning Statement, following up on the 2023 draft and continuing to propose to consolidate the Growth Plan into that single document.

PART 1 – FACTS AND ISSUES ASSESSMENT

This part of the Background Review provides the factual basis for understanding how significant Issues are addressed by provincial legislation, regulations, guidelines, policies, and municipal policies, bylaws, and practices in today's environment. Rather than citing each of these governance components individually, it is important to understand their strengths and weaknesses in dealing with the stated issues.

This assessment is issue-oriented and reflects significant concerns in Caledon and brings together the provincial interest as expressed in statutes, regulations, and guidelines. It is not a comprehensive policy analysis. It is an issue-oriented review and categorization of both policy and other relevant information.

1. LAND USE COMPATIBILITY, PROTECTION OF SENSITIVE LAND USES, HUMAN HEALTH

A. Provincial Policy Statement 2020

Policy 1.2.6.1 sets out the provincial planning interest with regard to Land Use Compatibility:

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

The definition of a Major Facility includes "resource extraction activities".

The definition of *Sensitive Land Uses* means:

> Buildings, amenity areas, or outdoor spaces where routine or normal activities occurring at reasonably expected times would experience one or more *adverse effects* from contaminant discharges generated by a nearby *major facility. Sensitive land uses* may be a part of the natural or built environment. Examples may include, but are not limited to: residences, day care centres, and educational and health facilities.

NOTE: In PPS 2014 originally, Policy 1.2.6.1 stated:

> *Major facilities* and *sensitive land uses* should be planned to ensure they are appropriately designed, buffered and/or separated from each other to prevent or mitigate *adverse effects* from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term viability of *major facilities.* [emphasis added]

NOTE: Policy 1.2.6.2 was not included in PPS 2014.

This policy means that “resource extraction activities” are to be planned and developed as compatible with land uses such as residences, amenity areas or outdoor areas.

The intent is to avoid or minimize and mitigate potential *adverse effects*, minimize risk to public health and safety, and ensure the long-term operational and economic viability of “resource extraction activities” according to provincial guidelines, standards and procedures.

“Adverse effects” is a specific term that is defined in the *Environmental Protection Act*. It means one or more of:

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

Policy 1.2.6.1 only considers the adverse effects from odour, noise, and other contaminants such as fly rock, that are assessed under the *Environmental Protection Act.*

The risk to public health and safety of humans are to be assessed according to provincial guidelines, standards and procedures. Under the *Environmental Protection Act*, Subsection 6(1) applies to aggregate operation, as follows:

> No person shall discharge into the natural environment any contaminant, and no person responsible for a source of contaminant shall permit the discharge into the natural environment of any contaminant from the source of contaminant, in an amount, concentration or level of excess of that prescribed by the regulations.

For clarity, the Act defines “natural environment” as,

> The air, land and water, or any combination or part thereof, of the Province of Ontario.

The long-term operational and economic viability of resource extraction activities are assessed according to provincial guidelines, standards and procedures.

Policy 1.2.6.2 is used, where avoidance under Policy 1.2.6.1 is not possible, as direction to planning authorities to protect long-term resource extraction activities if they are vulnerable to encroachment by sensitive land uses, that planned and developed adjacent sensitive land uses are only demonstrated and permitted according to provincial guidelines, standards, and procedures, as follows:

i. There is an identified need for the proposed use;
ii. Alternative locations for the proposed use have been evaluated and there are no reasonable alternative locations;
iii. Adverse effects to the proposed sensitive land use are minimized and mitigated; and
iv. Potential impacts to industrial, manufacturing, or other uses are minimized and mitigated.

Policy 1.2.6.2 is a provincial direction that the planning authority shall be satisfied that the proposed sensitive land uses meets all of the tests demonstrated by the required studies. If there is no or partial demonstration of the four tests, then the proposed sensitive land uses in the vicinity of the Major Facility should not be approved.

It is clear that the aggregate impacts of odour, noise and other contaminants are measured as adverse effects according to the scientific methods under the *Environmental Protection Act.*

Under Policy 2.5.2 – Protection of Long-Term Resource Supply, there is one provincial Policy 2.5.2.2 that applies to extraction in mineral aggregate resources areas:

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

In practice, this policy includes a determination of Land Use Compatibility that is determinative of Social Impact. Social Impacts are to be minimized. However, without provincial guidelines and standards that set out how to understand social impact, Caledon should utilize its planning policies to set out procedures to consider and mitigate community impacts and protect community interests.

B. Aggregate Resources Act, R.S.O. 1990, c. A.8

The Act is amended as of April 19, 2021. The Act defines a “Pit” and “Quarry”, as follows:

- “pit” means land or land under water from which unconsolidated aggregate is being or has been excavated, and that has not been rehabilitated, but does not mean land or land under water excavated for a building or structure on the excavation site or in relation to which an order has been made under subsection (3). [this is a Minister’s Order]
- “quarry” means land or land under water from which consolidated aggregate is being or has been excavated, and that has not been rehabilitated, but does not mean land or land under water excavated for a building or structure on the excavation site or in relation to which an order has been made under subsection (3).

Section 12(1) of the Act requires that the Minister shall have regard to “the effect of the operation of the pit or quarry on nearby communities” when considering whether a licence should be issued or refused.

There are two types of Licences:

- Class A licence to remove more than 20,000 tonnes of aggregate annually from the site of a pit or quarry.
- Class B licence to remove 20,000 tonnes or less of aggregate annually from the site of a pit or quarry.

[tonne is a measure of the volume of the material.]

This means removed from the pit or quarry. It does not mean excavated from the pit or quarry and stored on the site.

For clarity, in the *Aggregate Resources Act*, the term “operate” means “when used in relation to a pit or quarry, includes carrying out all activities associated with a pit or quarry that are carried out on the site of the pit or quarry.”

C. Ontario Regulation 244/97 under the *Aggregate Resources Act*

This Regulation is amended as of April 20, 2022.

Subsection 0.12 of the Regulation sets out Prescribed Conditions that are part of the Licence issued for a Pit or Quarry. These are the conditions that ensure the mitigation of specific impacts from the aggregate operation.

- The licensee shall apply water or other approved dust suppressant to internal haul roads and processing areas to mitigate dust if the pit or quarry is located within 1,000 metres of a sensitive receptor.
- The licensee shall equip any processing equipment that creates dust with dust suppressing or collection devices if it is located within 300 metres of a sensitive receptor. (This applies to Class A and B licences)
- The licensee shall obtain an environmental compliance approval where required to carry out operations at the pit or quarry.
- The licensee shall obtain a permit to take water where required to carry out operations at the pit or quarry.
- For a Class B licence, the licensee must mitigate the amount of noise emitted at the source with appropriate noise attenuation devices and site design if there is a sensitive receptor situated, within 500 metres of the boundary of the site in the case of a Class B licence.
- The licensee shall mitigate the amount of dust generated at the site of the pit or quarry to minimize any off-site impact.

In the Regulation, a “sensitive receptor” is defined:

- A school or childcare centre, or
- Any residence or facility at which at least one person sleeps, including a long-term care home, hospital, trailer park or campground.

Site Plan

A Site Plan for a Class A licence that is prepared along with the licence application is approved by the Minister as part of the Licence.

The Site Plan Notes set out the requirements for operating the aggregate facility as identified in the Technical Reports submitted as part of the application. The Notes include the mitigation measures and the monitoring programs.

One of the components of the Site Plan is the use of land on and within 120 metres of the site, such as land uses and land designations, and the location and use of all buildings and other structures existing on and within 120 metres of the site.

A Site Plan similar to a Class A licence is not required by the Regulation.

Technical Reports

One of the technical reports for a Class A licence is a Noise Assessment if the proposed excavation and/or processing facilities are within 150 metres of a sensitive receptor for a Pit or within 500 metres of a sensitive receptor for a Quarry.

D. Land Use Compatibility Guidelines (MECP)

These Guidelines were last amended in 1995. As stated in the D-1 Guideline, they are "a guide for land use planning authorities on how to decide whether new development or land uses are appropriate to protect people and the environment." The Guideline states that it "applies when a change in land use places or is likely to place sensitive land use within the influence area or potential influence area of a facility, for various situations." These situations are:

- used for the formulation and review of land use policies, guidelines, and programs.
- applies for review of general plans and proposals.
- applies for review of site-specific development plans.

There are non-applicable situations:

- where incompatible land uses already exist and there is no new land use proposal for approval.
- usually, where a change in land use, expansion or new development for a facility or sensitive land use that complies with existing official plan and zoning.
- emergency situations.
- federal jurisdiction.
- depending on the particular facility, adverse effects may be related to, but not limited to, one or more of the following: noise and vibration; visual impacts (landfills); odours and other air emissions; litter, dust and other particulates; and other contaminants.

The objective of the Guideline is “to minimize or prevent through the use of buffers, the exposure of any person, property, plant or animal life to adverse effects associated with the operation of specified facilities.”

The Preferred Approach is that “incompatible land uses are to be protected from each other, in land use plans, proposals, policies and programs to achieve the Ministry’s environmental objectives. Various buffers, on either side of the incompatible land uses or on intervening lands may be used to prevent or minimize adverse effects. Distance is often the only effective buffer, however, and therefore adequate separation distance, based on a facility’s influence area, is the preferred method of mitigating adverse effects.”

“The separation distance should be sufficient to permit the functioning of the two incompatible land uses without an adverse effect occurring. Separation and incompatible land uses should not result in freezing or denying usage of the intervening land. The distance shall be based on a facility’s potential influence area or actual influence area if it is known.”

The D-6 Guideline sets out the application of compatibility between industrial facilities and sensitive land uses. The D-6 Guideline does not apply to pits and quarries, with a caveat: [emphasis added]

> However, in the absence of site-specific studies, this guideline should be utilized when sensitive land use encroaches on an existing pit and/or quarry. In these situations, the appropriate criteria are the potential influence area and recommended minimum separation distance for a Class III industrial facility as set out in Sections 4.1.1 and 4.3 of this guidelines.

Although the Guideline does not specifically define a pit or quarry and the type of industry, it has been accepted that a pit or quarry is characterized as a Class III industrial facility:

> A place of business for large scale manufacturing or processing, characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. It has frequent outputs of point source and fugitive emissions of significant impact and there is high probability of fugitive emissions.

Generally, the D-6-3 Separation Distances, based on research done by the Ministry, are:

> Potential or actual influence area is 1,000 metres. A “potential influence area” identifies where adverse effects are generally expected to occur. An “actual influence area” is the area at above or below grade associated with a facility that is subject to one or more adverse effects which may be of varying duration, frequency and distance of dispersal.
>
> An “actual influence area” or “potential influence area” acts as a potential constraint for sensitive land use or conversely the establishment of a facility, unless evidence is provided that adverse effects are not a problem or can be satisfactorily mitigated to the level of trivial impact.

> "Trivial Impact" means present or predictable contaminant discharges which are or are likely to be so minor that there would not be and adverse effect. In determining whether an impact will be trivial, the timing and magnitude of contaminant discharges should be related to the sensitive land uses normal use period.

The minimum separation distance is 300 metres that is measured from the designation, zoning, or property lines of closest existing, committed or proposed Sensitive Land Use to designation, zoning, or property lines of closest existing, committed or proposed Class III Industrial Use. There is a caveat that "where the established use of on-site and ancillary lands associated with a sensitive land use are not of a sensitive nature (e.g., a parking lot or roadway), measurement may be taken to where the sensitive activities actually begin."

The D-1-2 Guideline states that the influence area for pits and quarries is determined on a case-by-case basis. For new operations, the influence area is determined by appropriate studies in support of the licensing or land use approvals. For encroachment of sensitive land uses on pits and quarries and resource areas, studies or the D-6 setbacks should apply.

According to PPS 2020, need for aggregate resources is a given and housing is usually needed, but Policy 1.2.6.1 and the D-6 Guideline require that compatibility between the pit/quarry and the sensitive land use must also be achieved when considering approval of a sensitive land use.

E. ***Planning Act*, R.S.O. 2020, c. P.13**

Section 2 requires regard to 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 orderly development of safe and healthy communities;
e. the protection of the financial and economic well-being of the Province and its municipalities;
f. the resolution of planning conflicts involving public and private interests;
g. the protection of public health and safety;
h. the appropriate location of growth and development.

In determining compatibility, there needs to a balance of provincial interests to avoid adverse effects on sensitive land uses and to ensure the viability of major facilities. It would seem that compatibility should work in both directions.

F. Town of Caledon Official Plan

The Preface to Section 5.11 of the Official Plan states, in part:

> The role of the Town of Caledon in the hierarchy of Provincial, Regional, and local aggregate resource planning, is to establish comprehensive mineral aggregate resource policies in its Official Plan. These policies must have regard to provincial policies and take into account local considerations (emphasis added).

For the purposes of the Plan, Section 5.11.2.6 in the Mineral Resources section sets out the Land Use Compatibility policies. The area of influence for sand and gravel operations is a distance of 300 metres and for quarries a distance of 500 metres.

The distance is measured from either the limits of CHPMARA or the extraction limit of the existing licenced operations.

Policy 5.11.2.6.4 sets out the tests for proposed new sensitive land uses within the area of influence.

Policy 5.11.2.6.2 defines sensitive land use:

> Buildings, amenity areas, or outdoor spaces where routine or normal activities occurring at reasonably expected times would experience one or more adverse effects from aggregate operations or major facilities. Adverse effects shall be as defined by the provincial Policy Statement. Sensitive land uses may be part of the natural or built environment.

Policies 5.11.2.6.5, 5.11.2.6.6, 5.11.2.6.7 and 5.11.2.6.8 provide for development within the CHPMARA or within the area of influence.

Policy 5.11.2.6.9 provides for the expansion of a designated settlement area into CHPMARA.

Policy 5.11.2.6.10 provides for severances within CHPMARA.

Policy 5.11.2.4 provides the relevant criteria/tests for considering a planning application to permit new or expanded aggregate operations:

> 5.11.2.4.2 c) for an Official Plan amendment: the Applicant has assessed the social impacts as described in Section 5.11.2.4.13 and demonstrated that the proposal will not have any unacceptable impacts.
>
> 5.11.2.4.2 i) for an Official Plan amendment: the Applicant has demonstrated that noise and vibration impacts will be mitigated to acceptable levels.
>
> 5.11.2.4.2 j) for an Official Plan Amendment: the Applicant has demonstrated that the impacts from dust and other air pollutants will be mitigated to acceptable levels.

> 5.11.2.4.2 k) for an Official Plan amendment: the Applicant has prepared a land use planning analysis and has demonstrated that the proposal will not result in any unacceptable land use conflicts.

Policy 5.11.2.4.5 discourages extractive industrial designations outside the CHPMARA but subject to the previous requirements and the goals and objectives.

Policy 5.11.2.4.13 states:

> Any impact studies required by this Plan, will include, where appropriate, an assessment of social impacts based on predictable, measurable, significant, objective effects on people caused by factors such as noise, dust, traffic levels and vibration. Such studies will be based on Provincial standards, regulations and guidelines and will consider and identify methods of addressing the anticipated impacts affected by the extractive operation.

Policy 3.1.1 in the Official Plan sets out a list of principles of sustainability. One of these principles is the “protection and promotion of health and well-being.”

G. Non-Renewable Resources Training Manual

Section 5.0 sets out Assessing Impacts of Adjacent Development.

> Non aggregate related development that may preclude or hinder access to the mineral aggregate resource should not be permitted within or adjacent to areas of known deposits or adjacent to mineral aggregate operations.

Subsection 5.1 provides for the Information requirements:

“Where an application for development occurs on or within:

- 300 metres of a known unconsolidated deposit (e.g. sand, gravel, clay) or a mineral aggregate pit operation; or
- 500 metres of a known bedrock deposit or a bedrock quarry operation,

The applicant should be required to assess the impact of the proposed development on the mineral aggregate resource and the mineral aggregate operation(s).”

2. IDENTIFICATION AND PROTECTION OF AGGREGATE RESOURCES AND REGULATION OF AGGREGATE OPERATIONS

The historic context in the Appendix to this report details the evolution of mineral aggregate policy during the past eighty years. The aggregate resources in Southern Ontario consist of sand, gravel and bedrock. The basic geological formations are found in information provided by the Ontario Geological Survey (OGS). The OGS started publishing data in 1980 with the Aggregate Resources Inventory Papers (ARIP) and in Open File Reports (OFR).

There are, in the order of 62 ARIP reports for most of Southern Ontario and parts of Northern Ontario. The OGS compiled this data electronically and in 2020, updated in 2021, produced the data in layers through Google Earth. OGS intends to annually update this data and make it available online. Included in the draft document, High Potential Mineral Aggregate Resource Areas: Mapping Methodology, are the inventory methods, data presentation and interpretation for the draft aggregate resource mapping.

The potential sources of aggregate are outlined in areas of sand, gravel and bedrock at or near the surface of the earth. The reports assess the potential quality and quantity of the aggregate resources. The meanings of sand, gravel, rock and aggregate are:

> Sand is mineral rock fragments (sediment) that have a particle size between 0.6 millimetres and 2.0 millimetres. [Oxford Dictionary of Environment and Conservation]
>
> Gravel is unconsolidated sediment that is composed of particles of between 2 and 75 millimetres in diameter. [Oxford Dictionary of Environment and Conservation]
>
> Rock, for purposes of defining “aggregate”, is a material except for metallic ores, andalusite, asbestos, barite, coal, diamond, graphite, gypsum, kaolin, kyanite, lepidolite, magnesite, mica, nepheline syenite, petalite, phosphate rock, salt, sillimanite, spodumene, talc or wollastonite. [O.R. 244/97]
>
> Aggregate is gravel, sand, clay, earth, shale, stone, limestone, dolostone, sandstone, marble, granite or other material. [*Aggregate Resources Act]*

The separate document, “High Potential Mineral Aggregate Resource Areas: Mapping Methodology” published as an Appendix in the Joint Review, provides a detailed assessment of the aggregate resources in the Town of Caledon. The OGS published the first ARIP No. 165 in 1996 for the Region of Peel. This ARIP was revised in 2009 and was updated in 2015. In the 1998 Caledon Community Resource Study (CCRS), the mapping for the Town of Caledon Official Plan was refined as CHPMARA. This mapping resource is integrated into the Caledon Official Plan (OPA 161) as Schedule “L”.

The ARIP mapping was updated in 2020 by OGS and was used to create the new 2023 draft HPMARA mapping for Caledon. The methodology used to create the new HPMARA is fully explained in the Joint Review Appendix document.

The resource mapping is based on the latest OGS mapping. The methodology applies constraints for natural resource areas, settlement areas, planned urban areas, residential subdivisions outside settlement areas, residential clusters, approvals for non-aggregate land uses, previous licenced, rehabilitated, and cancelled licences, and isolated fragments. The resource areas overlap each other in places.

The OGS mapping of resources is in the order of 16,807 hectares in Caledon (In the order of 25% of the total area of Caledon). Applying the constraints, the resulting HPMARA sand and gravel resources are 5,016 hectares and the bedrock resources are 1,922 hectares for a total of 6,938 hectares.

The total area of the Town of Caledon is 68,882 hectares (Census 2021). It is estimated that in the order of 10% of the Caledon land area is identified as draft HPMARA sand, gravel and bedrock (6,938 hectares).

The Caledon resource area includes existing licenced pits and quarries. Currently, there are 19 licensed pits and quarries with a total land area in the order of 1,844 hectares. In the order of 26.5% of the latest HPMARA are licenced for extraction. This leaves in the order of 5,094 hectares unlicensed.

Of the 19 licenced operations, there are 4 Quarries (151 hectares) and 15 Pits (1,693 hectares).

Summarily, in the order of 1,771 hectares of HPMARA bedrock are unlicensed and in the order of 3,323 hectares of HPMARA sand and gravel are unlicensed.

A. Provincial Policy Statement 2020

As stated in the historic context, the provincial interest is the “Protection of Long-Term Resource Supply:

> 2.5.2.1 As much of the *mineral aggregate resources* as is realistically possible shall be made available as close to markets as possible.
>
> 2.5.2.5 In known *deposits of mineral aggregate resources* and on *adjacent lands, development* and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if:
>
> - resource use would not be feasible; or
> - the proposed land use or development serves a greater long-term public interest; and
> - issues of public health, public safety and environmental impact are addressed.”

There is a definition of adjacent lands for purposes of interpreting Policy 2.5.2.5:

> Those lands contiguous to lands on the surface of known…*deposits of mineral aggregate resources* where it is likely that development would

> constrain future access to the resources. The extent of *adjacent lands* may be recommended by the Province.

There is a definition of deposits of mineral aggregate resources:

> 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.

Policy 2.5.1 provides the positive direction for Caledon's identification of HPMARAs:

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

B. <u>A Place to Grow: Growth Plan for the Greater Golden Horseshoe</u>

Section 4.2.8 sets out the Mineral Aggregate Policies. With respect to protecting aggregate resources:

> Municipalities will develop and implement official plan policies and other strategies to conserve *mineral aggregate resources*, including:
> - the recovery and recycling of manufactured material derived from *mineral aggregate resources* for reuse in construction, manufacturing, industrial, or maintenance projects as a substitute for new *mineral aggregate resources*; and
> - the wise use of *mineral aggregate resources*, including utilization or extraction of on-site *mineral aggregate resources* prior to development occurring.

The provincial interest in A Place to Grow is enabling and supportive rather than a positive direction.

C. <u>Greenbelt Plan 2017</u>

Section 4.3.2 sets out comprehensive Non-Renewable Resource Policies within the Protected Countryside. The Policy allows for mineral aggregate resource activities and operations with exceptions in the Natural Heritage System. The criteria are listed in sections 4.3.2.3 to 4.3.2.11.

The existing Caledon Mineral Aggregate resource Policies conform to the Greenbelt Plan since they were approved prior to December 16, 2004.

The availability of mineral aggregate resources for long-term use shall be determined according to the PPS 2020 policies and is subject to the Natural Heritage System exceptions.

In prime agricultural areas, an agricultural impact assessment is required to support new aggregate applications 'that shall seek to maintain or improve connectivity of the *Agricultural System*.

D. Oak Ridges Moraine Conservation Plan 2017

The Plan does not include policies regarding the protection and identification of mineral aggregate resources.

E. Niagara Escarpment Plan 2017

The Plan does not include policies regarding the protection and identification of mineral aggregate resources.

F. Regulation of Aggregate Operations

In the 2000s, when the Mineral Aggregate Policies came into effect, there were 17 licenced Pits and 4 licenced Quarries in Caledon. During the 2000 to 2023 period, four Pits closed, and they are no longer licenced and 6 new and expanded Pits were established. There is no change in the number of Quarries.

Today in 2023, there are 19 licenced Pits with a total land area of 1,693 hectares and 4 licenced Quarries (sandstone and shale) with a total land area of 151 hectares.

In the period from 1993 to 2014, Caledon annually produced in the range of 2.8 to 6.3 million tonnes of aggregate, predominantly in the form of sand and gravel. In each of these years, Caledon was included in the list of Top Ten aggregate producing municipalities in Ontario. From 2015 to 2019, Caledon annually produced from 2.5 million to 3.4 million tonnes of aggregate. Caledon was not included in the Top Ten during each of these years. In 2020, Caledon produced 3.1 million tonnes and was back into in the Top Ten. In 2021, Caledon produced 3.4 million tonnes and was just outside of the Top Ten again, and in 2022, Caledon produced 3.4 million tonnes and remained just outside of the Top Ten.

In 2022, Caledon produced 3,375,174 tonnes of aggregate. This represents 4.2% of the total production (80,476,357 tonnes) in the municipalities within the Greater Golden Horseshoe. In the Greater Golden Horseshoe, Peel/Caledon ranks 10th in the list of 14 Upper-Tier and Single Tier municipalities.

The relative occurrence of the aggregate resource varies from one municipality to another, as do the relevant planning policies. The quantity of resource extracted from Caledon is determined by the market. Under some older licenses, there is no upper limit on the quantity of resource that can be extracted.

The Provincial Government is responsible for the approval, management, operations, enforcement and rehabilitation of mineral aggregate operations on private lands and on Crown Land. The following is a list of most of the regulatory requirements relevant to

decisions that must be met by applicants/licensees for the establishment and operation of mineral aggregate extraction sites:

- *Aggregate Resources Act,* R.S.O. 1990, c. A.8
- Ontario Regulation 244/97 General under the *Aggregate Resources Act*
- Aggregate Resources of Ontario Site Plan Standards 2020
- Aggregate Resources of Ontario Technical Reports and Information Standards 2020
- Aggregate Resources of Ontario Amendment Standards 2020
- Aggregate Resources of Ontario Circulation Standards 2020
- Aggregate Resources Policies and Procedures Manual 2006
- *Planning Act*, R.S.O. 1990, c. P.13
- *Ontario Water Resources Act*, R.S.O. 1990, c. O.40
- O.R. 387/04 Water Taking and Transfer under *Ontario Water Resources Act*
- *Environmental Protection Act*, R.S.O. 1990, c. E.19
- O.R. 406/19 On-Site and Excess Soil Management under *Environmental Protection Act*
- Rules for Soil Management and Excess Soil Quality 2020 under *Environmental Protection Act*
- R.R.O. 1990 Reg. 347 General- Waste Management under *Environmental Protection Act*
- O.R. 419/05 Air Pollution – Local Air Quality under *Environmental Protection Act*
- O.R. 208/19 Environmental Compliance Approval in Respect of Sewage Works under *Environmental Protection Act*
- R.R.O. 1990 Reg. 360 Spills under *Environmental Protection Act*
- O.R. 224/07 Spill Prevention and Contingency Plans under *Environmental Protection Act*
- O.R. 524/98 Environmental Compliance Approvals – Exemption from Section 9 of the Act under *Environmental Protection Act*
- *Endangered Species Act*, 2007, S.O. 2007, c.6
- O.R. 230/08 Species at Risk in Ontario List under *Endangered Species Act*
- O.R. 242/08 General under *Endangered Species Act*
- *Environmental Bill of Rights*, 1993 S.O. 1993 c.28
- O.R. 681/94 Classification of Proposals for Instruments under *Environmental Bill of Rights*
- O.R. 73/94 General under *Environmental Bill of Rights*
- *Niagara Escarpment Planning & Development Act* R.S.O 1990, c. N.2
- R.R.O. 1990 Reg. 82 Development Within the Development Control Area under *Niagara Escarpment Planning & Development Act*
- *Clean Water Act* 2006 S.O. 2006 c. C22
- O.R. 287/07 General under *Clean Water Act*
- *Greenbelt Act* 2005 S.O. 2005, c. 1
- O.R. 61/05 Prescribed Applications, Matters, Proceedings and Policies for Purposes of Section 24(3) of the Act under *Greenbelt Act*
- *Conservation Authorities Act*, R.S.O. 1990, c. C27
- O.R. 596/22 Prescribed Acts – Subsections 21.1.1(1.1) and 21.1.2(1.1) of the Act under *Conservation Authorities Act*

There are several specific provisions in legislation that apply to the interests of municipalities and that may restrict the decisions of municipalities.

In Subsection 12.1(1) of the *Aggregate Resources Act*, “if a zoning by-law prohibits the site from being used for the making, establishment or operation of pits and quarries”, then a licence shall not be issued.

In Subsection 12.1 (1.1) of the *Aggregate Resources Act*, if a zoning by-law restricts the depth of extraction at a pit or quarry, then that provision of the zoning by-law is inoperative. This is the prohibition on “vertical zoning,” meaning that zoning cannot regulate the depth of extraction.

In Subsection 12 (1) of the *Aggregate Resources Act*, there are eleven matters that the Minister or the Tribunal shall have regard to when considering whether to issue or refuse a licence. Two of the matters to be considered are “any comments provided by a municipality in which the site is located”, and “any planning and land use considerations.” The Minister “shall not have regard to road degradation that may result from proposed truck traffic to and from the site”.

Subsection 66 (1) of the *Aggregate Resources Act* is the overriding clause:

“This Act, the regulations and the provisions of licences and permits and site plans apply despite any municipal by-law, official plan or development agreement and, to the extent that a municipal by-law, official plan or development agreement deals with the same subject-matter as this Act, the regulations or the provisions of a licence or permit or a site plan, the by-law, official plan or development agreement is inoperative.

Subsection 13.2 allows a licensee to apply to amend the licence and site plan to expand the area boundaries to include part of road allowance that is adjacent to the boundary. This includes closed road allowances.

Subsection 66 (5) of the *Aggregate Resources Act* states that “A requirement for a development permit imposed by a development permit system established under subsection 70.2(1) of the *Planning Act* does not apply to a site for which a licence or permit has been issued under this Act.

Under Subsection 142 (5) of the *Municipal Act*, a municipal site alteration by-law does not apply to the establishment, operation or enlargement of any licenced pit or quarry, and on land that permits a pit or quarry under a municipal zoning by-law.

Subsection 28 (1) of the *Conservation Authorities Act* provides that the applicant and/or operator of an approved pit or quarry does not require permission from the Conservation Authority “for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, changing or interfering in any way with a wetland, or control of flooding, erosion, dynamic beaches or pollution or conservation of land. The Conservation Authority has no authority to prohibit, regulate or require permissions.

The Conservation Authority may restrict and regulate the use of water in or from rivers, streams, inland lakes, ponds, wetlands and natural or artificially constructed depressions in rivers and streams.

NOTE: Effective April 1, 2024, Subsection 28.1 of the *Conservation Authorities Act* has been amended, under Bill 23, to provide that the activities that are prohibited by Subsection 28 (1) (as amended) do not apply to an approved pit or quarry under the *Aggregate Resources Act.*

It is explicit that the need to limit or preclude aggregate activities in watercourses, wetlands, hazardous lands, shorelands will be considered as part of the application for a licence under the *Aggregate Resources Act* and *Planning Act* applications for Official Plan and Zoning By-law Amendments.

On December 10, 2019, subsection 12.2 of the Act was amended to no longer require the licensee to send a copy of the approved licence and the final site plan to the municipality.

G. Disputes under the *Aggregate Resources Act*

Under the Act, there are no provisions for a person or a community to appeal an aggregate application or a decision regarding a licence or site plan, similar to a matter under the *Planning Act*. Appeals to official plan and zoning by-law amendments are made under the *Planning Act* and hearings before the Ontario Land Tribunal are held to consider disputes under the provisions of both Acts together.

The *Aggregate Resources Act* has very specific provisions applicable to persons and communities who have concerns with new and expanding Pits and Quarries. The following is a summary of the important steps in this dispute process under the Act:

The Minister (MNRF) may refer a licence application and any objection arising from notification and consultation to the Tribunal for a hearing and may direct that the Tribunal shall determine only the issues specified in the referral. [S. 11(1) 5]

The Tribunal may hold a hearing and direct the Minister to issue the licence subject to prescribed conditions and to any additional conditions. The Minister may refuse to impose additional conditions if the Minister decides that condition is not consistent with the purposes of the Act. [S. 11(8) 1.]

The Tribunal may hold a hearing and direct the Minister to refuse to issue the licence. [S. 11(8) 2.]

The Tribunal may determine that an objection is not made in good faith, is frivolous or vexatious, or is made only for the purpose of delay and may, without holding a hearing, refuse to consider the objection. The Tribunal may direct the Minister to issue the licence subject to prescribed conditions. [S. 11(8) 3.]

If all parties, other than the applicant, to the hearing withdraw before start of hearing, the Tribunal may refer the application back to the Minister and the Minister shall decide whether to issue or refuse the licence. [S. 11(8) 4.]

If an application is not referred to the Tribunal, the Minister may decide to issue or refuse a licence. [S. 11(9)]

If The Minister refuses a licence, the applicant may request a hearing by the Tribunal. [S. 11(11)]

The Tribunal may hold a hearing and direct the Minister to issue or refuse the licence. [S. 11(14)]

The Tribunal has no authority to review, rescind or vary any order or decision. [S. 11(15)]

The Tribunal, in a hearing, shall have regard to the matters under S. 12(1) of the Act, except the Tribunal or the Minister "shall not have regard to ongoing maintenance and repairs to road degradation that may result from proposed truck traffic to and from the site". S. 12(1) and (1.1)]

If the Minister proposes to add a condition to a licence, rescind or vary a licence condition or otherwise amend the licence, amend the site plan or require a new site plan, a licensee may request a Tribunal hearing. [S. 13(6)]

The Minister shall refer the matter to the Tribunal for a hearing. [S. 13(7)]

The Tribunal holds a hearing a may direct the Minister to carry out, vary or rescind the proposal. [S. 13(9)]

The Tribunal has no authority to review, rescind or vary any order or decision. [S. 13(10)]

If a hearing is not required, the Minister may carry out the proposal. [S. 13(11)]

If a licensee wishes to amend the licence or site plan to lower the depth of extraction from above the water table to below the water table, the Minister may refer a licence application and any objection arising from notification and consultation to the Tribunal for a hearing and may direct that the Tribunal shall determine only the issues specified in the referral. [S. 13.1 (1) and (4)]

The Tribunal Hearing, Tribunal decision and Minister's decisions are similar to a new licence application. [S. 13.1 (5)]

3. COMPREHENSIVE REHABILITATION

Roles of Ministry and Licensees

Part VI in the *Aggregate Resources Act* sets out the provisions for Rehabilitation addressed to the licensees. Section 47 leads with the application of Part VI:

> This Part does not apply to a pit or quarry or part thereof that is covered by water that is not the result of excavation of aggregate below the water table.

Section 48(1) sets out the licensee's duty to rehabilitate:

> Every licensee and every permitee shall perform progressive rehabilitation and final rehabilitation on the site in accordance with this Act, the regulations, the site plan and the conditions of the licence or permit to the satisfaction of the Minister.

When considering whether to issue or refuse a licence, the Minister or the Tribunal shall have regard to: "the suitability of the progressive rehabilitation and final rehabilitation for the site".

Section 48(1.1) establishes the Minister's oversight:

> Every licensee and every permitee shall submit reports on the progressive rehabilitation and final rehabilitation of the site at the prescribed times and shall prepare and submit the reports in accordance with the regulations.

Section 48(2) implements the Minister's oversight:

> On being satisfied that a person is not performing or did not perform adequate progressive rehabilitation or final rehabilitation on the site in accordance with subsection (1), the Minister may order the person to perform, within a specified period of time, such progressive rehabilitation or final rehabilitation as the Minister considers necessary, and the person shall comply with the order.

The Act defines "rehabilitate" to mean:

> To treat land from which aggregate has been excavated so that the use or condition of the land,
>
> - Is restored to its former use or condition, or
> - Is changed to another use or condition that is or will be compatible with the use of adjacent land.

The Act defines "progressive rehabilitation" to mean:

> The rehabilitation done sequentially, within a reasonable time, in accordance with this Act, the regulations, the site plan and the conditions of the licence or permit during the period that aggregate is being excavated.

The Act defines "final rehabilitation" to mean:

> Rehabilitation in accordance with the Act, the regulations, the site plan and the conditions of the licence or permit performed after the excavation of aggregate and the progressive rehabilitation, if any, have been completed.

Subsection 0.13 of Ontario Regulation 244/97, sets out the rules for rehabilitation, unless otherwise provide on a site plan:

> All topsoil and overburden stripped for the purpose of operating the site shall be used in the rehabilitation of the site.
>
> The final rehabilitation of the site shall ensure that,
>
> I. all excavation faces of a pit have a slope that is at least three horizontal metres for every vertical metre, and
> II. all excavation faces of a quarry have a slope that is at least two horizontal metres for every vertical metre.
> III. During rehabilitation, adequate vegetation shall be established and maintained to control erosion of any topsoil or overburden replaced on the site.
> IV. Rehabilitation of a pit or quarry shall ensure that there is adequate drainage and vegetation at the site and that any compaction of the site is alleviated.

The Aggregate Resources of Ontario Site Plan Standards sets out the information requirements for Rehabilitation on Class A and Class B Licences. These are found in paragraphs 60 through 69 and 72. There is no requirement to state the proposed land uses on the rehabilitated site.

Subsection 50(1) of the Act requires that the licensee shall make rehabilitation security payments to the Aggregate Resources Trust. The amount of the 2023 annual payment is 3% of the total annual aggregate fee. For a Class A Licence (more than 20,000 tonnes annually) the fee to the Trust is 0.00681 cents per tonne or $23.67 whichever is greater and for a Class B Licence (20,000 tonnes or less annually) the fee to the Trust is 0.00681 cents per tonne or $11.82 whichever is greater. For example, a pit or quarry that removes 500,000 tonnes annually, the fee paid to the Trust is $3,405.

Subsection 6.1(2) of the Act sets out the purposes of the Trust according to the terms of an agreement with the Minister:

> The rehabilitations of land for which a licence or permit has been revoked and for which final rehabilitation has not been completed.
>
> The rehabilitation of abandoned pits and quarries, including surveys and studies respecting their location and condition.
>
> Research on aggregate resource management, including rehabilitation.

The Applicant/Licensee is required to conform with Provincial Plans. The details of the rehabilitation policies in each of these Provincial Plans are:

a. **Place to Grow: Growth Plan for the Greater Golden Horseshoe**
   - Subsections 4.2.8 2(c); 4.2.8.4; 4.2.8.5.

b. **Greenbelt Plan 2017**
   - Subsections 4.3.2 3(c); 4.3.2 5; 4.3.2 6; 4.3.2 7; 4.3.2 8.

c. **Oak Ridges Moraine Conservation Plan 2017**
   - Part IV – paragraphs 35, 36.

d. **Niagara Escarpment Plan 2017**
   - Subsections 1.2.2 3; 1.9.1; 1.9.5; 2.9 3(h); 2.9 3(i); 2.9 8; 2.9.11;

Role of Municipality

Policy 2.5.3.2 of Provincial Policy Statement 2020 sets out an enabling and supporting direction for municipalities:

> *Comprehensive rehabilitation* planning is encouraged where there is a concentration of mineral aggregate operations.

Comprehensive rehabilitation means:

> Rehabilitation of land from which *mineral aggregate resources* have been *extracted* that is coordinated and complementary, to the extent possible, with the rehabilitation of other sites in an area where there is a high concentration of *mineral aggregate* operations.

The 2001 Oak Ridges Moraine Conservation Plan had a policy to encourage municipalities to undertake comprehensive rehabilitation plans in areas of the Moraine. This policy is continued in 2017 ORMCP.

This provincial policy first appeared in Provincial Policy Statement 2014. The impetus for comprehensive rehabilitation likely arose in the 2010 “State of the Aggregate Resource in Ontario Study (SAROS). Paper 6; Rehabilitation recommended Comprehensive Rehabilitation Plans “should be considered as early as possible. Once in place, they provide certainty to both producers and local residents. This could help reduce the tensions that have increased around applications.”

Policy 5.11.2.8.2 in the Caledon Official Plan states that Rehabilitation Master Plans will be prepared for ten aggregate resource areas. Policy 5.11.2.8.3 provides that where there is a Rehabilitation Master Plan detailed site rehabilitation plans shall be required.

On March 29, 2022, Caledon Council approved the “Rehabilitation Master Plan, Belfountain and Caledon Sand and Gravel Resource Areas, Concepts and Implementation Report” (“RMP”). This is the first Master Rehabilitation Plan. In its approval, Council set out a list of matters to be considered in the implementation framework in the Caledon Official Plan. Council required that the RMP be incorporated into the new Caledon Official Plan policies.

Council concluded that the implementation framework in the RMP include the following:

- the preparation of individual Coordinated Rehabilitation Plans for pits and quarries;
- phasing of the closure of aggregate sites;
- feasibility of integrating aggregate sites;
- alternative methods for rehabilitation;
- alternative after-land uses;
- consideration of a Caledon Village Bypass;
- consideration of existing constraints arising from policies and regulations in provincial and regional plans
- the environment that will be affected by the rehabilitation;
- cumulative effects of the rehabilitation;
- assessment of land use compatibility between the rehabilitation area and existing and planned sensitive land uses and people;
- monitoring and mitigation measures;
- consultation procedures with landowners, aggregate operators, individuals and communities;
- alternative regulatory procedures to ensure compliance with the Rehabilitation Plans, including amendments to existing approved rehabilitation plans.

4. GOODS MOVEMENT AND HAUL ROADS

The Joint Aggregate Review includes the “Transportation Technical Paper”. The paper focusing on the aggregate resources, supplements the Region’s Goods Movement Strategic Plan. The Paper describes the designated aggregate haul routes in Caledon that are illustrated on the CHPMARA Prioritization Plan.

The Goods Movement Strategic Plan 2017-2021 recommends a separate aggregates transport study “to manage its impacts on the community and road infrastructure. The “Commercial Vehicle Survey Data 2012 found that 12% of the weekly loaded trucks in Caledon carries aggregate. The northwest area of Caledon is a major trip origin for commercial vehicles carrying aggregate. Truck volumes are mainly Charleston Sideroad, King Street, Airport Road and Highway 50.

The Study makes several recommendations regarding road safety, alternative haul routes, road classifications, air quality, noise:

- identify an action plan to mitigate road safety design issues.
- review road design standards to adapt a more complete streets approach for haul roads.
- continue to protect community interests and transportation system performance, including accommodation of vulnerable road users to support sustainable mode share goals.
- work with MTO to undertake a feasibility study to explore alternative aggregate haul routes and options to manage truck impacts on existing and future settlement areas.
- explore the cost-benefits of upgrading Regional road and truck routes for year-round use to alleviate community impacts.

- explore new sources of data or new methods of collecting data that can differentiate and separate aggregate truck traffic from other truck traffic.
- consider a town-wide study to quantify air quality and noise impacts of aggregate goods movement on the community and identify opportunities to support industry transition to zero emission trucks.
- develop a stakeholder consultation plan to provide for on-going communications between all parties to address key issues.

Haul Routes

Haul Routes are those roadways that are used by the aggregate operations to transport the aggregate product from the site to various destinations in and outside Caledon.

Typically, external haul routes are not committed to the licence site plan and are therefore not approved by the MNRF in the licence process. The haul road is an issue that is to be considered by the road authority.

Subsection 12(1) of the *Aggregate Resources Act* provides that the Minister or the Tribunal shall have regard to the "main haulage routes and proposed traffic to and from the site". The Site Plan illustrates the internal haul road only.

The "Aggregate Resources of Ontario: Technical reports and information standards" requires that in the Summary Statement for the licence application "the main haulage routes and proposed truck traffic to and from the site as well as, applicable entrance permits" must be included for Class A licences only. This information is not required for Class B licence applications.

Since it is in the provincial interests that aggregate extraction is to be "close to markets", the transportation of the aggregate product is predominantly by truck. In the aggregate industry, typical truck types are Tri-Axle, Trailer, and Pony-Pup. The Ministry and the industry estimates that in the order of 50% of the cost of aggregate is in the transportation cost from the site to the destination.

- A Tri-Axle truck has capacity in the order of 23 tonnes of aggregate. Hypothetically, if an operation removes 500,000 tonnes of product annually, then the consequence is in the order of 21,800 truckloads per year.
- A Trailer truck has capacity in the order of 39 tonnes of aggregate. Hypothetically, if an operation removes 500,000 tonnes of product annually, then the consequence is in the order of 12,800 truckloads per year.
- A Pony-Pup truck combination has capacity in the order of 42 tonnes of aggregate. Hypothetically, if an operation removes 500,000 tonnes of product annually, then the consequence is in the order of 11,900 truckloads per year.

The Act states that although the Minister or the Tribunal shall have regard to the main haulage routes and to proposed truck traffic, they "shall not have regard to ongoing maintenance and repairs to address road degradation that may result from proposed truck traffic to and from the site".

In the Caledon Official Plan, Section 5.11.2.4.4 sets out the haul route considerations for amendments to the Official Plan. Section 5.11.2.4.14 requires the information in a Traffic Impact Study (Section 5.11.2.4.2 (b). Sections 5.11.2.5.1 and 5.11.2.5.2 establishes the roads where haul routes are to be located and the access provisions to roads. Section 5.11.2.7.5 encourages cooperation between operations to prepare traffic movement plans.

5. AGGREGATE RECYCLING

Recycled aggregate typically includes reclaimed concrete and asphalt and material from other sites that are blended, and that are imported into a pit or quarry during the operation. This material is incorporated into the native aggregate and then shipped from the site for specific construction purposes.

Subsection 67(0.5) of the *Aggregate Resources Act* provides that “recycled aggregate” will be defined in a Regulation. There is no legal definition to date.

In Subsection 71(4) of the Act, “aggregate” includes recycled aggregate as aggregate is defined in the Regulation.

Subsection 0.12 of Ontario Regulation 244/97 provides for a standard licence condition in paragraph 9.

> A licence or aggregate permit is subject to the condition that the licensee or permittee shall track and report the quantity of recycled aggregate removed from the site each month in an annual production report.

The condition may also be included on the approved site plan. The Aggregate Resources Standards requires that the site plan must identify the location of any proposed recyclable materials. Otherwise, there are no other standards provided for recycled aggregates.

Although recycled material is imported into a site, it is not considered as waste or excess soil as provided in Ontario Regulation 406/19 – On-Site and Excess Soil Management.

Policy 2.5.2.3 of Provincial Policy Statement 2020 provides:

> *Mineral aggregate resource conservation* shall be undertaken, including through the use of accessory aggregate recycling facilities within operations, where feasible.

Mineral aggregate resource conservation is a defined term in PPS 2020:

> The recovery and recycling of manufactured materials derived from mineral aggregates (e.g., glass, porcelain, brick, concrete, asphalt, slag, etc.), for re-use in construction, manufacturing, industrial or maintenance projects as a substitute for new mineral aggregates; and
>
> The wise use of mineral aggregates including utilization or extraction of on-site mineral aggregate resources prior to development occurring.

The industry and the Province have always been concerned about the types of material brought to a pit or quarry and the potential for contamination of the final product and the external impacts on surface water and groundwater. There is now an updated Best Practices Guide that is used by the industry.

The Caledon Official Plan includes Policy 5.11.2.2.4 b) that permits “blending with recycled asphalt or concrete materials” as an accessory use in the designated “Extractive Industrial” areas.

Policy 5.11.2.9.7 is a Special Policy in the Official Plan:

> The Town of Caledon will support initiatives by the aggregate industry and the Province to conserve aggregate resources, through such measures as recycling, and matching aggregate quality requirements to specific job specifications.

In the Official Plan, recycling of mineral aggregate is defined as an associated facility in a mineral aggregate operation.

6. ADAPTIVE MANAGEMENT PLANS

Adaptive Management Plans have been primarily incorporated into site plan approval for large-scale quarry operations. Adaptive Management Plans are not required in the Act or the Regulation, but the Aggregate Standards provide that for large-scale applications, the Site Plan may refer to an adaptive management plan that is identified in the required Technical Reports and Information provided in an aggregate application.

An adaptive management strategy is usually part of the broader monitoring and mitigation of adverse environmental impacts. The AMP is a mechanism that allows the aggregate operator to follow-up the mitigation measures. The federal government incorporated adaptive management measures in the previous *Canadian Environmental Assessment Act of 1992*. The federal interpretation of adaptive management was/is:

> a planned and systematic process for continuously improving environmental management practices by learning about their outcomes. Adaptive management provides flexibility to identify and implement new mitigation measures or to modify existing ones during the life of a project.

Continuous monitoring and mitigation are appropriate for large quarry projects where the natural systems are dynamic, and operations may need to be modified over time in order to satisfy the licence conditions or conditions under other environmental legislation such as the *Environmental Protection Act* and the *Ontario water Resources Act.*

Adaptive management is expensive and for this reason it is left to the other provincial agencies to provide oversight of the operator’s environmental compliance.

The Act, according to subsection 15.1, requires that the licensee submits an annual compliance report to the MNRF on or before September 1. This is the legislated self-assessment process to determine compliance with the Act, the regulation, the site plan and the conditions of the licence. If the licensee discloses a contravention, then it must be remedied within 90 days of submission and the cause of the contravention must be stopped.

Under Ontario Regulation 244/97, subsection 0.12 requires as a condition that permits and approval under the E.P.A. and the O.W.R.A. must be obtained where required to carry out the operations.
The licensee undertakes the compliance assessment between April 1 and September 15 of each year. Subsection 1.1(1) requires that the licensee must send the annual compliance report to Caledon and to Peel.

The results of monitoring, mitigation and adaptive management appear to be included in the Annual Compliance Report from the licensee. The report requires whether the licensee of an active site is or is not in compliance with the adaptive management plan.

Caledon Official Plan

In the Mineral Resources policies, Section 5.11.2.4.2 a) v) provides that in an application for an official plan amendment, Caledon will determine whether the application conforms to Ecosystem Planning and management policies. Section 5.11.1.1 sets out an Aggregate Management Objective that:

> Ensure that the extraction of aggregate resources is undertaken in a balanced manner which adheres to the Ecosystem Planning and Management Objectives contained in Section 3.2 of the Plan.

Section 3.2 contains Ecosystem Integrity Objectives and Ecosystem Planning Objectives that are the basis for a broad framework for ecosystem planning and management.

Section 3.1.3.12 in the Official Plan is a policy for Adaptive Environmental Management. Section 3.1.3.12.1 states:

> The Town shall develop and use Adaptive Environmental Management as a framework for measuring and evaluating the Town's Progress towards sustainability and determining the need to adjust practices and policies based on measured performance.

Section 3.1.3.12.2 states that Caledon shall apply Adaptive Environmental Management "shall require proponents of large-scale development proposals to develop and implement Adaptive Environmental Management, as appropriate and applicable".

The Official Plan provides a definition of Adaptive Environmental Management:

> Shall mean a framework for designing and implementing an environmental monitoring program, quantifying the effects of land use change on the natural environment, evaluating the effectiveness of environmental management and mitigation practices and identifying the need for changed/improved practices/policies in order to meet established objectives.

7. MANAGING IMPACTS OF QUARRY BLASTING

Globally, blasting rock in a quarry produces sound (concussion) and ground vibration. Typically, blasting in a quarry is a stationary source of sound and vibration.

One corollary impact arises from blasting, is the discharge of “fly rock” from sound, ground vibration, and the resulting discharge of “fly rock” may have adverse effects on property, people, and other features of the environment. Without strict control, blasting is a dangerous activity that may cause harm.

Under Ontario Regulation 244/97 (*Aggregate Resources Act*), Subsection 0.12(5) provides for required licence conditions where blasting at the site is authorized:

> The licensee shall monitor all blasts for ground vibration and blast overpressure and prepare blast monitoring reports in accordance with provincial guidelines on limits on blast overpressure and ground vibration for blasting operations.
>
> The licensee shall retain all blast monitoring reports prepared for a period of seven years under each blast.

Under Subsection 0.13, unless provided on a site plan, the licensee shall ensure that pit or quarry is in compliance with the following rules:

> No blasting shall occur on a holiday or between 6 p.m. and 8 a.m.
>
> A licensee shall take all reasonable measures to prevent fly rock from leaving the site during blasting if a sensitive receptor is located within 500 metres of the boundary of the site.

In the Aggregate Resource Standards, a Blast Design Report is required for Class A licences (more than 20,000 tonnes per year) where there is a sensitive receptor within 500 metres of the limit of extraction to demonstrate that provincial guidelines for blast overpressure and ground vibration can be satisfied.

The Annual Compliance Report requires whether the licensee of an active site is or is not in compliance with Quarry Blasting Monitoring.

The provincial guideline to be applied is NPC-119. This Guideline sets the limits for Concussion-Cautionary, Concussion-Peak Overpressure Level, Vibration Cautionary, Peak Vibration Velocity. The Procedures and Measurement Standards are set out in NPC-103 under Part 5. The Technical Definitions for the procedures ands standards are set out in NPC-101.

“Sound” is a defined term:

> An oscillation in pressure, stress, particle displacement or particle velocity, in a medium with internal forces (e.g., elastic, viscous), or the superposition of such propagated oscillations, which may cause an auditory sensation.

“Vibration” is a defined term:

> A temporal and spatial oscillation of displacement, velocity or acceleration in a solid medium.

The Province states that NPC-300 does not provide sound level limits for blasting operations and refers to NPC-119.

Policy A.R.5.00.10 in the Aggregate Resources Policy and Procedures Manual (2006) sets out requirements for the Blast Design Report and Monitoring:

> The allowable limits in NPC-119 must be adhered to and it is recommended that all blasts be monitored and if monitoring is not being routinely done then the cautionary limits will apply.
>
> Monitoring should normally be conducted at locations representative of the closest residence to the blast behind the face and/or closest residence to the blast in front of the face. The monitoring locations should be between the blast and the residence and as close to the residences as possible.

Provincial Policy Statement 2020 provides some guidance. In Policy 3.2.1, with regard to Human-Made Hazards, development on, abutting or adjacent to lands affected by mineral aggregate operations “may be permitted if rehabilitation or other measures to address and mitigate known or suspected hazards are under way or have been completed.

The issue of “Fly Rock” has been adjudicated by the Courts and the Tribunal. Several extracts provide the legal and planning implications of the “Fly Rock” issue:

> Castonguay Blasting Ltd. V Ontario (Environment), Supreme Court of Canada, October 17, 2013
>
> Bates v. Ontario (Ministry of Natural Resources & Forestry), Local Planning Appeal Tribunal, MM180027, January 22. 2021.
>
> Fowler Construction Company Ltd. v. Ramara Township, Local Planning Appeal Tribunal, OLT-22-002101, April 29, 2022.

8. SURFACE WATER AND GROUNDWATER

The Regional Official Plan contains policies requiring the maintenance of quality and quantity of ground and surface water that should inform the Town’s policies on where and under what circumstances aggregate operations should be permitted.

Cumulative Impact Assessment is to be applied where multiple aggregate operations occur in close proximity to each other and the impacts from each individual operation may overlap. The assessment terms of reference should determine the scale of the impact area typically from local to watershed and the timeframe of the potential impacts.

When used as a monitoring exercise in sand and gravel operations, these assessments are used where extraction is below the ground water table. The rationale for cumulative impact assessment in sand and gravel operations is to assess whether aggregate extraction may impact water quality, water quantity and ecosystem health.

The use of cumulative impact assessment in bedrock operations is more complicated. The physical condition of the bedrock is critical since bedrock may be fractured. Determining the location of the ground water table in bedrock is complicated as well.

Other important sources of surface water and groundwater impacts are the undertaking of aggregate washing and wash ponds that may leak or overflow; the dewatering of quarry excavation and the drawdown of the ground water table; the discharge of wash water to surface water resources; and the impact of blasting bedrock.

There are two Ontario references that should be used to understand cumulative impact assessment:

> Grand River Conservation Authority. “Cumulative Effects Assessment (Water Quality and Quantity). Best Practices Paper for Below Water Sand and Gravel Extraction Operations in Priority Subwatersheds in the Grand River Watershed”. November 26, 2020.
>
> Golder Associates. “Cumulative Impacts Assessment for Groundwater Takings in the Carden Plain Area”. September 2012. This Study was initiated by M.O.E. and OSSGA. The Ministry prepared the Study Terms of Reference. February 2009.

In the G.R.C.A. study, a definition of Cumulative Effects is provided:

> The combined environmental impacts or potential environmental impact of one or more development activities, including natural resource utilization or extraction, in a defined area over a particular time period. Cumulative effects may occur simultaneously, sequentially, or in an interactive manner.

In the Golder study, cumulative impact is defined:

> The additive effect of multiple quarry dewatering operations on groundwater, surface water and/or natural environment features.

In the M.O.E. terms of reference for the Caledon study, reference is made to the “Technical Guidance Document for Hydrogeological Studies in Support of Category 3 Applications for PTTW”. The Ministry suggests that these guidelines for hydrogeological studies could be applied to Cumulative Impact Assessments where there is a “group” of takings at individual quarries which may combine to create a cumulative effect.”

In the Aggregate Resources Standards, an application for a Class A or a Class B licence, requires a Water Report where extraction is proposed below the maximum predicted water table. There are two phases for the Water Table Report: Level 1 determines the potential

impacts for surface and ground water and identify wellhead protection areas for quantity. If potential impacts are identified, then a Level 2 report is undertaken, and an Impact Assessment is required to determine the significance of the effect and the potential for mitigation. There is no requirement for cumulative impact assessment.

Where a Permit to Take Water is required under the *Ontario Water Resources Act*, for purposes of site dewatering involving more than 50,000 litres per day and less than or equal to 400,000 litres per day of ground water, a Category 3 Permit is required. This is need where water takings are anticipated to have the highest potential of causing unacceptable environmental impact or interference. A hydrogeological study is required as part of the application. The study determines the impact to existing ground water users and the impact to surface water. The study may require a drawdown analysis where simultaneous pumping of the wells is undertaken to determine the cumulative effects of the proposed taking on local water resources.

Ontario Regulation 387/04 – Water Taking and Transfer sets out the matters to be considered in addressing a PTTW application. The critical issues are the need to protect the natural functions of the ecosystem, water availability, the use of water and the return of water after use.

Cumulative Impact Assessment is not required under the Act, but the Ministry may bring to the proponent's attention any cumulative impact concerns in the study area.

In Provincial Policy Statement 2020, Policy 2.2.1 states:

> Planning Authorities shall protect, improve, or restore the quality and quantity of water by (a) using the *watershed* as the ecologically meaningful scale for integrated and long-term planning, which can be a foundation for considering cumulative impacts of development.

In PPS 2020, development includes "a change in land use" requiring *Planning Act* approval. Cumulative impact may apply to the consideration of planning applications for pits and quarries. A Subwatershed Plan, undertaken by the Conservation Authority, may address cumulative impacts of existing and future land uses on the natural environment.

In Caledon, there are three main watersheds: Humber River, Etobicoke Creek, and Credit River.

The Caledon Official Plan contains special policies in section 5.11.2.9.2 that provides that Caledon will "monitor aggregate operations in and adjacent to Caledon on an individual and cumulative basis". Section 5.11.2.9.3 provides that Caledon "will conduct such studies and address as it considers appropriate the cumulative effects of the establishment and expansion of aggregate extraction operations on the Town of Caledon's communities, natural environment and cultural features."

The Official Plan defines "Cumulative Effects Assessment":

The assessment of cumulative environment effects associated with a proposed change in land use.

The Official Plan defines “Cumulative Environmental Effects”:

> The increment effect of an action when added to other past, present, and reasonably foreseeable future actions. These changes are characterized by being collectively significant over time and space, by occurring frequently in time or densely in space, and by combining additively or synergistically.

A thorough understanding of cumulative effects is found in documents published by the Impact Assessment Agency of Canada. The current *Impact Assessment Act* (June 21, 2019) replaced the *Canadian Environmental Assessment Act*. The Agency defines cumulative effects as “changes to the environment, health, social and economic conditions as a result of a project’s residual effects combined with the existence of other past, present and reasonably foreseeable physical activities.”

The May 2023 version of the “Policy Framework for Assessing Cumulative Effects under the *Impact Assessment Act* will be useful in creating policies in the Official Plan, where appropriate. Cumulative Effects is continued from the *Canadian Environmental Assessment Act* and Technical Guidelines are found in “Assessing Cumulative Effects under the *Canadian Environmental Assessment Act, 2012*.” (March 2018).

The *Impact Assessment Act* is “a planning and decision-making tool used to assess positive and negative environmental, economic, health, and social effects of proposed projects and impacts to Indigenous groups and rights of Indigenous peoples. One of the purposes of the Act is “to assess cumulative effects within a region”. Certain Projects “that have the most potential for adverse environmental effects in areas of federal jurisdiction” are listed in “Physical Activities Regulations” under the Act.

One of the Activities under Mines is the “The construction, operation, decommissioning and abandonment of a new stone quarry or sand or gravel pit with a production capacity of 3,500,000 tonnes per year or more.” The expansion of an existing stone quarry or sand or gravel pit if the expansion would result in an increase in the area of mining operations of 50% or more and the total production capacity would be 3,500,000 tonnes per year or more after the expansion.”

In the Act, subsection 22(1) states that one of the factors that must be taken into account is:

> Any cumulative effects that are likely to result from the designated project in combination with other physical activities that have been or will be carried out.

9. PREVENTION, MONITORING AND MITIGATION OF SOCIAL/ENVIRONMENTAL IMPACTS

Social Impact

There is no mandatory requirement that an application for an ARA licence must include a social impact assessment.

In the *Aggregate Resources Act*, there is one reference to “social”:

> 3.(2)(h). In administering this Act, the Minister may initiate studies on environmental and social matters related to pits and quarries.
>
> Subsection 12(1)(b), the Minister shall have regard to “the effect of the operation of the pit or quarry on nearby communities.”

In the Ministry’s “Policies and Procedures Menu”, Policy No. A.R. 2.01.10 states that “Matters which may impact nearby communities can include: noise, dust, vibration, truck traffic, and surface water and groundwater impacts.” The Policy states that many of the impacts “may be mitigated through Prescribed Conditions.”

In Provincial Policy Statement 2020, Policy 2.5.2.2 is a positive direction:

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

This Policy raises the question to whom is the policy directed – the aggregate operator, the MNRF, the municipality. The PPS sets out the directions to the planning authority and not to applicants. This policy is not directed to the MNRF since it has the mandate to decide operational matters under the ARA. The municipality is directed to determine the consistency of official plan and zoning applications under the Planning Act. This implies that the municipality is directed to determine the social impact of the proposed aggregate operation.

In the Caledon Official Plan, there are policies that refer to “social” impact:

> Section 5.11.2.4.2(c). The Applicant has assessed the social impacts as described in Section 5.11.2.4.13 and demonstrated that the proposal will not have any unacceptable impacts.
>
> Section 5.11.2.4.4(c). That a traffic and haul route evaluation has been completed that identifies and assesses the economic, social, and physical impacts associated with future aggregate traffic to or from aggregate operations within the resource area, identifies the proposed haul route of least impact and assesses the acceptability of the impacts along the proposed haul route.
>
> Section 5.11.2.3.4.13. Any impact studies required by this Plan, will include, where appropriate, an assessment of social impacts based on probable, measurable, significant, objective effects on people caused by factors such as noise, dust, traffic levels and vibration. Such studies will be based on provincial standards, regulations and guidelines and will consider and identify methods of addressing the anticipated impacts in the area affected by the extractive operation.
>
> Section 5.11.2.7.6. The Town of Caledon will request the Ministry of Natural Resources and Forestry to require that all extraction and processing and associated activities be located, designed, and operated so as to minimize environmental and

> social impacts and ensure no negative impacts on the regional Greenlands system, the Environmental protection Area designations and ground and surface water quantity and quality.

There are no known definitions or descriptions of “social impact” or “social impact assessment” in Ontario statutes, regulations, or standards. The appropriate definition of Social Impact Assessment comes from the International Association for Impact Assessment (IAIA):

> Social Impact Assessment includes the processes of analyzing and managing the intended and unintended social consequences, both positive and negative of planned interventions (policies, programs, plans, and projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.

The IAIA has produced twelve fundamental principles for development to be considered in practice.

In Ontario, typically social impact assessment is integral to environmental assessments under the *Environmental Assessment Act.* In the Act, the definition of “environment” includes “the social, economic and cultural conditions that influence the life of humans or a community in Ontario”.

In some examples of SIA in Ontario, the methodology includes assessing the views of communities of interest and their responses to the proposed aggregate operation, the predicted impacts, and the expected mitigation and monitoring measures contained in the technical studies. The criteria to assess impacts include displacement and disruption of residents, disruption of community and recreation features, changes to community character and image and to community cohesion, and the effects on the broader community. The scope of the SIA is the community of people located close to the proposed/expanded operation and along the proposed haul route. The SIA should determine whether the resulting impacts are acceptable, or they are effectively mitigated and monitored.

There are four types of impacts considered in an SIA: Direct impacts, indirect impacts, induced impacts, cumulative impacts.

Environmental Impact

There is a large array of policies that focus on various aspects of environmental protection, environmental impacts, natural hazards. These policies can be found in Provincial Policy Statement 2020, A Place to Grow: Growth Plan for the Greater Golden Horseshoe, Niagara Escarpment Plan, Greenbelt Plan, Oak Ridges Moraine Conservation Plan, Caledon Official Plan, Conservation Authority Regulations and Watershed Plans.

10. CLIMATE CHANGE AND GREENHOUSE GASES

Section 2 (s) in the *Planning Act* states:

> 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, the mitigation of greenhouse gas emissions and adaptation to a changing climate.

Subsection 16. (14) in the *Planning Act* states:

> An official plan shall contain policies that identify goals, objectives, and actions to mitigate greenhouse gas emissions and to provide for adaptation to a changing climate, including through increasing resiliency.

Policy 1.1.1 (i) in Provincial Policy Statement 2020 states:

> Healthy, livable, and safe communities are sustained by preparing for the regional and local impacts of a changing climate.

“Impacts of a changing climate” is a defined term:

> The present and future consequences from changes in weather patterns at local and regional levels including extreme weather events and increased climate variability.

If the Caledon Official Plan contains policies that provide direction for designated land uses and the mitigation of greenhouse gas emissions, then consideration should be given to pits and quarries. One major source of greenhouse gas is carbon dioxide.

In quarry excavations, the limestone is a sedimentary rock made of calcium carbonite with mainly calcite ($CaCO_3$), and the dolostone is a sedimentary rock made of dolomite ($CaMg(CO_3)_2$) with relatively limited calcite. Where there are high concentrations of calcite and dolomite, these are considered as high-purity carbonate rocks.

In the HPMARAs, there are high-purity rocks. In the quarry extraction and processing of limestone and dolostone, carbon dioxide is not released to the atmosphere. ***The discharge of carbon dioxide occurs when limestone is used as a raw material in the production of cement.*** The calcite in the limestone, plus other components, are heated at a very high temperature. Carbon Dioxide is absorbed from the atmosphere. When the Mix and fuel are put into a cement kiln at high temperature producing clinker, and then cooled, the carbon dioxide is then emitted to the atmosphere. Most of the carbon dioxide comes from the clinker and the fuel used for heating*.* ***The last published report on GHG emissions indicated that cement production in Canada represents 14% of total emissions from the manufacturing sector.***

The cement industry and governments are researching methods to achieve low-carbon cement and net-zero concrete.

Section 3.1.3.8 of the Caledon Official Plan, sets out the policies for Climate Change. The Town of Caledon prepared and adopted its current “Resilient Caledon – Community Climate Action Plan”. Carbon emissions discharge from Pit and Quarry equipment, blasting rock and from trucks arriving and leaving the site. Although aggregate operations solely contribute relatively little impact on climate, it is the downstream activities, particularly the manufacturing of cement, asphalt and concrete that contribute significant carbon discharges to the atmosphere. The aggregate industry has a significant role in carbon-based infrastructure development.

11. PEER REVIEW PROCESS

Peer Review is often used by many municipalities as part of its consideration of a proposed project. The Caledon Official Plan includes several references to Peer Review.

> 5.11.2.4.6. The Town may, in appropriate circumstances, and to the extent appropriate, require an Applicant for a redesignation to permit a new or expanded aggregate extraction operation, to pay reasonable costs of external peer review which shall not include original data collection or original research of any studies required by this Plan. In such case, the Town shall enter into an agreement with the Applicant to administer and scope the peer review and to set reasonable controls on peer review costs.
>
> 5.11.2.4.8. (extract) In the pre-submission consultation meeting, one of the issues is “to outline the process of evaluation and peer review” for a new operation or expansion.
>
> 5.11.2.6.4. The Town may, in appropriate circumstances, and to the extent appropriate, require an Applicant for a new sensitive land use to pay reasonable costs of peer review which shall not include any original data collection or original research of any studies required by this Plan. In such case, the Town shall enter into an agreement with the Applicant to administer and scope the peer review and to set reasonable controls on peer review costs.
>
> 5.11.2.6.8. The Town may, in appropriate circumstances, and to the extent appropriate, require an Applicant for a new interim use of land in accordance with Section 5.11.2.6.7, to pay reasonable costs of peer review which shall not include original data collection or original research of any studies required by this Plan. In such case, the Town shall enter into an agreement with the Applicant to administer and scope the peer review and to set reasonable controls on peer review costs.
>
> 6.2.1.6.3. Subject to more detailed policies of this Plan, an applicant shall be responsible for the costs of any peer review undertaken by the Town of Caledon of any studies submitted by the applicant in support of an application for an Official Plan Amendment or rezoning to permit a new use. The Town of Caledon will enter into an agreement with an applicant to administer peer review and set reasonable controls on peer review process.

12. CALEDON OFFICIAL PLAN AGGREGATE POLICIES

Caledon will need to review the policies and procedures for undertaking a comprehensive review of planning applications and for commenting on applications for new and expanded aggregate operations. This review will be contained in the Policy Options Report.

13. PLANNING ACT MODIFICATIONS TO CALEDON PLANNING PROCESS

On November 28, 2022, Bill 23 was given Royal Assent as the *More Homes Built Faster Act, 2022.* Schedule 9 amended the *Planning Act* and gave effect to significant changes to Regional Planning and Local Planning.

The dissolution of the Regional Municipality of Peel under the *Hazel McCallion Act (Peel Dissolution), 2023* comes into force on January 1, 2025.

The Sections of Bill 23 as enacted that have not yet been proclaimed by the provincial government and not in effect (as of July 14, 2023).

The Regional Municipality of Peel becomes an “upper-tier municipality without planning responsibilities”.

For municipal planning purposes, the Town of Caledon becomes a local municipality. The Region of Peel will no longer have planning approval authority. Until the Region of Peel is resolved, the Town of Caledon remains a lower-tier municipality for municipal purposes.

The Town of Caledon is required to prepare and adopt an Official Plan, incorporating the former Region of Peel Official plan as local planning policy, where appropriate. The Region of Peel Official Plan is deemed to become the Caledon Official Plan until Caledon revokes or amends the Region’s Official Plan. The existing Region of Peel Official Plan was approved by the Minister of Municipal Affairs and Housing and came into effect on November 4, 2022.

The Region of Peel prepared Background Reviews regarding aggregate resources and transportation. Caledon may continue to adopt the official plan that applies to Caledon. The Region of Peel is required to forward all documentation prepared with regard to the adoption of the official plan. If there is a conflict between the policies of the Region of Peel Official Plan that becomes the Caledon Official Plan and the existing Caledon Official Plan, the Region of Peel’s Official Plan prevails as it existed before the effective date.

The Town of Caledon is required to enact a Comprehensive Zoning By-law that conforms with the Caledon Official Plan as approved.

PART TWO - OVERVIEW OF EXISTING CALEDON OFFICIAL PLAN MINERAL RESOURCE GOALS, OBJECTIVES AND POLICIES

The MINERAL RESOURCES Policies in Section 5.11 are still in effect. Since 2003, when they came into effect, there were two amendments that were adopted as part of conformity exercises with Provincial Plans and Policies.

During the period from 2003, there have been six applications for aggregate operations that satisfied these Official Plan policies

The Official Plan Review provides an opportunity to assess the efficacy of the Caledon Mineral Aggregate Policies to determine whether they conform with Provincial Statutes, Regulations, Policies and Guidelines. Another reason for this assessment is to reflect the character of the Caledon Community to determine how these policies consider the Provincial Interest in Aggregate Resources while protecting the Municipal and Community Interests.

The Provincial interest needs to be addressed in a manner that respects the other planning goals of the municipality. The goal of these official plan policies is to remake Caledon's planning review and decision processes for mineral aggregate applications and oversight in this manner.

The provincial government requires Caledon to identify and protect mineral aggregate resources from land use development; to make as much of the aggregate resource available as is realistically possible close to markets in the context of the other planning considerations; to ensure that extraction of mineral aggregates shall minimize social, economic, and environmental impacts that is achieved primarily through the application of policies on where they may be located; to allow existing licenced pits and quarries to continue; to require progressive and final rehabilitation that promotes land use compatibility.

Caledon's Official Plan mineral aggregate resource policies shall focus on protecting the natural environment, water resources, communities, businesses and institutions from impacts and effects of aggregate and aggregate-related activities within a potential influence area and establishing front-end consultation and review of aggregate proposals.

Mineral Aggregate Policies set out the objectives and policies established primarily to manage mineral aggregate resources, operations, extraction, and rehabilitation from the perspective of the Caledon community; to mitigate the effects on the community and the natural environment; and to implement the procedures to achieve the plan objectives.

Section 13 of the *Planning Act* mandates that an official plan shall contain goals, objectives and policies established primarily to manage and direct physical change and the effects on the social, economic, built, and natural environment of the municipality or part of it.

The methodology to review the existing MINERAL RESOURCES policies divides the text into the following parts:

Aggregate Resources Goals and Objectives

Aggregate Resources Operations Application Requirements

Policies that are Positive Directions to Applicants
These are policies that are imperative or mandatory. They include the words "shall" and "must" and may include "will".

Policies that are Limitations and Prohibitions to Applicants
These are conditional positive directions. They include the words "shall not", "shall be", "shall identify", "only", and "permit".

Policies that are Enabling and Supportive.
They include the words "may" (permissive and empowering), "should" (recommended or advisory), "will" (done in the future), "generally" (usually without regard to particulars or exception), "promote" (help forward), "encourage" (stimulate by help), "accommodating" (obliging or compliant), "avoiding" (refrain from).

The detailed review to occur in the next stage of the study will identify the continued applicability of the existing policies and non-conformities with Provincial requirements together with policy options to address them.

Note: The verbs indicate how they are to be implemented as stated in Provincial Policy Statement 2020.

1. AGGREGATE RESOURCES GOALS AND OBJECTIVES

GOALS

Policy 2.2.3

To balance the protection and use of mineral aggregate resources now and in the future with other goals of the Town of Caledon as expressed in the Official Plan, including, but not limited to, maintenance of the local community/social values; protection and stewardship of the Town of Caledon's natural ecosystems and cultural/human heritage resources; and strengthening the local economy and tax base.

To recognize the Town of Caledon's mineral aggregate resource industry as an important component of the Town of Caledon's economic base and to provide for the continuation of presently licenced mineral extraction operations; to protect existing licenced facilities from new adjacent land uses which may hinder their operation; and to stress the need for

progressive rehabilitation in existing facilities, as well as rehabilitation of abandoned pits and quarries.

To identify high potential mineral aggregate resource areas in Caledon, to protect them for possible use and to establish policies that allow as much of the resource as is realistically possible to be made available for use, to supply resource needs, in a manner consistent with this Plan and the Niagara Escarpment Plan where applicable.

Commentary

There are three Goals that are included in the overall list of Caledon Official Plan Goals. These Goals will need to be modified to reflect the intent of the new Caledon Official Plan.

OBJECTIVES

5.11.1
The comprehensive analysis of aggregate resources in the Town of Caledon has resulted in the formulation of Town-wide objectives which will provide the framework for policies to guide the management and use of aggregate resources. The Town-wide objectives are as follows:

5.11.1.1
To ensure that the extraction of aggregate resources is undertaken in a balanced manner which adheres to the Ecosystem Planning and Management Objectives contained in Section 3.2 of the Plan and which will recognize Caledon's community character and social values over the short and long-term.

5.11.1.2
To provide a framework for orderly extraction of aggregate resources that provides for a greater degree of certainty to both the aggregate industry and the community, ensures the efficient use of infrastructure, minimizes impacts, and encourages timely rehabilitation.

5.11.1.3
To provide a framework to allow as much of the aggregate resource as is realistically possible to be made available for use.

5.11.1.4
To protect aggregate resources identified as Caledon High Potential Mineral Aggregate Resource Areas (CHPMARA) as identified on Schedule L for possible future extraction. Development within or adjacent to the protected areas that would preclude or hinder extraction or access to the aggregate resources will be restricted.

5.11.1.5
To minimize the impact of aggregate related traffic on the community.

5.11.1.6
To establish a set of clear, balanced, and standard criteria for evaluating applications for new or expanded aggregate operations that will contribute to achieving the goals and

objectives of this Plan. April, 2018 Office Consolidation 5-125 Town of Caledon Official Plan Chapter 5 Town Structure and Land Use Policies 5.11.1.7 5.11.1.8 5.11.2 5.11.2.1 5.11.2.1.1 5.11.2.1.2.

5.11.1.7
To minimize the disturbed area and achieve beneficial end uses by encouraging and promoting the speedy, progressive, and final rehabilitation of both new and older aggregate operations and the preparation of a Rehabilitation Master Plan for each of the ten aggregate resource areas.

5.11.1.8
To improve aggregate resource management in the Town through cooperation with the aggregate industry and other stakeholders in joint sponsorship or ventures.

Commentary

The Objectives need to be revised to reflect changes in Provincial Statutes, Regulations, Guidelines and Policies and the Review of the Issues identified in this Background Review. The Objectives need to be written as positive statements that provide direction for the decisions of Caledon Council

5.11 Preamble

The role of the Town of Caledon in the hierarchy of Provincial, Regional, and local aggregate resource planning, is to establish comprehensive mineral aggregate resource policies in its Official Plan. These policies must have regard to provincial policies and take into account local considerations. They must be in conformity with the Regional Official Plan and the Niagara Escarpment Plan where applicable. The Town of Caledon's aggregate resource policies refine the identified Regional HPMARA for protection at the local level and allow mineral aggregate resources to be made available for use, where this use can be balanced and integrated with the ecosystem, social and economic goals of the Town of Caledon.

To the extent that any policies within Section 5.11 may conflict with the Niagara Escarpment Plan, the Niagara Escarpment Plan, where applicable, shall prevail.

Within the ORMCPA, mineral aggregate operations are required to conform to the ORMCP. Therefore, within the ORMCPA, the provisions of Section 5.11 are to be read and interpreted in conjunction with the provisions of Section 7.10. In accordance with Section 33 of the ORMCP, this Plan and the Town's implementing Zoning By-law shall not contain provisions that are more restrictive than the provisions of the ORMCP with respect to mineral aggregate operations and wayside pits. Notwithstanding any other provision of this Plan, it is determined that the provisions of this Plan are more restrictive than the ORMCP with respect to mineral aggregate operations and wayside pits, the provisions of the ORMCP shall prevail to the extent that they are less restrictive.

The High Potential Mineral Aggregate Resource Areas (HPMARA) are identified on Schedule C in the Regional Official Plan. The HPMARA is not a land use designation; it is

a mechanism for identifying and protecting significant areas of mineral aggregate resources. The HPMARA includes those portions of the primary and secondary sand and gravel and bedrock resource areas located in the Region of Peel that are not constrained by: the Core Areas of the Greenlands System in Peel as identified in Section 2.3 and on Schedule A in the Regional Official Plan; the Escarpment Protection Areas as designated in the Niagara Escarpment Plan; registered plans of subdivision; and the approved settlement areas as designated in area municipal official plans.

The Regional HPMARA has been further refined at the local level to reflect the Town of Caledon's local environmental, cultural, social, and other planning considerations to create the Caledon HPMARA (CHPMARA), as identified on Schedule L of this Plan. A policy framework has been established to deal with applications for extraction within the CHPMARA. Within the ORMCPA, CHPMARA was further refined by removing ORMCP Natural Core Areas.

The process of refining HPMARA and creating CHPMARA included the elimination of portions of resource areas in order to be consistent with Caledon's environmental policies. Certain Environmental Policy Areas were excluded from HPMARA for this reason. In addition, fragments of HPMARA which, because of their size, shape, or other factors, were not considered to be feasible for extraction were similarly removed. Furthermore, residential clusters were identified and excluded from the HPMARA so as to produce CHPMARA.

The Town is characterized by its rolling hills and valleys, rivers and streams, natural landscapes, agricultural lands, rural residential areas, historic hamlets/villages, parks, and conservation areas, hiking trails, the Niagara Escarpment, and the Bruce Trail. The Town's Mineral Aggregate policies are based on the need to balance the protection, use and enjoyment of these human and environmental features with the sometimes-competing priorities for the protection of the mineral aggregate resources for future extraction. The wise management of the Town's aggregate resources is critical to preserving Caledon's unique identity and character.

Commentary

The Preamble needs to be revised to reflect the purpose of Chapter 20 of the new Caledon Official Plan, the revised Goals and Objectives and Caledon's approach to balancing the interests of Caledon and its residents and the Provincial Interest in protecting Aggregate Resources and Operations.

2. AGGREGATE RESOURCE OPERATIONS APPLICATION REQUIREMENTS

Section 5.11.2.4 sets out the policies how Caledon will consider applications for new and expanded aggregate operations. The detail is stated in section 5.11.2.4.1.

Corollary policies in sections 5.11.2.4.2 and 5.11.2.4.8 require pre-consultation prior to the submission of planning applications and sets out the criteria for consideration of official plan amendment applications. These criteria include social impacts, noise and vibration impacts, dust and other air quality impacts, and land use conflicts. The latter policy very

clearly lists the reports that are required from applicants. References are made to subsidiary policies in section 3.1 (Ecosystem Planning and Management), section 5.7 (Environmental Policy Area), section 5.11, and section 6.2.3.3 (Official Plan Amendments). Corollary policy in section 5.11.2.5.2 sets out the requirements for road access.

Sections 5.11.2.4.7 and 5.11.2.4.8 are primary policies provide for transparency and consultation during the planning application process.

Commentary

Although these policies set out requirements for applications and consideration, the directions to Council and applicants are not necessarily positive. The primary policies and most of the corollary and subsidiary policies use the term “will”.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

3. LAND USE COMPATIBILITY, SENSITIVE LAND USES, HUMAN HEALTH

Section 5.11.2.6 sets out the primary Land Use Compatibility policies. Sections 5.11.2.6.3 and 5.11.2.6.6 require consultation and demonstration that a development proposal does not preclude or hinder potential extraction. Section 5.11.2.6.5 policies allow conditions for development that would preclude, or hinder extraction and Section 5.11.2.6.7 allows for interim land uses in the resource areas.

Section 5.11.2.6.8 is a positive direction that requires the applicant to pay for peer review.

Sections 5.11.2.6.1 and 5.11.2.6.2 are positive directions that establish the area of influence and sensitive land uses.

Section 5.2.11.6.4 sets out the requirements where development is proposed in an area of influence from sand and gravel operations. There are policies that noise study for the proposed development is positively required, and in designated settlement areas, mitigation measures will be incorporated in the design.

Section 5.11.2.6.9 sets out policies to consider the expansion of settlement areas into resources areas.

Section 5.11.2.4.13 enables impact studies that may include and assessment of social impacts.

Commentary

The Land Use Compatibility policies need to include reference to quarries in addition to sand and gravel operations.

The impact studies that are required are explained in detail in other corollary and subsidiary policies.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

It will be necessary to expand the Social Impacts Assessment to relate to other policies regarding Human Health Impacts. The Caledon Official Plan does not reference the need for Guidelines and Standards for a Caledon Compatibility Impact (Social Impact) Assessment Report.

4. AGGREGATE RESOURCES AND AGGREGATE OPERATIONS

Sections 5.11.2.1 and 5.11.2.2 are enabling policies that are intended as positive directions to establish Mineral Aggregate Resources Areas and Official Plan designations. Section 5.11.2.3 are enabling policies regarding Wayside Pits and Wayside Quarries and Portable Asphalt Plants.

Section 5.11.2.7 set out the Aggregate Operations/Design Policies

Commentary

The policies will need to reflect the revised HPMARA mapping and the improved Aggregate Operation Policies, plus any additional local constraints that may be appropriate.

Policies need to recognize permanent asphalt plants and permanent ready-mix concrete plants, as well as accessory uses subject to locational criteria outside of licenced aggregate sites.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

5. AIR QUALITY

Section 5.11.2.4.2 contains positive direction for applicants to submit reports including 5.11.2.4.2 (j) that “the Applicant has demonstrated that the impacts from dust and other air pollutants will be mitigated to acceptable levels”.

Section 3.1.3.11 sets out the narrative and Caledon’s expectations to meet Air Quality and in Section 3.1.3.11.5 the positive direction is “to implement setbacks for residential development and other sensitive land uses from potential sources of harmful emissions.”

Section 3.1.3.7.1 is a positive direction that Caledon will prepare, develop, and implement design guidelines such as:

> Compatibility between existing uses and new uses, including uses on lands adjacent to the Caledon boundary in neighbouring municipalities, considering such items as lighting, height, traffic, noise, dust, air quality, odours, and vibrations.

Commentary

The directions to applicants are positive, but their continued appropriateness needs to be considered, including potential consideration of local standards or guidelines.

The Caledon Official Plan does not reference the need for Guidelines and Standards for a Caledon Fugitive Dust Assessment and a Caledon Air Quality Assessment Report.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

6. HYDROLOGY AND HYDROGEOLOGY

Section 5.11.2.4.2 requires, in part, that an applicant will provide a Water Resources Study for applications above water table extraction and below water table extraction. The provisions for these studies are included in sections 5.11.2.4.15 and 5.11.2.4.16.

Section 5.11.2.4.15 is a positive direction that sets out the guideline that “shall identify all sources of water and their functions and analyze and assess the impact of the application on each of those water resources and shall satisfactorily demonstrate that there will not be unacceptable impacts”. There are other matters that shall be addressed in the study.

Section 5.11.2.4.16 is a positive direction that sets out the guideline that “shall identify all sources of water and their functions and analyze and assess the impact of the application on each of those water resources and shall satisfactorily demonstrate that there will be no unacceptable impacts”. There are other matters that shall be addressed in the study.

Each of these policies provides satisfaction with sections 3.2.5.13 and 5.11.2.2.6 that establish Groundwater policies and where aggregate operations are permitted relative to natural heritage areas and groundwater areas.

Section 5.11.2.4.6 provides that the impact on surface water will be considered by the Ministry when issuing a licence.

Surface Water is considered in sections 3.2.5.10.4 (fisheries), 3.2.3.12.4 (valley and stream corridors), and 3.2.5.13.1 (interconnections with groundwater).

Commentary

The directions to applicants are positive.

The Caledon Official Plan does not reference the need for Guidelines and Standards for a Caledon Water Resources Assessment Report.

7. NOISE

Section 5.11.2.4.2 requires, in part, that an applicant will “demonstrate that noise and vibration impacts will be mitigated to acceptable levels.”

Section 5.11.2.4.13 provides that required impact studies will include an assessment of social impacts based on noise and vibration.

Section 5.11.2.6.4 provides that where sensitive land uses are proposed within an area of influence, noise and vibration studies will be required.

Section 3.1.3.7.1 is a positive direction that Caledon will prepare, develop, and implement design guidelines such as:

Compatibility between existing uses and new uses, including uses on lands adjacent to the Caledon boundary in neighbouring municipalities, considering such items as lighting, height, traffic, noise, dust, air quality, odours, and vibrations.

Commentary

The directions to applicants are positive.

The Caledon Official Plan does not reference the need for Guidelines or Standards for a Caledon Acoustic Assessment Report and a Vibration Assessment Report.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

8. NATURAL HERITAGE AND ENVIRONMENT

Section 5.11.2.4.2 is a positive direction that requires the application to submit a report that demonstrates how “the application conforms to the Ecosystem Planning and Management Policies (section 3.2), the Environmental Policy Area Policies (section 5.7) and section 5.11.2.2.6".

Section 5.11.2.2.6 modifies the positive policies in section 5.11.2.2.5 that prohibits extraction in such natural heritage areas as the Core Areas of the Greenland System, the Environmental Policy Areas designation, kettle lakes and their catchments, natural lakes and their catchments, parts of the Natural Heritage System of the Greenbelt Plan.

Notwithstanding section 5.11.2.2.5 policies, mineral aggregate operations may be permitted within and adjacent to such natural heritage features as Valley and Stream Corridors draining less than 125 hectares, subject to satisfying conditions, Woodland Core Areas, and Other Woodlands, subject to satisfying conditions, Other Wetlands subject to satisfying conditions, among other features.

Sections 5.11.2.2.7 and 5.11.2.2.8 are positive directions regarding operations in the Oak Ridges Moraine and the Greenbelt.

Section 5.11.2.4.17 sets out the criteria for a comprehensive, broader scale environmental study.

Section 5.11.2.7.6 will be used to advise the Ministry to minimize environmental impacts and ensure no negative impacts on the Greenlands System, the Environmental protection Area designations, and ground and surface water quantity and quality.

Section 3.1.3.7.1 provides that Caledon shall develop and implement design guidelines that consider “integration of natural systems, features, and functions into the design of the community in an ecologically compatible manner.

Section 6.2.1.6.2 requires that an Environmental impact study and management plan, a Comprehensive broader scale environmental study, and a Phase 1 environmental site assessment are submitted with planning applications.

Commentary

The Natural Heritage and Environmental policies are comprehensive and are positive directions to applicants.

The Caledon Official Plan does not reference the need for Guidelines or Standards for a Caledon Environmental Impact Report.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

9. COMPREHENSIVE REHABILITATION

Sections 5.11.2.8.3 and 5.11.2.8.4 are positive directions that require operators to prepare detailed site rehabilitation plans that conform to the Official Plan policies. There are related corollary and subsidiary policies in sections 3.1 (Ecosystem Planning and Development) and section 5.7 (Environmental Policy Area).

The remaining policies in section 5.8 are enabling and supportive.

Commentary

Now that Caledon Council has adopted a Rehabilitation Master Plan for part of the Resource Area, the approved Implementation Framework should be incorporated into the new Official Plan.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

10. HAUL ROADS

Section 5.11.2.5.1 is a positive corollary direction that requires new aggregate operations on high-capacity arterial roads except as provided in section 5.2.5.2. These are outcomes of the required Traffic Impact Studies in section 5.11.2.4.14. A positive direction for a Road Improvement Study is set out in section 5. 1..2.5.2. The identification of haul roads is considered in section 5.11.2.5.3.

Commentary

The positive policies in the new Caledon Official Plan should include recommendations from the Peel Goods Movement Strategic Plan 2017-2021 and the Peel/Caledon Transportation Technical Paper.

The Caledon Official Plan does not reference the need for Guidelines and Standards for a Caledon Vehicle Traffic Capacity & Safety Impact Assessment Report.

11. AGGREGATE RECYCLING

Section 5.11.2.9.7 is special policy in the Official Plan that enables and supports aggregate recycling.

Commentary

The new Caledon Official Plan should include positive policies that reflect the requirements under the *Aggregate Resources Act* and Ontario Regulation 244/97 and Provincial Policy Statement 2020.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

12. ADAPTIVE MANAGEMENT PLANS

Section 3.1.3.12 (Adaptive Environmental Management) provides positive direction that Caledon shall develop, use, and apply Adaptive Environmental Management in context of Sustain ability.

Commentary

The Mineral Aggregate Resource policies should include positive direction to provide for and be able to assess Adaptive Management Plans as integral to monitoring aggregate resource operations.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

13. IMPACTS OF QUARRY BLASTING

There are no policies regarding quarry blasting in the Caledon Official Plan.

Commentary

The Mineral Aggregate Resource policies should include policies that require the applicant to prepare and submit a Blasting Noise and Vibration Assessment Report and a Blast Fly Rock Discharge Assessment Report to Caledon.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

14. CUMULATIVE IMPACTS - SURFACE WATER AND GROUNDWATER

There is no direct policy that provides for the submission of a Cumulative Impact Assessment that would be used to measure environmental effects on water quantity and water quality arising from aggregate operations.

Commentary

The Mineral Aggregate Resource policies should refer to the preparation of a Cumulative Impact Assessment jointly with relevant agencies, where there are issues with impacts on hydrological and hydrogeological features and functions.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

15. MONITORING AND MITIGATION

Section 5.11.2.4.3 expects that applicants will propose a Monitoring Program when considering an application. Sections 5.11.2.4.15, 5.11.2.4.16 are positive directions to require a Water Resources Study and that the appropriate monitoring program will be implemented.

Commentary

The Monitoring and Mitigation program seems to be used to measure the impacts related to surface water and groundwater features. There are no policies to monitor Social Impacts from other implications of the aggregate operations.

Similar to Provincial Policy Statement 2020, the new Mineral Aggregate Resources policies should use the term “shall” and “must”, where appropriate.

16. CLIMATE CHANGE AND GREENHOUSE GASES

Section 3.1.3.8 sets out the narrative and the policies for the reduction of greenhouse gas emissions in the municipality.

Commentary

These are broad positive directions that do not directly apply to Mineral Aggregate Operations.

17. PEER REVIEW PROCESS

Sections 5.11.2.4.6, 5.11.2.4.8, 5.11.6.4, 5.11.2.6.8, 6,2,1,6,3 set out the requirements for peer review of various studies that are undertaken as part of applications for Mineral Aggregates.

Commentary

The Caledon Official Plan does not provide Peer Review Guidelines or a Protocol supporting peer reviews or work required to complete assessment. These should be referenced in the Official Plan policies.

18. SPECIAL POLICIES

All of Section 5.11.2.9 set out direction for other matters regarding aggregate resources.

PART 3:
BACKGROUND – HISTORIC PERSPECTIVE AND CONTEXT

How did the Province and the municipality manage the mineral aggregate resources in the past 80 plus years starting in the post-war period? How did we get here as a community and how will the municipality and the community manage in the next thirty years to the next planning horizon of 2051?

Sand and gravel extraction occurred in the Caledon area as long ago as the early 1900s. In a Report titled “Sand and Gravel in Ontario” published by the Bureau of Mines in 1918, the following characterization of the resource in Caledon is indicative of the historic perspective:

> Large pits were opened near Cataract in the Credit River Valley. The gravel is coarse and made up mostly of sandstone, shaly sandstone, igneous and metamorphic rocks. The pits are located on the east bank of the river and mostly in the concave bends. This gravel was probably brought down by the river during the formation of the valley. The walls of the pits are about 70 feet high. The deposits are extensively worked by steam shovels, the material being used as ballast and road gravel. [Source: Ontario Bureau of Mines. Sand and Gravel in Ontario. A. Ledoux. 1918]

There were large gravel deposits near Cataract in the Credit River valley. In the 1950s and 1960s, there were several Pits such as Pinchin, Franceschini, Cooper’s, Caledon, Smythe, Bee Jay, Armstrong, and Mineral Industries.

It is reasonable to witness the significant changes in legislation, regulations, guidelines court and tribunal decisions and policies that primarily expressed the interests of the Province and the municipalities and consequently the community interests. Looking forward, it is fair and reasonable to look backwards for context.

This part of the Background Review is factual and an objective observation of the history during various time periods from 1940 to 2023. This is a selection from a large archive of documents.

1940 to 1970 Period

In 1948, the Nuisance section of the *Municipal Act* was amended by adding paragraph 39b to section 405 under Pits and Quarries:

> For prohibiting the making of pits and quarries in the municipality or regulating the location of them, provided that the making or locating of a pit or quarry in contravention of the by-law in addition to any other remedy may be restrained by action at the instance of the corporation.

These were not new powers given to cities, towns, villages, and townships. These provisions already existed with regard to zoning since 1908 and were now consolidated into one section. Some Townships had this power since 1924. The municipal by-law would

apply the restriction within the entire municipality. These are not zoning by-laws under the Planning Act. [Source: *Municipal Act*, S.O. 1948. Section 13. June 1, 1948]

This paragraph was repealed in 1957 and two new paragraphs were added to section 379 of the *Municipal Act* that allowed local municipalities to pass by-laws pertaining to the operations and regulations of pits and quarries (not zoning by-laws):

> 118. For prohibiting the carrying on or operation of a pit or quarry in any area in which the use of land is restricted to residential or commercial use by a by-law passed, or an official plan adopted, before the 1st day of January, 1959, provided no by-law passed under this paragraph shall come into force until approved by the Municipal Board or shall apply to a pit or quarry made or established before the 1st day of January, 1959, except to prohibit the enlargement or extension of any such pit or quarry beyond the limits of the land owned and used in connection therewith on the 1st day of January, 1959.
>
> 119. For regulating the operation of pits or quarries within the municipality and for requiring the owners of pits and quarries that are located within 300 feet of a road and that have not been in operation for a period of twelve consecutive months to level and grade the floor and sides thereof and the area within 300 feet of their edge or rim so that they will not be dangerous or unsightly to the public.
> [Source: *Municipal Act*, *1959*, c.62, s.18(3) and 1958, c.64, s.29(6)]

On January 13, 1958, the Ontario Court of Appeal rendered an important decision regarding the zoning of a gravel pit under section 390 of the *Municipal Act,* (Pickering Twp. v. Godfrey). This was an appeal by Pickering Township against a 1957 Court decision that allowed Godfrey to dig gravel on his land and sell the gravel contrary to Pickering's Zoning By-law. The relevance of the Appeal Court decision was that "the making of pits and quarries is not a 'use of land' within the meaning of s. 390 and it therefore follows that a zoning by-law passed under it cannot prevent a landowner from digging and removing gravel or other substances from his lands."

> This Decision interprets pits and quarries as not a 'use in the land'.
> [Source: Ontario Court of Appeal. Pickering (Township) v. Godfrey (1958) O.R. (2nd) 484]

3. On March 26, 1959, the Ontario Legislature amended the *Planning Act* to permit municipalities to pass zoning by-laws (section 27a 6.):

> For prohibiting the making or establishment of pits and quarries within the municipality or within any defined area or areas thereof.

This amendment to the *Planning Act* was the response to the Court of Appeal decision. This paragraph when read in context of section 27a, does not permit the municipality to pass a zoning by-law "prohibiting the use of land"**.** On the face, the pit or quarry is not a use of land for zoning purposes. This section was repealed on August 1, 1983, through Bill 159. [Source: The *Planning Amendment Act*, *1959*. c. 71, s. 5. March 26, 1959]

In 1962, D. F. Hewitt (Department of Mines), published “Urban Expansion and the Mineral Industries in the Toronto-Hamilton Area”. In 1960, rapid growth of municipalities “has created a need for planned development of land-use in the areas of urban expansion”. Consequentially, “In the best interests of the community, zoning regulations should take into account the need to assure the community of an adequate supply of essential mineral raw materials, particularly for the construction industry”.
[Source: Department of Mines. Urban Expansion and the Mineral Industries in the Toronto-Hamilton Area. D. F. Hewitt. Industrial Mineral Report No. 8. 1962]

In the Toronto-Hamilton Area, there were 86 producers of sand, gravel and crushed stone that produced in the order of 25.4 million tonnes. The implication of the municipal growth to the mineral industry is stated as follows:

> The fact that transportation is a decisive factor in the costs of construction raw materials needed within municipalities should be borne in mind when municipal officials are considering the best interests of the municipality in regard to restriction of development of mineral raw materials in areas where they may be present.

The Report concluded with this message regarding municipal zoning:

> When zoning regulations make provisions for the wise development of natural resources, they should also ensure that certain performance standards are met by the producers. Control of noise, dust, dirt, and traffic, and requirements as to set-back from roads, appearance of the plant, screen planting, safety, and land rehabilitation, should be dealt with in the zoning regulations. However, the regulations should not contain unreasonable, arbitrary, or unnecessary restrictions.

The Report generally illustrates the sand and gravel producers and resources and the bedrock formations and quarries within a 60-mile (100 kilometre) radius from the Toronto Islands. In the then Caledon and Chinguacousy Townships, there were approximately 14 sand and gravel pits and two shale quarries.
[Source: Department of Mines. Urban Expansion and the Mineral Industries in the Toronto-Hamilton Area. D. F. Hewitt. Industrial Mineral Report No. 8. 1962]

In 1963, Hewitt and Karrow (Department of Mines) described the 258 sand and gravel deposits in southern Ontario. The report indicates that in the Toronto area, sand and gravel sources are difficult to find**.** In 1960, there were a reported 176 commercial pit operators. In the Peel County area, there were twenty pits listed with four in the then Caledon area.
[Source: Department of Mines. Sand and Gravel in Southern Ontario. D. F. Hewitt and P. F. Karrow. Industrial Mineral Report No. 11. 1963]

In June 1968, Len Gertler presented the “Niagara Escarpment Study Conservation and Recreation Report”. He recommended provincial standards including licensing, site redevelopment plans, and performance bonds to guarantee site redevelopment. Other recommendations included an inner zone centred on the Escarpment edge where new operations are prohibited and an outer zone where they are permitted.

[Source: Ontario Treasury and Economics Department. Niagara Escarpment Study. Conservation and Recreation Report. L. O. Gertler. June 11, 1968]

In 1969, the Department of Mines published “Stone Resources on the Niagara Escarpment”, authored by M. A. Vos. This Report surveyed the stone resources along the Niagara Escarpment. It sets out three factors for locating a quarry site: geographic location, quality of the stone, freedom of operation.

With regard to geographic location, it states**,** “It is essential for a quarry to be located close to a market for its product**.”** With regard to quality of the stone, it states, “Limestone and dolomite have a long history of providing mankind with the basic necessities of shelter and industry…” With regard to freedom of operation, it states**,** “Planning of land use and land development should prevent situations in the future in which resources become a total loss to society. It must take into account the eventual depletion of all available resources.” [Source: Department of Mines. Stone Resource of the Niagara Escarpment. M. A. Vos. Industrial Mineral Report No. 31. 1969]

On December 15, 1969, the High Court of Justice stated in Township of Whitchurch v. McGuffin “that the zoning by-law prohibits the making or establishment of a pit or quarry. It does not restrain an existing operating pit.”
[Source: High Court of Justice. Township of Whitchurch v. McGuffin et al. 1969 CanLII 208 ONSC. December 15, 1969]

In September 1969, the “Report of the Mineral Resources Committee” was submitted to the Minister of Mines. This committee of officials from three Ministries reviewed submissions by the Aggregate Producers’ Association of Ontario and the Quarry Operators Section of the Ontario Mining Association, made to the Premier of Ontario. The stakeholders requested “a unified province-wide set of operating conditions conducive to the efficient and economic conduct of the extractive industry.” The concern was raised that “There can be little doubt that the existing and often conflicting proliferation of municipal bylaws now regulating and controlling the industry has led to considerable uneasiness”. [Source: Department of Mines. Report of the Mineral Resources Committee to the Minister of Mines. September 1969 and Addendum April 1970]

The Committee reflected on the previous M. A. Vos Report. The Report concluded that “The concept of conservation and utilization of mineral resources within a municipality for the common good is totally foreign to present municipal zoning regulations.” The Committee recommended that there is a “need for Provincial Regulation of Pits and Quarries”; there is a “Need for a Mineral Resources Policy”, and there is a “Need for Education in Rehabilitation Techniques”.

The recommendations included provincial preparation of mineral resource mapping to be used as a basis for a provincial Policy of Mineral Resources Zoning; the Mining Act should be amended to uniformly regulate pits and quarries including operations and rehabilitation; and the Planning and Municipal Acts to remove municipal control and zoning by-laws prohibiting pits and quarries should be enacted only where there is an official plan that has mineral policies identifying areas where extraction should and should not occur. Zoning

takes into account the need to assure the community an adequate resource. Exploit the resource first.
[Source: Department of Mines. Report of the Mineral Resources Committee to the Minister of Mines. September 1969 and Addendum April 1970]

1970 to 1982 Period

On June 26, 1970, the *Niagara Escarpment Protection Act, 1970* came into effect. The Act was used as an interim step until the Province-wide legislation regulating pits and quarries would be enacted. The Act applied to Caledon. Chinguacousy, Albion and Mono Townships. A Minister's permit was required to establish a pit or quarry. Extraction was prohibited within 300 feet of the Escarpment edge.
[Source: The *Niagara Escarpment Protection Act*, *1970*. c. 31. June 26, 1970]

15. In 1970, the Department of Mines published "Urbanization and Rehabilitation of Pits and Quarries". The Report was authored by Hewitt and Vos. The Report provides a picture of aggregate production in the Toronto Area. The introduction states, in part:

> The relentless urbanization of southern Ontario has led to a great expansion of the production of essential mineral raw materials for construction, such as sand, gravel, crushed stone, clay, shale, gypsum and stone for portland cement and lime.
>
> As urbanization proceeds, more roads, sidewalks, bridges, sewers and buildings are required, and an increasing tonnage of aggregates is consumed.

The Report illustrates the four stages of the Life Cycle of an Aggregate Deposit or of the aggregate industry in a municipality: Discovery; Utilization; Depletion; Rehabilitation.
[Source: Department of Mines. Urbanization and Rehabilitation of Pits and Quarries. D. F. Hewitt and M. A. Vos. Industrial Mineral Report No. 14. 1970]

On November 3, 1971, the *Pits and Quarries Control Act, 1971* came into effect. The Act applied to designated Townships in Ontario. The former Townships of Albion, Caledon and Chinguacousy were designated in 1971. It provided the rules and regulations for provincial licensing of pits and quarries and for rehabilitation. The municipality continues to prohibit pits and quarries through zoning by-laws. A pit or quarry licence is not issued by the Province where the location of the pit or quarry contravenes an official plan or a zoning by-law. The *Niagara Escarpment Protection Act, 1970* was repealed.
[Source: The *Pits and Quarries Control Act*, *1971*. c. 96. September 13, 1971]

In 1971, The Department of Mines and Northern Affairs published "Mineral Resources of the Toronto-Centred Region". The Report was authored by D. F. Hewitt and S. E. Yundt. The Report states that in 1969, 3.9 million people live in the Region, and it is forecast that in the year 2000, 8.0 million people will live in the Region. In 1958, the Region produced 23.5 million tonnes and in 1969 it produced 45.6 million tonnes that is an increase of 94% in 11 years. The Report estimates that in the year 2000, there is a need to produce 94.3 million tonnes.

The Report concludes that:

> It is inevitable that as aggregate resources within the area are depleted within the next 20 to 30 years, aggregate supplies will have to be shipped into the Region at greatly increased costs.
>
> It would seem imperative to preserve a large percentage of present aggregate sources for utilization in the decades ahead.

[Source: Department of Mines. Mineral Resources of the Toronto-Centred Region. Industrial Mineral Report 38. 1971]

On October 2, 1972, the Divisional Court decided against Caledon's application for judicial review of a Pit Licence (Francesschini Brothers) issued by the Ministry in January. Caledon adopted an official plan amendment and enacted a zoning by-law amendment prior to the issuance of the licence providing that part of the licence area is to be developed for residential uses. The Court decided that the official plan and zoning by-law do not override the continued use of the Pit. The application was dismissed.
[Source: Ontario High Court of Justice. Divisional Court. Township of Caledon and the Queen in Right of Ontario et al. 1972 CanLII 521 (ON SC). October 2, 1972]

On October 26, 1972, the Ontario Court of Appeal dismissed Caledon's application for leave to appeal the Divisional Court decision. The Court of Appeal concluded that the issuance of the pit licence is not in contravention of the Caledon Official Plan since Caledon knew at the time that the operations were legal non-conforming to the zoning by-law and could continue.
[Source: Ontario Court of Appeal. Township of Caledon and the Queen in Right of Ontario et al. 1972 CanLII 691 (ON CA). October 26, 1972]

In 1972 the Ontario *Environmental Protection Act* came into force which introduced a new era in the management of the impacts of human activities, particularly in relation to industrial processes. Research and knowledge of contaminants as well as the regulatory regime to manage them has evolved considerably over the decades.

In December 1972, the provincial Report of the Niagara Escarpment Task Force, established in response to the visual impacts of quarrying on the brow of the escarpment in Milton, recommended that within the Niagara Escarpment Planning Area boundary, a Pit and Quarry Restrictive Area should be established roughly one kilometre on either side of the Escarpment edge. Also, aggregate resources should be designated in provincial and local plans**.** D. E. Hewitt dissented and opined that the recommendation to relocate existing crushed stone quarries should be opposed and disagreed with the 1-kilometre restricted zone.
[Source: Ontario Ministry of Treasury Economics and Intergovernmental Affairs. To Save the Escarpment. Report of the Niagara Escarpment Task Force. December 30, 1972]

On April 26, 1973, the Divisional Court decided another matter regarding the application of a municipal zoning by-law to a Pit (Township of Uxbridge v. Timber Brothers Sand & Gravel Ltd.). The Township requested that the Divisional Court restrain the company from operating in contravention of the zoning by-law. The Court decided that the Township had no statutory authority to licence a Pit. The parts of the by-law that dealt with licencing were

declared invalid. This included a provision to establish a set-back from a road allowance and a licensing provision.
[Source: Ontario High Court of Justice. Township of Uxbridge v. Timber Brothers Sand & Gravel Ltd. 1973 CanLII 555 (ON SC). April 26, 1973]

On June 4, 1973, the *Niagara Escarpment Planning and Development Act, 1973* came into effect.
[Source: *The Niagara Escarpment Planning and Development Act, 1973*. c. 52. June 22, 1973]

On January 1, 1974, the Regional Municipality of Peel came into effect. The Town of Caledon was established from the merging of the Townships of Caledon and Albion and part of the Township of Chinguacousy.
[Source: *The Regional Municipality of Peel Act.* c.60. June 22, 1973]

On January 27, 1975, the Ontario Court of Appeal allowed the Township of Uxbridge appeal except for the provision of the set-back from the road allowance. The Court disagreed that the digging and removal of gravel is a "use" of land within the meaning of the Planning Act. The Act does not apply to existing pits and quarries.
[Source: Ontario Court of Appeal. Township of Uxbridge v. Timber Brothers Sand & Gravel Ltd. 1975 CanLII 507 (ON CA). January 27, 1975. On May 5, 1975, the Supreme Court of Canada dismissed an application for leave to appeal]

On October 23, 1975, the Ministry of Natural Resources published "The Pits and Quarries Control Legislation in Ontario, Past, Present and Future." The author is G. A. Jewitt. The paper sets out the problem that Courts have raised regarding municipal regulation of pits and quarries. Some regional municipalities are including resource policies in their official plans. He suggests that government must reduce and remove constraints on production. They should formulate policies and give municipalities information on high aggregate potential to include in official plans. They need to make aggregate extraction as close to demand as supply permits.
[Source: Ministry of Natural Resources. The Pits and Quarries Control Legislation in Ontario, Past, Present and Future. G. A. Hewitt. October 23, 1975]

In December 1976, the report of the Ontario Mineral Aggregate Working Party was published. The Working Party consisted of public and municipal representatives and public servants. G. A. Jewitt was the Chair of the group. The document is titled "A Policy for Mineral Aggregate Resource Management in Ontario". The substantive recommendations are:

> It is a provincial role to establish a regional target for provision of the resource through a Mineral Aggregate Resource Management Policy. The Ministry would annually provide information on the number of pits and quarries in each region and establish a three-year target for each region and county. The process would determine how need for additional licences should be determined.
>
> The Working Party recommended that the regions and counties should issue licences if they have official plan policies.

> The Province provides geological maps of deposits. Province and upper-tiers identify and establish resources for possible future extraction by designation in official plan.
>
> The Province enacts new legislation as The Aggregate Management and Control Act.
>
> With a provincial mineral aggregate resource management policy in effect, upper-tier official plan incorporates the provincial policy and resource areas.
>
> Municipality prohibits major development that would preclude future extraction in resource areas.
>
> In principle, all aggregate areas share appropriately in the provincial demand for the resource. The report states that "Basic to our proposed approach is an acceptance of increased resource utilization in the regions closest to markets and an equitable sharing of demand between regions."

[Source: Ministry of Natural Resources. Report of the Ontario Mineral Aggregate Working Party: A Policy for Mineral Aggregate Resource Management. December 1976]

In 1977, the Ministry of Natural Resources published "Towards the Inventory of Ontario's Mineral Aggregates". It was authored by W. R. Cowan. This Report explains how the provincial aggregate mapping will be perfected:

> Use quaternary geological map to produce maps showing high, moderate, and low categories of probability.
>
> Derive possible aggregate reserves (gross tonnage less basic cultural constraints equal net tonnage.)
>
> Deposits are ranked and further refinements for cultural and environmental conflicts.
>
> Provincial mapping defines the aggregate resources and municipality applies "extractive zoning".

[Source: Ministry of Natural Resources. Towards the Inventory of Ontario's Mineral Aggregates. W. R. Cowan. 1977]

In 1977, the Ministry of Natural Resources published "Aggregates A Case Study of Resource Management in Ontario." The author was G. A. Jewitt. This is a Report that sets out a solution to communicate the problem of depleting aggregate resources in southern Ontario. The substantive recommendations are:

> All aggregate areas share equitably in the supply of sand, gravel, and stone. The province would determine the aggregate resources sufficient to meet an appropriate share of provincial demand and the upper-tier municipality would designate and protect the resource.

> Suggests attaching an aggregate resource area map as an appendix to the upper-tier official plan. Designate areas where there are no or few constraints as “Mineral Aggregate Extraction Areas”. This would control uses that would preclude future extraction. If there is a need to develop in mineral aggregate extraction areas, then other resources would be designated. If extraction is proposed in a non-mineral aggregate extraction area, then the official plan would be amended.

[Source: Ministry of Natural Resources. A Case Study of Resource Management in Ontario. George A. Jewitt. 1977]

On June 1,1979, the Caledon Official Plan was approved. The Extractive Industrial policies were appealed and referred to the Ontario Municipal Board.

On November 14, 1979, Minister of Municipal Affairs approves parts of Caledon Official Plan that were not referred to O.M.B.

On October 8, 1981, Caledon rescinds the Extractive Industrial policies and adopts new policies. Schedule “K” was adopted.

On January 22, 1982, O.M.B. modifies and approves policies and Schedule ‘K’.

Ontario Cabinet is petitioned to delete Schedule ‘K’.

On December 22, 1982, the Minister of Natural Resources published the first provincial policy regarding aggregate management. This is “Mineral Aggregate Resource Planning Policy: A Provincial Policy on Planning for Mineral Aggregate Resources.” This approved policy replaced the previous “Towards a Mineral Aggregate Resource Management Policy for Ontario” (March 9, 1978); “Mineral Aggregate Policy for Official Plans” (September 11, 1979); “Draft Mineral Aggregate Resource Planning Policy” (September 2, 1980). Some of the fundamental policies addressed to municipalities are:

> Shall have due regard to this policy.
>
> Planning programs should ensure that sufficient mineral aggregate resources are available to meet the future needs of Ontario residents.
>
> Mineral aggregate resources are a matter of provincial interest and concern.
>
> All parts of Ontario possessing mineral aggregate resources share a responsibility for meeting future provincial demand.
>
> Province provides mapping and prepares guidelines and enforces Act.
>
> Province encourages extraction as an interim land use.

Maintain sources of supply as close to markets as possible until such time as long-distance transportation may become feasible.

Province administers Pits and Quarries Control Act.

Official plan protects existing pits and quarries.

Municipality identifies and protects from uses incompatible with future extraction as much of the mineral aggregate resource occurring in the municipality as is realistically possible.

Municipality permits land uses in mineral aggregate resource protected areas under carefully considered circumstances.

Official plan provides a clear and reasonable mechanism to permit pits and quarries.

Zone existing pits and quarries.

[Source: Ministry of Natural Resources. Mineral Aggregate Resources Planning Policy: A Provincial Policy on Planning for Planning for Mineral Aggregate Resources (MARPS). December 22, 1982]

1982 to 1992 Period

On April 7, 1983, the Ontario Cabinet renders decision (Cabinet Corners) to delete Schedule 'K' and recognizes the northwest corner of Caledon (north of Old Baseline and west of Kennedy Road) as an area where regard would be had to the aggregate resources when making land use decisions.

On August 1, 1983, Bill 159 amended the *Planning Act* to delete old section 39(1)6 that read:

> For prohibiting the making or establishment of pits and quarries within the municipality or within any defined area or areas thereof.

This subsection was replaced with a new subsection 34(2):

> The making, establishment or operation of a pit or quarry shall be deemed to be a use of land for the purposes of Paragraph 1 of subsection 1. (regulating the use of land by zoning.)

This amendment to the Planning Act was the response by the Province to the Pickering and Uxbridge Court decisions.

The Planning Act also introduced provisions for provincial policy statements.
[Source: The *Planning Act, 1983*. c. 1 January 27, 1983]

On June 12, 1985, the Niagara Escarpment Plan was amended:

The Mineral Resource Extraction Area designation created for pits and quarries and to establish future mineral resource areas.

New areas producing less than 20,000 tonnes annually in Escarpment Rural Area do not require an amendment to the Plan.

New areas producing more than 20,000 tonnes annually need an amendment from Escarpment Rural Area to Mineral Resource Extraction Area.

Mineral resources policies set out development criteria for extractive operations including wayside pits and haul routes.

On May 9, 1986, the Ministry of Natural Resources and the Ministry of Municipal Affairs published the “Policy Statement on Mineral Aggregate Resources” (MARPS) and “A Guideline on Implementation.”

Shall have regard to policy statement.

Replaces the Mineral Aggregate Resource Planning Policy, 1982.

Province provides maps and prepares guidelines and administers Act.

Province encourages concept of extraction as an interim land use activity.

All parts of Ontario possessing mineral aggregate resources share a responsibility for meeting future provincial demand.

Municipality identifies and protects as much of its mineral aggregate resources occurring in the **municipality as is** realistically possible in the context of the municipality’s other land use planning objectives, and in recognition of the continuing local, regional, and provincial need for mineral aggregates.

Maintain sources of supply as close to markets as possible until such time as long-distance transportation may become feasible.

Official plan identifies and protects existing pits and quarries.
Official plan identifies and protects from land uses which are incompatible with possible future extraction as much of the mineral aggregate resource as is realistically possible.

Official plan provides a clear and reasonable mechanism to permit pits and quarries.

Municipality zones existing pits and quarries.

The Guideline sets out Options for identifying and protecting mineral aggregate resources:

Official plan policy refers to MNR resource maps.

Official plan policy refers to mineral aggregate resource areas.

Official plan appendix contains mineral aggregate resource maps.

Official plan contains mineral aggregate resource area map as overlay.

Mineral aggregate resource areas are designated on land use map.

[Source: Ministry of Natural Resources and Ministry of Municipal Affairs. Policy Statement on Mineral Aggregate Resources: A Guideline on Implementation. May 9, 1986]

On January 1, 1990, the new *Aggregate Resources Act, 1989* came into effect. The Act repealed and replaced the *Pits and Quarries Control Act, 1971*. The Act introduced Class A and Class B Licences. The Act required that the issuance of a licence by the Minister must comply with all relevant zoning by-laws. The Region of Peel is a designated municipality for aggregate licensing.
[Source: *Aggregate Resources Act, 1989*. c. 23. April 25, 1989]

1992 to 2000 Period

In December 1992, the Ministry of Natural Resources published "Aggregate Resources of Southern Ontario: A State of the Resource Study". The fundamental conclusions raised:

> For the period 1990 to 2010, southern Ontario is moving towards a critical economic, social, and environmental situation in terms of production of, and access to, aggregate resources required to meet the increasing demands of Ontario residents.
>
> Total existing licenced aggregate reserves...would be depleted as early as 1995 in some areas if new reserves are not licenced.
>
> Given societal concern regarding the creation of a balance between the environment and development, a continuing and increased emphasis should be placed on a coordinated and balanced approach to aggregate resource management.

[Source: Ministry of Natural Resources. Aggregate Resources of Southern Ontario. A State of the Resource Study. December 1992]

On June 12, 1994, the Niagara Escarpment Plan was revised with modifications to aggregate resource policies:

> New licenced pits or quarries producing less than 20,000 tonnes do not require amendment; those producing more than 20,000 tonnes require amendment, and both are permitted uses in the Escarpment Rural Area (section 1.5).
>
> Section 1.5 contains 'Development Policies for Mineral Extraction' to guide amendment applications to designate as Mineral Resource Extraction Area.

Section 1.9 sets out policies for Mineral Resource Extraction Area and are subject to Part 2. The uses are those permitted and After Uses.

Section 2.11 are the development criteria for Mineral Resources.

On March 28, 1995, the first Comprehensive Set of Policy Statements came into effect. The provincial mineral aggregate policies are:

Shall be consistent with policy statements.

Section F is the Mineral Aggregate Resources Policy.

The Goal is to ensure that all parts of Ontario possessing mineral aggregates share a responsibility to identify and protect mineral aggregate resources and legally existing pits and quarries to ensure mineral aggregate resources are available at a reasonable cost and close to markets as possible to meet future local, regional, and provincial needs.

Municipalities identify and protect from land uses which are incompatible with possible future extraction as much of its mineral aggregate as is practicable, in the context of other land use planning objectives, to supply local, regional, and provincial needs.

Clear and reasonable policies to permit pits and quarries.

Municipal policy shall be consistent with policy statement.

There is no provincial role included in statement

There are no Implementation Guidelines.

Significant means important in terms of amount, content, representation, or effect.
[Source: Ministry of Municipal Affairs. Comprehensive Set of Policy Statements. March 28, 1995]

An amendment to the *Planning Act* came into effect on May 22, 1996 resulting from Bill 20. The Act now provided that decisions on planning matters by the Province and the municipalities shall have regard to provincial policy statements, rather than be consistent with.
[Source: *Land Use Planning and Protection Act,* 1996 c. 4. April 3, 1996]

On May 22, 1996, a new Provincial Policy Statement came into effect replacing the 1995 version. With regards to mineral aggregate resources:

Shall have regard to policy statement.

Section 2.2.3 Mineral Aggregates.

> As much of the mineral aggregate resources as is realistically possible will be made available to supply mineral resource needs, as close to markets as possible.
>
> Protect operations from precluding or hindering activities.
>
> Allow development only if tests are met: resource use would not be feasible, or proposed land uses or development serve a greater long term public interest and public health, public safety and environmental impact issues are addressed.

[Source: Government of Ontario. Provincial Policy Statement 1996. May 22, 1996]

On December 19, 1996, substantive amendments to the *Aggregate Resources Act* came into effect in Bill 52**.** The aggregate industry was given increased self-enforcement powers. New licensing procedures including a timed application and public consultation process. A licence can be issued only if the location of the site complies with all relevant zoning by-laws. The Act prevails over municipal by-laws and official plans where they treat the same subject matter in different ways.
[Source: *Aggregate and Petroleum Resources Statute Law Amendment Act, 1996*, c. 30. December 19, 1996]

In March 1997, the Ministry of Natural Resources released “Non-Renewable Resources Training Manual”, Version 1.1. The document explains the mineral aggregates policy in the provincial policy statement. It includes the Aggregate Resources Constraint Model.

> The purpose of the manual is to asst planning authorities in implementing Policy 2.2 of the Provincial Policy Statement (Government of Ontario, 1996).

As Much as Possible
This policy recognizes that it may be impractical to ensure all aggregate resources be made available for resource use. For example, making all the resource available in a municipality that is underlain by vast deposits of aggregates could sterilize all other development and this is not the intent. The intent is that as much of the resource should be protected and kept available for use, while still taking into account other planning objectives. Municipalities with larger tracts of undeveloped aggregate deposits will be in a better position to plan for mineral aggregates and will be able to consider more options or strategies to provide for aggregate protection and availability when official plans are being developed or amended. The objective is to balance societies need for aggregate materials when considering other planning matters.

As Close to Market as Possible
More trucks traveling longer distances increases the cost of construction projects, consume more fossil fuels, and release increased exhaust emissions into the atmosphere**.** In order to minimize the cost of transportation and the social/environmental impact of truck haulage, the resource should be accessed as close to where the materials are needed (i.e., near the market area). This also includes processed aggregates, secondary related products and/or recycled aggregate materials. The dominant mode of aggregate shipping will be by truck and while shipping may be important modes of aggregate transport, it has to date not proved to be practical for other than a small percentage of the aggregate production in the Province. In addition, rail and water transport are not practical for some specific locations or for some product types and have been demonstrated to be

noncompetitive when serving large sectors of the construction industry. This is due to the extra costs and delays incurred in rehandling and the distance of transhipping facilities (e.g., wharves or rail yards) from the locations of aggregate usage.

The mitigation of the environmental and social impacts of aggregate extraction operations are regulated by the legislative and regulatory requirements under the Aggregate Resources Act. There are, however, social and environmental impacts related to truck haulage that increase with increased transportation distances. The impacts due to haulage cannot be addressed under either the ARA or other environmental legislation. The social impact of increased transportation is often summarized as: more trucks past more people. Costs and impacts of long-distance haulage are minimized by accessing those aggregate resources that are nearest the area where aggregates are consumed
[Source: Ministry of Natural Resources. Non-Renewable Resources Training Manual. Version 1.1. March 1997]

Caledon adopts Phase 3 Report of Caledon Community Resource Study (CCRS) on September 13, 1999.

On December 22, 1999, amendments to the *Aggregate Resources Act* came into effect:

> An amendment to state that no licence shall be issued if a zoning by-law prohibits the site from being used for a pit or quarry; the override Section 66 was clarified. Site plans and licences are added as instruments that take precedence where the same subject matter is treated in different ways.

[Source: *Red Tape Reduction Act, 1999.* Schedule 'N'. c. 12. December 22, 1999]

2000 to 2005 Period

On March 27, 2000, Caledon Council adopts Official Plan Amendment No. 161. Amendment appealed to the Ontario Municipal Board.

On November 16, 2001, the Oak Ridges Moraine Conservation Plan came into the effect. Licence applications are subject to the Plan. Mineral aggregate operations are permitted in Natural Linkage Areas, Countryside Areas and Settlement Areas, but not in Natural Core Areas. Although, there are rigorous natural heritage and hydrogeological evaluations and standards, aggregate resources are not identified or designated in the Plan.

In October 2002, the Ministry of Natural Resources published the "Mineral Aggregates Issue Paper" prepared for the Smart Growth Central Ontario Zone Panel. The following conclusion and recommendations are made:

> Limiting aggregate extraction or access to the resource does not eliminate the demand for the resource or the conflicts associated with extraction. It simply transfers the situation and issues to another location and increases the environmental, social and economic impacts. The major demand for the resource still remains in the urban areas.

There are five recommendations:

1. Mineral aggregates are a provincially important resource, and it is in the provincial interest to ensure the continued availability and long-term benefit to the residents of Ontario.
2. Aggregate resource extraction operations should be considered as a long-term but interim land use and subsequent after-uses should be planned for.
3. Broader social and environmental impacts should be considered in the balancing of provincial interests.
4. The full economic (value added) benefit of aggregate resources in the Province of Ontario should be understood, recognized, and considered in the balancing of provincial interests.
5. Municipalities should have regard for these interests and provide clear and reasonable mechanisms to permit timely access to provincially significant mineral aggregate resources to meet the demands of the economy of Ontario.

[Source: Ministry of Natural Resources. Mineral Aggregates Issue Paper. October 2002]

In August 2003, the Ministry of Natural Resources published the "Policy Regarding Applicability of Section 66 of the Aggregate Resources Act.

> Municipality can't regulate the same subject matter regulated under the Aggregate Resources Act for operation through development agreement, zoning by-law and official plan.
>
> Zoning by-laws cannot define land use into different classes of pits or quarries.
>
> Can't regulate by vertical zoning or double zoning or development agreement.

[Source: Ministry of Natural Resources. MNR Policy regarding Applicability of Section 66 of the Aggregates Resources Act. August 2003]

On May 28, 2004, Ontario Municipal Board approved Caledon OPA No. 161 with Schedule 'L'.
[Source: Ontario Municipal Board. PL000508, PL000757. June 1, 2004]

On February 28, 2005, the Greenbelt Plan came into effect. Section 4.3.2 sets out the Non-Renewable Resources Policies. There are specific policies regarding new aggregate operations in various parts of the Protected Countryside. Aggregate resources are not identified or designated in the Plan. Section 3.2.2 Natural Heritage System Policies establishes a maximum twenty-five percent disturbed area.

On March 1, 2005, Provincial Policy Statement 2005 came into effect.

> Shall be consistent with policy statement.
>
> Section 2.5 Mineral Aggregate Resources.
> Mineral aggregate resources shall be protected for long-term use.
>
> As much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible. Need shall not be required.

> Demonstration of need for mineral aggregate resources shall not be required.
>
> Extraction shall be undertaken in a manner which minimizes social and environmental impacts. (This is new section 2.5.2.2)
>
> Existing operations shall be protected from development and activities preclude or hinder expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact.
>
> Development and activities adjacent to or in deposits of mineral aggregate resources may be permitted if: resource use would not be feasible, or proposed land use or development serves a greater long-term public interest, and public health, public safety and environmental impact issues are addressed.

[Source: Government of Ontario. Provincial Policy Statement 2005. March 1, 2005]

On June 13, 2005, the *Place to Grow Act, 2005* came into effect.

On November 16, 2005, the *Clean Water Act, 2005* came into effect. An existing licenced issued under the Aggregate Resources Act must conform with the Source Protection Plan and any amendments must also conform. If the pit or quarry is or would be significant drinking water threat, then licence can be amended by the Minister.

2005 to 2015 Period

On April 1, 2006, the Ministry of Natural Resources published the first Manual of Policies and Procedures.
[Source: Ministry of Natural Resources. Aggregate Resources Program. Policies and Procedures Manual. April 1, 2006]

On June 16, 2006, the Growth Plan for the Greater Golden Horseshoe came into effect.

> Section 4.2.3 provides that the Province and stakeholders will identify significant mineral aggregate resources for the GGH and develop a long-term strategy for ensuring the wise use, conservation, availability and management of resources in the GGH as well as identifying opportunities for resource recovery and coordination of rehabilitation.

On November 6, 2008, the Clean Water Act, 2006 and the Regulation were amended:

> A licence issued under the Aggregate Resources Act before a source protection plan comes into effect shall be amended to conform with the significant threat policies and designated Great Lakes policies in the source protection plan.

[Source: *Clean Water Act, 2006.* c. 22. July 3, 2007]

On June 30, 2008, the *Endangered Species Act, 2007* came into effect:

> The Act provides that regulations may be made to exempt from clause 9 (1)(a) or subsection 10(1). Clause 9 (1)(a) prohibits killing, harming, harassing, capturing or taking a living member of a species on the Species at Risk in Ontario List as an extirpated, endangered or threatened species. Subsection 10(1) prohibits damaging or destroying the habitat of endangered, threatened or extirpated species.
>
> O.R. 242/08 came into force on June 30, 2008. These prohibitions under the Act do apply to an operating pit or quarry that was licenced on this date and there is an agreement between the operator and the Minister that allow modifications to the operations to minimize impacts on species at risk. The agreement may provide that species at risk habitat enhancements could take place in final rehabilitation.
>
> On April 8, 2010, the Minister of Natural Resources announced that there is a proposal to enter into 103 agreements covering mitigation of 20 species. Twenty of these agreements are for operations in the Greater Golden Horseshoe.

[Source: *Endangered Species Act, 2007*. c. 6. June 30, 2008]

In June 2010, the “State of the Aggregate Resource in Ontario Study” (SAROS) was presented to the Minister of Natural Resources. The Study consisted of six consultant studies and recommendations updating knowledge on aggregate resources in the Province. The Ministry’s objective in undertaking this work in 2009 was “to gain a better understanding of aggregate resources by gathering the most up to date information and current science on the consumption, demand, availability, analysis of alternatives, current reserves, rehabilitation, recycling/reuse, and the value of aggregates in the Province of Ontario.”

The Report identifies that in 2007, 173 million tonnes of primary aggregate were produced in Ontario. (Sand and Gravel 97 million tonnes; Stone 76 million tonnes). In the period from 2000 to 2010, an average of 164 million tonnes (including recycling) per year were consumed. The Report projects that in the next twenty years, 186 million tonnes per year (including recycling) will be consumed. The Greater Toronto Area consumes one-third of this annual production.

In 2010, the Report focused on limestone/dolomite reserves. It found that in 97 existing licenced quarries, there is 3.44 billion tonnes in reserve. The Report investigated several high-quality quarries and found that the total reserve of 902 million tonnes is located within 75 kilometres of Vaughan Centre and of this amount, an estimate 317 million tonnes are high quality. The Report explored options for recycling, rehabilitation, and transportation.

One of the important findings is:

> Ontario has abundant and high-quality aggregate deposits close to high demand areas. However, ninety-three per cent of unlicensed bedrock resources have overlapping environmental, planning and agricultural constraints.

[Source: State of the Aggregate Resource in Ontario Study (SAROS). Aggregate Resource Advisory Committee Consensus Recommendations to the Minister of Natural Resources. June 2010]

On March 22, 2012, the Ontario Legislature instructed the Standing Committee on General Government to review the *Aggregate Resources Act* and to recommend strengthening the Act. The Committee was instructed to at least focus on consultation, best practices and new industry developments, fees and royalties, and resource development and protection. [Source: Government of Ontario. Review of Aggregate Resources Act. March 22, 2012]

On October 30, 2013, the Standing Committee presented the "Report on the Review of the Aggregate Resources Act".
[Source: Standing Committee on General Government. Report on the Review of the Aggregate Resources Act. October 30, 2013]

On February 20, 2014, the Ministry of Natural Resources and Forestry presented the "Comprehensive Government Response to Standing Committee on General Government Report on the Review of the Aggregate Resources Act".
[Source: Ministry of Natural Resources and Forestry. Comprehensive Government Response to Standing Committee on General Government's Report on the Review of the Aggregate Resources Act. February 20, 2014]

On April 30, 2014, Provincial Policy Statement 2014 came into effect.

> Section 2.5 Mineral Aggregate Resources.
>
> Mineral aggregate resources shall be protected for long-term use.
>
> Where provincial information available, deposits shall be identified. This is an addition to the policy.
>
> 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 shall not be required.
>
> Extraction shall be undertaken in a manner which minimizes social, economic, and environmental impacts. (This section is amended to add environmental impacts).
>
> Existing operations shall be protected from development and activities preclude or hinder expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact.
>
> Development and activities adjacent to or in deposits of mineral aggregate resources may be permitted if: resource use would not be feasible, or proposed land use or development serves a greater long-term public interest, and public health, public safety and environmental impact issues are addressed.

[Source: Government of Ontario. Provincial Policy Statement 2014. April 30, 2014]

2015 to 2020 Period

On October 21, 2015, the Ministry of Natural Resources and Forestry presented “A Blueprint for Change”, a proposal to modernize and strengthen the *Aggregate Resources Act* Policy Framework”. Public submissions by December 15, 2015.
[Source: Ministry of Natural Resources and Forestry. A Blueprint for Change. A Proposal to modernize and strengthen the Aggregate Resources Act Policy Framework. October 21, 2015.]

On July 1, 2016, the *Planning Act* was amended by Bill 73.

> Section 22 of the *Planning Act* was amended to add subsection 2.1. This provides that an application to amend a new municipal official plan cannot be made until two years after the official plan comes into effect. This came into effect on July 1, 2016.
>
> Section 34 of the *Planning Act* was amended to add subsection 10.0.0.1. This provides that an application to amend a new comprehensive municipal zoning by-law cannot be made until two years after the zoning by-law comes into effect. This came into effect on July 1, 2016.

[Source: *Smart Growth for Our Communities Act, 2015*.c. 26. December 3, 2015]

In August 2016, the Ministry of Natural Resources and Forestry published “Supply and Demand Study of Aggregate Resources Supplying the Greater Golden Horseshoe”. This Report updates the data from SAROS. It includes Material Supply, Constraint Analysis, Demand Study and Traffic Assessment.

The Report summary indicates that remaining reserves in licenced quarries in the Greater Golden Horseshoe are 545 million tonnes. The Report suggests that these estimates are not predictable. In the mapped resource areas, approximately 95% of the aggregate reserves are constrained from extraction in the GGH. The summary report concludes regarding the supply of aggregate resources:

> What the results do tell us is that the availability of aggregate resources in Ontario needs to be carefully planned for. Aggregates will not be available if it is assumed or taken for granted that there will be a plentiful supply after all other planning considerations are accounted for. Planning for aggregate availability will require an integrated and balanced approach that recognizes some compromises will be required. Without this recognition it is more likely that aggregate deposits are not protected or not made available due to the potential presence of on-site and adjacent constraints.

The Report estimated that the consumption of aggregates per year in the next twenty years is 192 million tonnes. This compares to the average of 170 million tonnes in the past twenty years. Approximately 111 million tonnes will be consumed in the GGH over the next twenty years**.**
[Source: Ministry of Natural Resources. Supply and Demand Study of Aggregate Resources Supplying the Greater Golden Horseshoe. August 2016]

On May 10, 2017, the Ontario Legislature made a significant amendment to the *Aggregate Resources Act* by Bill 39.

Those in effect as of May 10, 2017.
(Although in effect, still require Regulations in some places).

1. In the definition of “operate”, “work” no longer means “operate”.
2. Discretion is given to an Inspector to provide a report of contraventions to a person who is contravening, and report sets out a list of contraventions and includes actions or measures for remediation. [New s.s. 4(5)]
3. Where a regulation designating part of Ontario under the Act is in effect prior to May 10, 2017, MNRF can substitute a licence for a permit. [New s.s. 5(3) to (5)]
4. Where there are qualifications prescribing a person who meets criteria, he or she may operate without a licence, according to prescribed terms and conditions. [New s.s. 7(1.1)]
5. Remove aggregate annually from the site of a pit or quarry instead of “from a pit or quarry”. A site is where the licence or permit relates. [s.s. 7(2)] (licence area and site are the same).
6. Section 11 Procedures.
    a. Minister shall require Applicant to comply with prescribed notification and consultation procedures. (No change) Now, may have a custom plan. May have different prescribed notification and consultation procedures for custom plans.
    b. Individuals that participate in prescribed notification and consultation procedures are made public unless individual requests confidentiality.
    c. The Minister may require custom plan according to s.s. 11(4) and prescribed requirements.
    d. Contents of a custom plan include consultation and notification procedures; surveys or studies to carried out and documentation.
    e. timing for the preparation of a custom plan.
    f. minister’s approval of a custom plan**.**
    g. Compliance with a custom plan.
    h. same (the details of a custom plan are not prescribed)
    i. The Minister may refer the matter for a hearing including “any objections arising out of the notification and consultation procedures that are prescribed or set out in a custom plan”. [s.s. 11(5)] The Minister may specify issues to be included in referral to Board.
    j. Same procedures [11(6) to (15)]. Minister may be a Party, Board or Tribunal directs Minister to issue license with conditions or refuse.

7. Section 12 Matters to be Considered
    a. All drinking water sources instead of only municipal water sources. [s.s. 12(1)(e)] Improvement.

8. Compliance Report is now an annual report sent to the Minister to assess compliance. Report according to Regulation. [s.s. 15.1]
    a. No longer send the compliance report to the municipality.
9. Rehabilitation
    a. Submit progress reports on progressive and final rehabilitation according to the Regulations. Prescribed times. [New 48 (1.1)]

10. Expert Review
    a. Regulations may provide for peer review by the Minister. Applicant, licensee pays for peer review. Peer Reviewers according to prescribed qualifications. [New s.s. 62.2]

11. Direction by Minister for operational information. Regulation. Licensee shall comply. [New s.s. 62.3]

12. Direction by Minister for inventory, survey, test or study that is usually conducted and submitted as part of documentation, only if necessary for proper administration. [New s.s. 62.4] A.M.P.

13. Regulations [s.s. 67]

14. Content of Application [s.s. 71(5)]

    a. An “established pit or quarry” is to be defined by regulation.
    b. The definition of “material” may be prescribed.
    c. The definition of “rock’ is repealed.
    d. In the application according to Regulation, documentation shall be submitted as prescribed. [s.s. 7(3)]
    e. Application fees are to be prescribed. [s.s. 7(4)]
    f. Site Plans are to be prepared according to Regulation, unless the Regulation provides otherwise. The Regulation will require that a site plan is to be included unless otherwise provided. [New s.s. 8]
    g. A Report is not required in the application. (Subsection is repealed.) [New s.s. 9(1)] A Regulation will establish the documentation to be included in the application.
    h. There is now no need to describe the zoning that is applicable to the site and the adjacent lands. [s.s 10] See s.s. 71 (5.1(c) there must be compliance with zoning by-laws.
    i. Licensee does not have to send a copy of the licence and final site plan to the clerk of the municipality. [s.s. 12.2]
    j. Minister may attach conditions of licence. (Slight change) [New s.s. 12.2]
    k. There are now major and minor amendments according to Regulation. [s.s. 13 (1) (2)] Not clear whether public and municipal consultation is required.
    l. Former section 16 - Amendment to Site Plans is repealed. See 13(1)(2). When this provision comes into effect, the amount of aggregate to be removed from the site, with valid licence) annually does not exceed licenced amount. Aggregate includes recycled aggregate. Recycled Aggregate is to be defined in Regulation. [New s.s. 71.1(2) and (4) May 17, 2017. On April 3, 2018, Bill 127 came into effect. The Mining and Lands Commissioner is changed to the Mining and Lands Tribunal.

[Source: *Aggregate Resources and Mining Modernization Act, 2016*. c. May 10, 2017]

On April 3, 2018, Bill 139 came into effect. In the *Aggregate Resources Act*, the Ontario Municipal Board is changed to Local Planning Appeal Tribunal.

On June 1, 2017, amendments to Niagara Escarpment Plan – subsections 1.2.2, 1.2.3, 1.9, 2.9.

On July 1, 2017, “A Place to Grow: Growth Plan for the Greater Golden Horseshoe” came into effect.

The 2017 Growth Plan built upon the 2006 Growth Plan and responded to, among other things, significant investments in transit projects in the Greater Toronto and Hamilton Area and beyond. The 2017 Growth Plan also responded to shifts to more compact development patterns, a greater variety of housing options and more mixed-use developments in urban growth centres and other strategic growth centres.

> Section 4.2.8 provides that the Province, municipalities, industry and stakeholders will undertake sub-area assessment “to identify significant mineral aggregate resources for the GGH, and to develop a long-term strategy for ensuring the wise use, conservation, availability and management of mineral aggregate resources in the GGH, as well as identifying opportunities for resource recovery and for coordinated approaches to rehabilitation where feasible.” Section 4.2.8.7 provides that applications received and deemed completed under the *Aggregate Resources Act* after planning applications under the *Planning Act* are subject to A Place to Grow.

On July 1, 2017, the Greenbelt Plan was modified.

The new fee schedule under the *Aggregate Resources Act* came into effect on January 1, 2018, and January 1, 2019.

On April 3, 2018, Bill 139 amended the *Planning Act*. Section 22 was amended to add subsection 2.1.1. This provides that an application to amend a new secondary plan cannot be made until two years after the official plan comes into effect.
[Source: *Building Better Communities and Conserving Watersheds Act, 2017.* c. 23. December 12, 2017]

On May 16, 2019, a revised “A Place to Grow: Growth Plan for the Greater Golden Horseshoe” came into effect.

The 2019 Growth Plan was updated with minimum density targets for Major Transit Station Areas and Urban Growth Centres as well the introduction of Provincially Significant Employment Zones (among other updates). Aggregate policies remained in this version of the Plan.

On May 29, 2019, Schedule 1 to the *Aggregate Resources Act* under Bill 100 came into effect making a few amendments.

On December 10, 2019, a significant amendment to the *Aggregate Resources Act* came into effect regarding vertical zoning.

> 12.1(1.1) If a zoning by-law prohibits a site in a part of Ontario designated under subsection 5(2) from being used for the making, establishment or operation of pits or quarries, any restriction contained in the zoning by-law with respect to the depth of extraction at the site is inoperative.

[Source: *Better for People, Smarter for Business Act, 2019.* Schedule 15. c.14. December 10, 2019]

On May 1, 2020, Provincial Policy Statement 2020 came into effect. There is one significant modification to subsection 2.5.2.4 in the Mineral Aggregate Resources policies.

> 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.*

[Source: Government of Ontario. Provincial Policy Statement. May 1, 2020]

In August 2020, the Ministry of Natural Resources and Forestry published four new standards:

> Technical Reports and Information Standards.
> Site Plan Standards.
> Amendment Standards.
> Circulation Standards.

[Source: Ministry of Natural Resources. Aggregate Resources of Ontario. August 2020]

On September 1, 2020, Regulation 244/97 under the *Aggregate Resources Act* was amended regarding the four Standards.

Several provisions came into effect on April 1, 2021:

- "Rock" definition is clarified.
- "Below the Water Table" is defined.
- The Aggregate Standards August 2020 are prescribed.
- Requirements - Applications for Licences.
- Requirements - Applications to amend Site Plans and Licences.
- Conditions of Licences issued on or after April 1, 2021.
- Control and Operation of Pit or Quarry provisions.
- Requirements for Reports.
- Fees and Royalties amended.
- Requirements - Amendments without Minister Approval.
- Operations of Pit or Quarry without a Licence.

In the amended Regulation, two important provisions came into effect:

> Excavation shall not occur within 30 metres from any part of the boundary of the site that abuts land that is restricted to residential use by a zoning by-law in place when the licence or permit is issued.
>
> A stockpile of aggregate, topsoil or overburden, a processing plant or area or a building or structure shall not be located within 90 metres from any part of the

> boundary of the site that abuts land that is restricted to residential use by a zoning by-law in place when the licence or permit is issued.

[Source: Ontario Regulation. 466/20. September 1, 2020]

On October 1, 2020, the Ministry of Natural Resources and Forestry published its updated Statement of Environmental Values, including the following:

The Ministry's relevant principles applied to regulations, policies and instruments are:

> The ministry recognizes the finite capacity of ecosystems and takes into account environment, social and economic values, impacts and risks.
>
> The ministry exercises caution in the face of uncertainty and seeks to avoid, minimize or mitigate harm to the environment.

As well is the integration with other considerations:

> MNRF will take into account social, environmental, economic and other considerations; these will be integrated with the purposes of the EBR when making decisions that might significantly affect the environment.

2020-2023 Period

On April 1, 2021, the four Standards came into effect.

On June 1, 2021, the name "Local Planning Appeal Tribunal" was changed to Ontario Land Tribunal". Bill 245.

On January 1, 2022, the following provision under amended Regulation 244/97 came into effect regarding blasting:

> Unless otherwise provided on a site plan, a licensee or permittee shall ensure that the pit or quarry is in compliance with the following rules:
>
> > A licensee or permittee shall take all reasonable measures to prevent fly rock from leaving the site during blasting if a sensitive receptor is located within 500 metres of the boundary of the site**.**

On April 20, 2022, Regulation 244/97 was amended to provide the following:

> This Regulation sets out the provisions for the deposit of Excess Soil in a pit or quarry unless authorized in an aggregate licence.

[Source: Ontario Regulation 395/22. April 20, 2022]

On November 28, 2022, the *Planning Act* was amended by Bill 23:

Section 22 (2.1) and (2.1.2) of the *Planning Act* are repealed to provide that an application to amend a new official plan or a new secondary plan may be made at any time for the making, establishment or operation of a pit or quarry rather than waiting two years. Section 34 (10.0.0.1) and (10.0.0.2) of the *Planning Act* are repealed to provide that an application to amend a new comprehensive zoning by-law may be made at any time for the making, establishment or operation of a pit or quarry rather than waiting two years.
[Source: *More Homes Built Faster Act, 2022*. c. 21. November 28, 2022]

On April 6, 2023, the Ministry of Municipal Affairs and Housing posted a proposed Provincial Policy Statement for public consultation. The intent is to integrate the policies from A Place to Grow and Provincial Policy Statement 2020 in order to support the provincial housing objectives. The Province "requires municipalities to facilitate access to aggregate resources close to market and to protect minerals, petroleum and mineral aggregate resources."

Proposed Section 4.5 sets out the Mineral Aggregate Resources policies. The only difference from PPS 2020 is in proposed section 4.5.4 Extraction in Prime Agricultural Areas, regarding complete rehabilitation**.** There is a minor amendment to the meaning of Deposits of mineral aggregate resources.

On August 18, 2023, Ontario Regulation 244/97 was amended by O. R. 262/23 to add to new provisions where amendments to approved Site Plans are made without the approval of the Minister under subsections 13 (13.2) and 37.2 (5) of the *Aggregate Resources Act.*

> To allow the importation of concrete, asphalt, brick, glass, or ceramics for recycling, if regulatory requirements are satisfied.
>
> To add or relocate an entrance or exit to the site if regulatory requirements are satisfied.
>
> To allow the addition or relocation of portable processing equipment if regulatory requirements are satisfied.
>
> To allow the addition or relocation of portable concrete or asphalt plants if regulatory requirements are satisfied.
>
> To allow the addition or relocation of above-ground fuel storage tanks if regulatory requirements are satisfied
>
> To allow the removal of portable processing equipment, portable concrete or asphalt plants or above-ground fuel storage tanks.

[Source: Ontario Regulation 262/23. August 13, 2023]