

PLANNING JUSTIFICATION REPORT:

TRAFALGAR EXPANSION PIT

Applications to Amend the Township of Thames Centre Official Plan Zoning By-law

PART LOT 17, CONCESSION 2, NTR
TOWNSHIP OF THAMES CENTRE
MIDDLESEX COUNTY

Prepared for:

Paton Aggregates and Soils Ltd

Prepared by:

ESHER PLANNING INC.
133 Ayton Cres.
Woodbridge, Ontario L4L 7H6



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1.0 INTRODUCTION

Esher Planning Inc. is applying on behalf of Paton Aggregates and Soils Ltd. to amend the Zoning By-law for the Municipality of Thames Centre, in order to permit an expansion to an existing sand and gravel pit (Trafalgar Expansion Pit). A related application under the Aggregate Resources Act (ARA) has been submitted to the Ministry of Natural Resources (MNR) for Class A, Pit Below Water License.

The proposed development is located at 6545 Trafalgar Street, in Part of Lot 17, Concession 2 NTR.

The Planning Act and Aggregate Resources Act applications are supported by a series of technical studies which assess the impact of the proposed development on neighbouring residents, the natural environment, water resources, and the local road network. The Site Plans detail the manner in which operations will be carried out as described by the sequence of extraction and progressive rehabilitation.

The following information and reports have been prepared in support of this application:

- Water Report: Groundwater Science Corp.
- Natural Environment Report: Terrastory Environmental
- Agricultural Impact Assessment Report: Esher Planning Inc.
- Cultural Heritage/Archaeology Report: Timmins Martelle Heritage Consultants
- Site Plans: Harrington McAvan Ltd.

The proposed mineral aggregate operation has been designed in accordance with current industry best practices and reflects the recommendations of the accompanying technical reports. The operational notes on the license site plans were prepared in accordance with the standards of the Aggregate Resources Act and incorporate specific conditions that reflect the technical recommendations and mitigation measures to minimize any potential effects of the proposed development.

This report provides a description of the project and an analysis of the proposed use in the context of current provincial and municipal planning policy.

1.1 Location and Surrounding Lands

The subject property is located on the south side of Trafalgar St., west of Elgin Road and southwest of Thamesford (see **Figure 1**). The existing Trafalgar pit operates under Aggregate Resources Act licence #626167 and has a licenced area of 27.3 hectares.

The proposed pit expansion has an area of 11 hectares and is located adjacent to the east limit of the existing Trafalgar Pit. This parcel is currently in agricultural use and contains an active agricultural field bound by a tree line to the west, and woodlots to the south and east.

Surrounding land uses include gravel pit operations to the north and east and agricultural uses. There are also natural heritage features in the area, including the North Dorchester Swamp, a Provincially Significant Wetland complex (see **Figure 2** and **Figure 3**).

2.0 DESCRIPTION OF THE PROPOSAL

The proposal is for a mineral aggregate operation with extraction above and below the water table. The area to be licensed is 11 hectares with a proposed extraction area of 9.4 hectares. The proposed annual tonnage limit is 150,000 tonnes. The operational design and rehabilitation of the pit is based on the recommendations of a multi-disciplinary technical team to address provincial policies and regulations. The technical reports assessed the potential impacts of the proposed pit operation on groundwater, natural heritage and cultural heritage features on the site and adjacent lands.

The aggregate operations will include extraction of sand and gravel using excavators and a dragline, loading with front end loaders. Portable and stationary processing equipment for screening and crushing will be used on site and will generally be located on the pit floor. Other equipment may include excavators, bulldozers and conveyors.

The proposed hours of operation are 7 a.m. to 7 p.m. for processing and shipping, 7 a.m. to noon on Saturdays, and no operations on Sundays or Statutory holidays.

Rehabilitation of the site will progressively restore the extracted lands to create a pond with meadow side slopes, compatible with the surrounding lands. The current agricultural uses shall continue on this site as long as possible during pit operations.

The ARA Site Plans include details about the existing features, operations and rehabilitation as well as technical recommendations as outlined in the reports submitted with the application.

2.1 Aggregate Resource Overview

The subject lands are located within a glaciofluvial ice-contact deposit, identified in the Aggregate Resources Inventory Paper for Middlesex and London (ARIP 078) as an area of “primary significance”. The site is part of a large expanse of undifferentiated ice-contact stratified drift terrain located in the east-central portion of the Municipality of Thames Centre, extending into the County of Oxford. This deposit is associated with the Dorchester moraine.

The high degree of variability of this deposit allows for production of a variety of aggregate products. Gravel and crushable material tends to occur in pockets, and the ability to produce Granular A and related products is dependent on locating these pockets. This area has been important for sand and gravel production, with numerous pits located in the area, as shown on **Figure 3**.

The subject lands are identified in the Official Plan mapping as a mineral aggregate resource area.

2.2 Soil Capability for Agriculture

Canada Land Inventory mapping shows that the majority of the area to be licensed is class 4. The mapping indicates 70 percent of the soils are class 4, with limitations and 30 percent are class 2 with limitations related to topography (see **Figure 8**).

Class 4 soils generally have severe limitations that restrict the range of crops or require special conservation practices, or both. The limitations seriously affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. The soils are low to fair in productivity for common field crops but may have higher productivity for a specially adapted crop.

In Ontario, class 1-3 agricultural lands are considered “prime agricultural” lands. Although the site soils do not meet the criteria to be considered prime agricultural land, the County and Township Official Plan mapping identifies this site as being within a prime agricultural area, which can include a range of prime agricultural land and non-prime agricultural land. Provincial and local planning policies allow aggregate extraction within prime agricultural areas, as an interim land use, subject to meeting the policies set out in the planning documents.

2.3 Haul Route

The proposed entrance will be on to Trafalgar Street, through the existing pit entrance. The Pit license proposes an annual maximum material extraction of 150,000 tonnes. A pre-consultation meeting was held with Thames Centre staff and the County engineer in March 2026 to discuss truck traffic movements from the proposed pit. A traffic engineer was previously retained by the applicant to conduct a traffic impact study for the existing licence (F.Berry, 2017). It is anticipated that truck traffic volume and hauls routes will mirror the existing traffic from the Trafalgar Pit.

Trucks will continue to travel the designated haul routes being used by the existing licenced pits in the area to transport aggregate to the various demand areas, i.e. truck traffic will continue to use Dundas and Elgin Roads and the area will be influenced by activities associated with aggregate extraction. As noted in the 2017 traffic impact assessment by F.R. Berry & Associates, the pit will mainly produce bedding sand for use in the dairy industry and that production will be relatively consistent year round.

After loading, trucks will exit onto Trafalgar Street, a gravel road using the entrance/exit along the west-central section of the north boundary of the adjacent site. Trucks will travel east on Trafalgar to Hunt Road and then north to Dundas Street toward the City of London or south along Elgin Road to the 401 to reach destinations east of the City of London or into London. No truck traffic from the proposal will travel west on Trafalgar Street because of the road conditions

in sections to the west of the property. This complies with the Official Plan, where it states that trucks will be expected to access the nearest designated “Truck Haul Route” by the shortest distance possible.

The existing pit has a maximum annual tonnage limit of 150,000 tonne. Although each licence has a separate tonnage limit, the total combined extraction, from the existing pit and the proposed expansion, will not exceed 150,000 tonnes per year.

2.4 Rehabilitation

In accordance with the requirements of the Aggregate Resources Act Provincial Standards, the extracted area will be progressively rehabilitated, as outlined on the Site Plans. All topsoil and overburden on site will be stripped and stockpiled separately in berms or stockpiles and replaced as quickly as possible in the progressive rehabilitation process. Soil stripping/handling will only occur during dry (unsaturated) and unfrozen conditions. Topsoil berms shall be graded to stable slopes and seeded with a grass/legume mixture to prevent erosion and minimize dust.

In the short term, the land will continue to be used for agriculture until such time as the aggregate extraction commences. The phasing of the pit will maintain lands in agricultural use during pit operations as much as possible.

The final rehabilitation of this property will create a pond with sideslopes as shown on the Site Plans. The final rehabilitation will be compatible with the surrounding lands and land uses and enhance the existing natural features within and surrounding the site. The rehabilitation plan is consistent with the Official Plan and the Provincial Planning Statement (2024).

2.5 Background Reports and Site Plans

The Planning Act and Aggregate Resources Act applications are supported by a series of technical studies which have assessed the impact of the proposed operation on the natural environment, cultural heritage, and water resources. These reports have been prepared in accordance with the requirements under the Aggregate Resources Act and also meet the requirements for review of the Planning Act application.

The Site Plans detail the manner in which operations will be carried out as described by the sequence of operations and progressive rehabilitation. The Site Plans form the basis of the pit license application under the Aggregate Resources Act and also form an integral part of the review process of the applications.

The proposed pit operation has been carefully designed and reflects recommendations of the accompanying technical reports, together with comments from reviewing agencies. The operational notes on the license site plans under the Aggregate Resources Act, have incorporated conditions to reflect specific recommendations and measures to mitigate any negative environmental effects.

2.6 Indigenous Consultation

The project area is located on the traditional lands of the Anishinaabek, Haudenosaunee, and Attawandaron peoples, on lands connected with the London Township Treaty of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous peoples (e.g., First Nations, Métis and Inuit) who are contemporary stewards of the land.

The Crown has a duty to consult First Nation and Métis communities when it has knowledge, real or constructive, of credibly asserted or established Aboriginal or treaty rights and contemplates conduct that might adversely affect those rights. The duty to consult rests with the Crown and the Crown must retain oversight of the consultation process.

The Ministry of Natural Resources (MNR) has delegated the procedural aspects of the duty to consult to the applicant for the related ARA application. The applicant will be engaging First Nations through the ARA process, as informed by MNR.

3.0 PLANNING CONSIDERATIONS

The subject lands fall within the Planning jurisdiction of the Municipality of Thames Centre and the County of Middlesex. This report evaluates the proposed land use within the context of the Official Plans for the County and the Township, as well as within the context of Provincial legislation including the Planning Act, and the Provincial Planning Statement (PPS 2024).

The protection and management of aggregate resources has been deemed to be of provincial significance, and their development is regulated by specific legislation. In addition to the Aggregate Resources Act (ARA), the development of aggregate extraction operations must respect the provisions of the Planning Act and give appropriate consideration to the policy framework established by the regional and municipal planning documents.

When making any land use planning decision, it is necessary to review provincial interests and determine how they may be impacted through development. In the case of aggregate development, often more than one provincial interest exists, and it is the goal of sound land use planning to balance and protect these competing interests in the most effective manner, keeping in mind the long term planning horizon.

The Trafalgar Pit Expansion property is currently designated as “Agricultural” in the Thames Centre Official Plan (see **Figure 4**). The property is also identified as a “Aggregate Resource Area” on Appendix 3 of the Official Plan (see **Figure 5**).

The following analysis provides an assessment of the proposal in the context of relevant Provincial and Local planning policies. For ease of reference, the following tables review the

proposal against the applicable current planning policies. The evaluation is based on the findings of the technical studies forming part of the application submission, an evaluation and an analysis of the surrounding land use, and the environmental impact of the proposal.

3.1 Planning Act

When carrying out its responsibilities under the Planning Act, a municipality or any other authority which affects a planning matter must have regard for the provincial interests as identified in Section 2 of the Planning Act.

The provincial interests contained in Section 2 of the Planning Act are outlined in the table below. The Trafalgar Expansion Pit proposal has been evaluated in the context of these prescribed provincial interests:

Planning Act, Section 2 Evaluation

Provincial Interests	Trafalgar Expansion Pit Proposal
<i>2(a) The protection of ecological systems, including natural areas, features and functions.</i>	The proposed operations and rehabilitation activities for the proposed pit expansion have been assessed for potential impacts on the natural environment. Terrastory Environmental Consultants completed a 4 season inventory of the natural heritage features on the site and surrounding lands. The recommendations of the Natural Environment Report (NER) have been incorporated into the pit design, thereby protecting ecological systems, natural areas, features and functions.
<i>2(b) The protection of the agricultural resources of the Province</i>	The property contains overlapping important resource areas: agricultural land and mineral aggregate resources. The depth of the resource warrants below water extraction and the rehabilitation to a pond is consistent with provincial policy.
<i>2(c) The conservation and management of natural resources and the mineral resource base.</i>	Aggregate resources are a provincial interest and should be protected from incompatible land uses and developed responsibly. The proposed pit will provide a high quality supply of mineral aggregate material to the local and regional markets.

Provincial Interests	Trafalgar Expansion Pit Proposal
<i>2(d) The conservation of features of significant architectural, cultural, historical, archaeological or scientific interest.</i>	The Archaeology Assessment Report prepared by Timmins Martelle Heritage Consultants. evaluated the presence of archaeological features on the site. The Stage 2 assessment (standard pedestrian survey at a 5 m interval) did not result in the documentation of archaeological resources. As such, no further archaeological assessment is recommended. The report has been cleared by the Ministry of Citizenship and Multiculturalism (MCM).
<i>2(e) The supply, efficient use and conservation of energy and water</i>	Ground and surface water features have been studied and documented in the Maximum Predicted Water Table Report prepared by Groundwater Science Corp. Mitigation measures included on the Operations Plan such as, groundwater level monitoring and restriction of surface activities will minimize the potential for groundwater disturbance or contamination in accordance with provincial guidelines.
<i>2(k) The adequate provision of employment opportunities.</i>	The proposed expansion will provide local employment opportunities in the Township.
<i>2(l) The protection of the financial and economic well-being of the Province and its municipalities.</i>	The Township and the County will see a source of revenue through property tax assessment and annual tonnage contributions (TOARC) fees. Currently 61 percent of revenues collected by TOARC are directed to the local municipality and 15 percent goes to the upper tier municipality.
<i>2(m) The coordination of planning activities of public bodies.</i>	The interests of public bodies and agencies are considered by the circulation requirements of the Planning Act and the ARA.
<i>2(n) The resolution of planning conflicts involving public and private interests.</i>	The land use planning process, as well as the ARA licensing process, enables municipalities, agencies and the public to participate in the evaluation of this proposal.

Provincial Interests	Trafalgar Expansion Pit Proposal
<i>2(o) The protection of public health and safety.</i>	The operational plan contains a variety of mitigation measures which have been developed to minimize the social impact of the proposed pit operation. The requirements of the Operation Plan and site plan notes therein are legally binding as per the ARA.
<i>2(p) The appropriate location of growth and development.</i>	Rural areas are prime location for the development of this non-renewable resource. On- site investigation has confirmed the quality and extent of this resource. The proposal will provide the local market with a supply of high quality construction materials.

3.2 Provincial Planning Statement (PPS) 2024

The Province introduced a new Provincial Planning Statement which came into effect on October 20, 2024. The PPS 2024 is issued under *section 3 of the Planning Act*, which requires that all decisions affecting planning matters shall be consistent with the minimum standards set in the Provincial Planning Statement.

The PPS provides policy direction on matters of provincial interest related to land use planning and development. As a key part of Ontario's policy-led planning system, the Provincial Planning Statement sets the policy foundation for regulating the development and use of land province-wide, helping achieve the provincial goal of meeting the needs of a fast-growing province while enhancing the quality of life for all Ontarians.

The PPS recognizes that the Province's natural heritage resources, water, agricultural lands, mineral aggregate resources, cultural heritage and archaeological resources provide important environmental, economic and social benefits. The wise use and management of these resources over the long term is a key provincial interest. The province must ensure that its resources are managed in a sustainable way to conserve biodiversity, protect essential ecological processes and public health and safety, provide for the production of food and fiber, minimize environmental and social impacts and meet its long term economic needs.

The proposed pit contains resources that are considered to be of provincial significance: a high-quality aggregate resource, and agricultural land. The operations and progressive rehabilitation

plans have been designed to achieve the balance required to manage these overlapping provincial interests.

The following table provides an evaluation of the proposal in the context of the relevant policies of the PPS. The evaluation is based largely on findings of various technical studies referenced previously in this report.

Provincial Planning Statement – Consistency Analysis

PPS (2024) Policies	Trafalgar Expansion Pit Proposal
<i>2.5. Rural Areas in Municipalities</i> <i>Healthy, integrated and viable rural areas should be supported by:</i> <i>f) promoting the diversification of the economic base and employment opportunities through goods and services, including value-added products and the sustainable management or use of resources.</i>	The proposed pit expansion is located in a rural area which has been identified as an important mineral aggregate resource area. The sustainable management or use of mineral aggregate resources contributes to the local economic base.
<i>2.6.1 Rural Lands in Municipalities:</i> <i>On rural lands in municipalities, permitted uses are:</i> <i>a) to the management or use of resources;</i>	The proposed pit represents the use of a provincially significant natural resource (mineral aggregate) and is an appropriate rural land use. The subject lands are recognized in the provincial aggregate inventory mapping and in the municipal Official Plan mapping as an important mineral aggregate resource area.
<i>3.5 Land Use Compatibility</i> <i>3.5.1 Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.</i>	The site plans for the proposed pit have been designed to ensure that appropriate mitigation measures are in place to minimize the effects of noise and dust from the operation.

PPS (2024) Policies	Trafalgar Expansion Pit Proposal
<i>4.2.1 Planning authorities shall protect, improve or restore the quality and quantity of water by:</i> <i>b) minimizing potential negative impacts, including cross-jurisdictional and cross-watershed impacts;</i> <i>f) implementing necessary restrictions on development and site alteration to:</i> <i>1. protect all municipal drinking water supplies and designated vulnerable areas; and</i> <i>2. protect, improve or restore vulnerable surface and ground water and their hydrologic functions;</i>	No municipal drinking water sources are located within the proposed licensed area. Operational best practices are reflected on the Site Plans and are designed to minimize any potential for surface activities to impact groundwater quality. Groundwater level monitoring, and restriction of surface activities (fuel storage and refueling, spills plan, etc.) in accordance with provincial guidelines form part of the operating conditions outlined on the Site Plans. The Groundwater Science Corp. report concludes that the proposed gravel pit will not have any adverse effect on surface and groundwater in the area.
<i>4.3 Agriculture</i> <i>4.3.2 As part of the agricultural land base, prime agricultural areas, including specialty crop areas, shall be designated and protected for long-term use for agriculture.</i> <i>4.3.5 Non-Agricultural Uses in Prime Agricultural Area</i> <i>4.3.5.1 Planning authorities may only permit non-agricultural uses in prime agricultural areas for:</i> <i>a) extraction of minerals, petroleum resources and mineral aggregate resources in accordance with policies 2.4 and 2.5</i> <i>b) limited non-residential uses</i> <i>4.3.5.2 Impacts from any new or expanding non-agricultural uses on the agricultural system are to be avoided, or where avoidance is not possible, minimized and mitigated as determined through an agricultural impact assessment or equivalent analysis, based on provincial guidance.</i>	The subject property is identified in the Canada Land Inventory Agricultural Capabilities Mapping as predominantly class 4-7 soils. The PPS policies for prime agricultural lands are therefore not applicable to this site, however, the proposed rehabilitation will create a pond and sideslope area that is compatible with the surrounding lands. An Agricultural Impact Assessment was prepared for this application and examines the proposed pit expansion in the context of the agricultural system.

PPS (2024) Policies	Trafalgar Expansion Pit Proposal
4.5 Minerals Aggregate Resources <i>4.5.1.1 Mineral aggregate resources shall be protected for long-term use and, where provincial information is available, deposits of mineral aggregate resources shall be identified.</i> 4.5.2 Protection of Long-Term Resource Supply <i>4.5.2.1 As much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible.</i> <i>Demonstration of need for mineral aggregate resources, including any type of supply/demand analysis, shall not be required, notwithstanding the availability, designation or licensing for extraction of mineral aggregate resources locally or elsewhere.</i>	The technical studies prepared in support of the proposed pit demonstrate that no natural or cultural heritage features will be impacted by the development. The hydrogeological study has confirmed groundwater elevations and a series of operational practices designed to restrict activities which could present threats to groundwater have been included on the operations plan. Adherence to provincial standards for noise and dust will minimize any potential social impacts and nuisances. The TOARC contributions will provide a sustained fund to the Township for road maintenance along the proposed haul route and ensure safe vehicular access to and from the site is provided over the long-term with minimal disruption to existing traffic flows.
4.5.2.2 Extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts.	The site plans for the proposed pit expansion have been designed to ensure that appropriate mitigation measures are in place to minimize the potential social, economic and environmental effects of the pit operations.

PPS (2024) Policies	Trafalgar Expansion Pit Proposal
4.5.3 Rehabilitation <i>4.5.3.1 Progressive and final rehabilitation shall be required to accommodate subsequent land uses, to promote land use compatibility, to recognize the interim nature of extraction, and to mitigate negative impacts to the extent possible. Final rehabilitation shall take surrounding land use and approved land use designations into consideration.</i> <i>4.5.3.2 Comprehensive rehabilitation planning is encouraged where there is a concentration of mineral aggregate operations.</i>	The proposed rehabilitation to agricultural use, with the same soil capabilities that exist pre-extraction, is consistent with provincial policy.
4.5.4 Extraction in Prime Agricultural Areas <i>4.5.4.1 In prime agricultural areas, on prime agricultural land, extraction of mineral aggregate resources is permitted as an interim use provided that</i> <i>a) impacts to the prime agricultural areas are addressed, in accordance with policy 4.3.5.2; and</i> <i>b) the site will be rehabilitated back to an agricultural condition.</i>	The PPS provides Rehabilitation to an Agricultural condition is not required where there is a substantial quantity of resource below the water table warranting extraction. In this case, over 60 percent of the resource is located below the water table.
4.6 Cultural Heritage and Archaeology <i>4.6.2 Planning authorities shall not permit development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless the significant archaeological resources have been conserved.</i>	An Archeological Assessment was completed by Timmins Martelle Heritage Consultants and was reviewed and cleared by the Province (MCM). There are no significant archaeological sites located on the property.

3.3 Official Plan Policies: Middlesex County

On July 19th, 2022, County Council adopted Amendment No. 3 to the County of Middlesex Official Plan. Amendment No. 3 was approved by the Ministry of Municipal Affairs and Housing with Modifications on July 7th, 2023. The County is currently undertaking another review of the Official Plan to include further updates which will bring the OP into conformity with the PPS 2024. On January 13th, 2026, County Council adopted Amendment No.4 to the County of Middlesex Official Plan. Amendment No.4 has been submitted for approval to the Ministry of Municipal Affairs and Housing in accordance with the Planning Act. The proposed policies have also been considered in this report.

The County Official Plan contains policies and land use schedules to establish locational and development review requirements for various land uses (residential, commercial, industrial, institutional, parks, etc.), set out how agricultural land and other natural features and cultural heritage resources are to be protected and provide direction on how environmental constraints are to be addressed.

The County recognizes the importance of the protection, conservation and sustainable utilization of natural resources to the continuation of economic growth and development. An integrated approach to land use planning is intended to protect the quality of the natural environmental and conserve those natural resources necessary for future economic growth, on a sustainable basis (OP Section 2.2)

The policies of the Plan recognize the need to balance competing priorities for the protection of aggregate resources for future extraction and the need to protect agricultural land, the Natural Heritage System and other sensitive land uses. The policies state that “The County, in conjunction with the Province shall ensure that as much of the mineral aggregate resources as is realistically possible is made available to supply the need, as close to market as possible; extraction is undertaken and completed in an orderly fashion; and, extraction does not have a permanent adverse impact on the Natural Heritage System or the agricultural land base. Operational impacts on residential and other sensitive land uses shall be minimized” (OP Section 2.2.3).

Areas of aggregate resource, as identified on Schedule E, shall be protected for long-term use (Section 2.2.3.2).

The subject property is within an area of agricultural and mineral extractive land uses and is identified on Schedule E as an aggregate resource area. There are existing licensed sand and gravel pits adjacent to the east and west of the site. The phasing of extraction and progressive rehabilitation of the site, together with location of berms and visual screens around the perimeter of the site, are informed by the technical reports and are designed to minimize impacts of the proposed pit operations.

The pit operation and rehabilitation has been designed to ensure a logical sequence of extraction and progressive rehabilitation. The Site Plan includes the recommended technical measures to

prevent or minimize potential impacts. The proposed pit expansion meets the objective to “ensure the availability of mineral aggregate resources occurs as close to markets as possible”

The policies for Mineral Aggregate Resources allow aggregate extraction within the agricultural designation as an interim use, provided that rehabilitation is completed. Complete rehabilitation to an agricultural after use is not required provided that the site contains a resource below the water table which preclude agricultural extraction and provided that alternatives on class 4-7 soils have been considered. As the proposed development is an expansion of an existing pit operation, there are limited alternatives that could be considered. In addition, the soils on site are primarily class 4.

To mitigate impacts on significant natural heritage features, the Terrastory report recommendations include establishing a 15 m setback from the Significant Woodland and 30 m setback from the Provincially Significant Wetland located adjacent to the licence area. These setbacks encompass all candidate/confirmed Significant Wildlife Habitat types as well as habitat for Endangered Bats. As outlined in the NER technical recommendations, a Buffer Enhancement Area will be established within the 15 m Significant Woodland setback which will serve to convert tilled agricultural land to natural cover. Additional technical recommendations include timing restrictions for removal of vegetation to avoid the breeding bird season (April 1 to September 30th). Installation of bat boxes is also proposed and discussion with MECP Species at Risk (SAR) Branch to ensure that appropriate measures are in place to protect any habitat for SAR species on the site. All of these recommendations are incorporated into the Site Plans.

The Natural Heritage Report concludes that, with the mitigative measures in place, there will be no negative impacts to the natural heritage features or ecological functions identified both on and off site. No cumulative negative impacts on the natural environment are anticipated in association with the proposed pit. The project conforms with the Natural Heritage policies of the County OP, as outline in Section 2.2.1

Section 2.2.3.3 sets out the items that are to be addressed when local municipalities are considering an application to permit a new pit or quarry. These items are also reflected in the Thames Centre Official Plan and are detailed in the next section of this report.

3.4 Official Plan: Municipality of Thames Centre

The Thames Centre Official Plan was approved by Council in October 2003 and updated through the 5-year review process in 2014 (OPA 12). In 2022 the municipality completed a comprehensive review of the Official Plan and introduced policy changes to the OP as part of OPA #27 which was approved by Council in August 2022. OPA 27 establishes the planning framework for the municipality through 2047. The recent changes have been included in the analysis of the proposed Trafalgar Pit Expansion.

The general land use strategies related to aggregate resources are referenced in Section 11.4 and Section 3.3 and acknowledge the rich supply of aggregate resources in the Thames Centre. The OP states that “In areas that are identified as primary aggregate resource areas that are not

also identified as natural heritage areas priority for development will be given to extractive industrial uses”.

Municipality of Thames Centre OP Policies	Proposed Trafalgar Expansion Pit
3.2 Natural Heritage System and Natural Hazards Thames Centre has many natural heritage features and areas containing rare ecosystems, habitats of significant species and sites valued by the Municipality's residents for their natural appearance. The natural heritage system policies of the Plan rely upon a green - space system that protects and seeks improvements to the ecological and landscape interconnections among features and areas. Policies in this Plan anticipate that natural heritage objectives will be achieved through two means: (1) careful planning and control of new land uses and development proposals in keeping with policies of this Plan and its supporting Zoning By- law; and (2) encouraging landowners to implement effective stewardship of their land holdings. Development and site alteration shall not be permitted within the following Natural Heritage System features: • Provincially Significant Wetlands; • Fish Habitat except in accordance with federal and provincial requirements; and • Habitat of Endangered Species and Threatened Species except in accordance with federal and provincial requirements. Development and site alteration shall not be permitted within the following Natural Heritage System features unless it has been demonstrated that there will be no negative impacts on the Natural Heritage System features or their ecological functions: • Significant Woodlands; • Significant Valleylands; • Significant Wildlife Habitat; • Significant Areas of Natural and Scientific Interest; and	Terrastory completed an ecological evaluation which included numerous field studies to assess the potential effects of the proposed pit expansion on the Natural Heritage system. The Terrastory report recommended mitigation measures to protect these features and ecological functions, and these recommendations have been incorporated into the design of the operations and site rehabilitation.

• Significant Vegetation Groups and significant Vegetation Patches as defined in the Middlesex Natural Heritage System	
3.3 Non-renewable Resources All aggregate extraction operations shall be considered an interim use and subject to a program of progressive rehabilitation as specified by the Provincial Policy Statement, the Aggregate Resources Act and the actual pit license. Existing aggregate operations are recognized within the " Extractive Industrial" designation overlay of this Plan. New aggregate operations proposed on lands that are not designated identified as ' Extractive Industrial' will be permitted subject to an amendment to the Zoning By- law and the issuance of a license pursuant to the Aggregate Resources Act. <u>3.3.2 Goals</u> (3) To encourage extraction of mineral aggregate resources where this is feasible recognizing these resources are needed as close to market as possible. (4) To achieve a balance among protecting aggregate resources for future extraction, protecting agricultural land and resources, and protecting the natural heritage features and areas of the Municipality's green-space system. (5) To require that aggregate extraction sites are operated in an orderly fashion so that extraction operations do not cause unacceptable impacts on the agricultural land base, or the components of the green-space system, or on existing areas of development. (6) To ensure that aggregate extraction and petroleum sites are rehabilitated to leave the sites amenable for uses that are compatible and consistent with surrounding land uses.	The proposed Trafalgar Pit Expansion meets the policy requirements of Section 3.3 of the Township OP. The pit will allow for the utilization of the resources close to the markets where they are needed. The majority of the products will be used to supply local construction projects. The pit has been carefully designed to avoid sensitive natural features and ensures the protection of the woodland and wetland areas for the long term. The final rehabilitation is compatible with the surrounding land uses. As noted in this report, the surrounding land uses also include other active mineral aggregate operations, located near the subject property. In this regard, the proposed use is consistent and compatible with existing land uses in the area. Agricultural uses will continue in the areas of the site that are not being actively extracted.

(7) To encourage the continuance of compatible land uses (i.e., agricultural land uses) on lands having deposits of aggregate materials and on licensed areas until such time as aggregate extraction occurs.	
A3.3.3.3 Rehabilitation of Aggregate Resource Sites Aggregate extraction sites must be progressively rehabilitated to an agricultural condition in which substantially the same areas and same average soil capability for agriculture are restored. Complete agricultural rehabilitation is not required if: 1) there is a substantial quantity of mineral aggregates below the water table warranting extraction; or 2) the depth of planned extraction in a quarry makes restoration of pre-extraction agricultural capability unfeasible; and 3) other alternatives, such as the rehabilitation of natural environment features, have been considered by the applicant and found suitable and agricultural rehabilitation in remaining areas will be maximized. Where other alternatives are for a use not normally permitted within the underlying designation, the Official Plan amendment application required to enable the operation will need to address those alternatives.	The site contains a substantial quantity of aggregate resource below the water table. The depth of the proposed extraction makes restoration of pre-extraction agricultural capability unfeasible. As previously noted, there is a substantial overlap between the significant mineral aggregate resource areas and prime agricultural land. No alternatives have been identified of a similar quantity and quality of resource on non-prime agricultural lands.
5.8 Truck Haul Routes To ensure that trucks utilize roads that are suitably constructed or improved for these purposes, "Truck Haul Routes" have been designated and are shown on Schedule "C". In evaluating applications for changes in use, trucks will be expected to access the nearest designated "Truck Haul Route" by the shortest distance possible that minimizes the impact on local roads that are either unsuited for truck traffic as a result of their standard construction or as a result of existing truck traffic volumes.	Truck traffic from the proposed pit will utilize the existing pit entrance onto Trafalgar Street. The proposed pit will not require any extension or expansion of municipal infrastructure.

Section 3.3.3 of the Official Plan outlines the matters to be addressed when considering proposals for an aggregate use. The items outlined for the Planning Impact Analysis in the OP are noted below in italics, with a response provided below each item.

1) The impact on adjacent land uses and residents, including visual impacts;

The proposed Trafalgar Pit Expansion is located in an Agricultural area of Thames Centre. The surrounding lands are in mainly agricultural use and extractive industrial use with pit operations located to the east and north of the site. There are farm and non-farm residences located along Trafalgar Street and there are several existing licensed gravel pits located near the site.

The design of the proposed pit includes berms around the perimeter of the site. The berms will be taken down once the pit operations are complete. Once extraction is completed, the lands will be restored to a pond and field meadow. The proposal will not adversely impact the character or stability of the surrounding area. The proposal is compatible with the present and future uses in the area.

2) the impact on any components of the Municipality's natural areas or green -space system natural heritage features and areas;

The woodlot and wetland area along the east boundary of the site is excluded from the area to be licensed. Setbacks have been incorporated into the design to provide protection for natural heritage features based on the recommendations of the Natural Environment Report.

3) The impact on significant cultural heritage sites or features as designation under the Heritage Act.

There are no identified cultural heritage resources that would be impacted by the proposed pit. An archaeological assessment was completed and did not identify any significant resources on the site.

4) The impact on the existing road network

The site is located on roads that have been identified in the Official Plan as “truck haul routes” and are currently being used for gravel truck traffic.

5) The impact on existing groundwater resources

No municipal drinking water sources are located on or within 120 metres of the property. The proposal will ensure the preservation of existing groundwater quality and quantity by retaining a buffer between the pit floor and the established high water table.

Several operational best practices have been included on the Operations Plan in order to minimize any potential for surface activities to impact groundwater quality. These include groundwater level monitoring and restriction of surface activities in accordance with provincial guidelines. Further, contingency measures have been implemented on the site plans in order to provide for appropriate corrective actions should groundwater be encountered during extraction.

6) The manner in which the operation would be carried out.

Page 2 of the Site Plans shows the Operational Plan depicting the proposed phasing of the operation, with extraction commencing in the east part of the site, adjacent to the existing Trafalgar Pit, and then proceeding easterly in 2 areas across the site. The area for primary crushing and screening would move with the pit face, as shown on the Site Plans, as extraction progresses.

7) The nature of progressive and final rehabilitation that is proposed, and

The details of progressive and final rehabilitation are laid out on the Site Plans and show the sequence of rehabilitation as well as the final landform.

8) The capabilities of the site for agricultural or other land uses

Once extraction is complete the site will contain a pond with meadow sideslopes providing habitat and complementing the adjacent natural heritage area.

The proposed pit expansion conforms with the policies of the Thames Centre Official Plan.

3.5 Municipality of Thames Centre Comprehensive Zoning Bylaw

The property is currently zoned A – Agricultural in the Township Zoning By-law. The applicant is proposing to change the zoning to M3 (Extractive Industrial) to permit the pit development.

The M3 zone permits both aggregate extraction operations and agricultural uses. Therefore, the zone provisions will allow for extraction and rehabilitation to occur in a phased and progressive manner as provided for on the Site Plans.

3.6 Summary of Planning Analysis

The planning analysis contained in this report demonstrates that the proposal is consistent with the principles, strategic initiatives, objectives and policies of the County and Township Official Plans and is consistent with the Provincial Policy Statement (PPS 2024).

Impacts, and cumulative impacts that have been addressed in the technical reports prepared for this application and recommendations incorporated into the Site plans, and are summarized below:

3.5.1 Natural Heritage Features

The Natural Environment Report prepared by Terrastory have examined the potential for negative effects on natural heritage features and functions on the property and adjacent lands. During site investigations and field surveys, it was determined that significant natural features and potential habitat for species of risk occurred on or adjacent to the site.

To mitigate impacts on significant natural heritage features, the Terrastory report include establishing a 15 m setback from the Significant Woodland and 30 m setback from the Provincially Significant Wetland located adjacent to the licence area. These setbacks encompass all candidate/confirmed Significant Wildlife Habitat types as well as habitat for Endangered Bats. As outlined in the NER technical recommendations, a Buffer Enhancement Area will be established within the 15 m Significant Woodland setback which will serve to convert tilled agricultural land to natural cover. Additional technical recommendations include timing restrictions for removal of vegetation to avoid the breeding bird season (April 1 to September 30th). Installation of bat boxes is also proposed and discussion with MECP Species at Risk (SAR) Branch to ensure that appropriate measures are in place to protect any habitat for SAR species on the site. All of these recommendations are incorporated into the Site Plans.

The Natural Heritage Report concludes that, with the mitigative measures in place, there will be no negative impacts to the natural heritage features or ecological functions identified both on and off site. No cumulative negative impacts on the natural environment are anticipated in association with the proposed pit.

3.5.2 Water Resources

Groundwater Science Corp. (GSC) prepared a report to characterize the groundwater and surface water features on the site and surrounding lands and evaluate the potential impacts of the proposed aggregate operation on water supplies.

The proposed aggregate extraction activities are not expected to adversely impact water supply with this aquifer, since the aquifer is set well below the proposed extraction depth, and active construction dewatering is not proposed as part of the aggregate extraction methodology. In addition, there are no adverse effects on surface water resources expected.

The GSC report recommends that groundwater monitoring be continued quarterly while the pit is in operation. Other recommendations include provisions for fuel storage and erosion control, and the report outlines a suggested well water interference protocol. The recommendations of the report are included as operating conditions on the Site Plans.

3.5.3 Cultural Heritage Resources

Timmins Martelle Heritage Consultants (TMHC) completed Stage 1 and 2 archaeological assessments for the Site in May and October 2023.

The archaeological assessment was conducted to meet the requirements of the Aggregate Resources Act and in accordance with the Standards and Guidelines for Consultant Archaeologists (MTC 2011). The report was submitted to the Ministry of Citizenship and Multiculturalism (MCM) and a clearance letter from the Ministry has been obtained, confirming that the report meets the current provincial requirements.

3.5.4 Traffic

As noted earlier in this report, the proposed pit would use the existing entrance from the adjoining pit licence with access to Trafalgar Street. While the expansion would extend the life of the pit operation, there is no anticipating increase in the average daily shipment volumes and no proposed change to the existing haulage routes.

4.0 PLANNING CONCLUSION

The zoning by-law amendment and ARA license applications are supported by the foregoing land use planning analysis, the Summary Statement, the ARA site plans and related requirements, and the associated technical reports referenced in this document.

Based on these submissions it is concluded that:

- 1) The proposed pit expansion is located in a provincially, regionally and locally recognized aggregate resource area.
- 2) The deposit can be extracted in such a manner that potential environmental and social impacts are minimized.
- 3) The matters of provincial interest as identified in Section 2 of the Planning Act have been properly assessed and the proposal has appropriate regard to these provincial interests.
- 4) The Provincial Planning Statement 2024 contains policy requiring mineral aggregate resources to be protected and that as much of the resource as possible be made available as close to market as is possible. The proposal is consistent with this provincial objective as well as provincial policy related to the protection of natural heritage, water and cultural resources and the protection of public health and safety.
- 5) The proposed pit, through its Operations Plan, Rehabilitation Plan and the recommendations of the supporting technical reports, is consistent with provincial policy as set out in the 2024 Provincial Policy Statement.
- 6) The proposal conforms to the relevant policies of the County of Middlesex Official Plan with regard to amendments for new aggregate extraction applications.
- 7) The proposal conforms to the relevant policies of the Municipality of Thames Centre Official Plan with regard to amendments for new aggregate extraction applications.
- 8) The proposed pit operation has been carefully designed and reflects recommendations of the accompanying technical reports. The operational notes on the license site plans under the Aggregate Resources Act, have incorporated conditions to reflect specific recommendations and measure to mitigate any negative environmental effects.
- 9) The ARA site plans, prepared by taking into consideration the technical studies, surrounding land uses and legislative requirements, are designed to minimize environmental and social impacts in accordance with the Provincial Standards established under the ARA.
- 9) The proposed rezoning to ME- Mineral Extraction is appropriate for the proposed use. No special conditions or exceptions are proposed.

The proposal is consistent with the 2024 Provincial Planning Statement and conforms with the Official Plans for the Municipality of Thames Centre and the County of Middlesex.

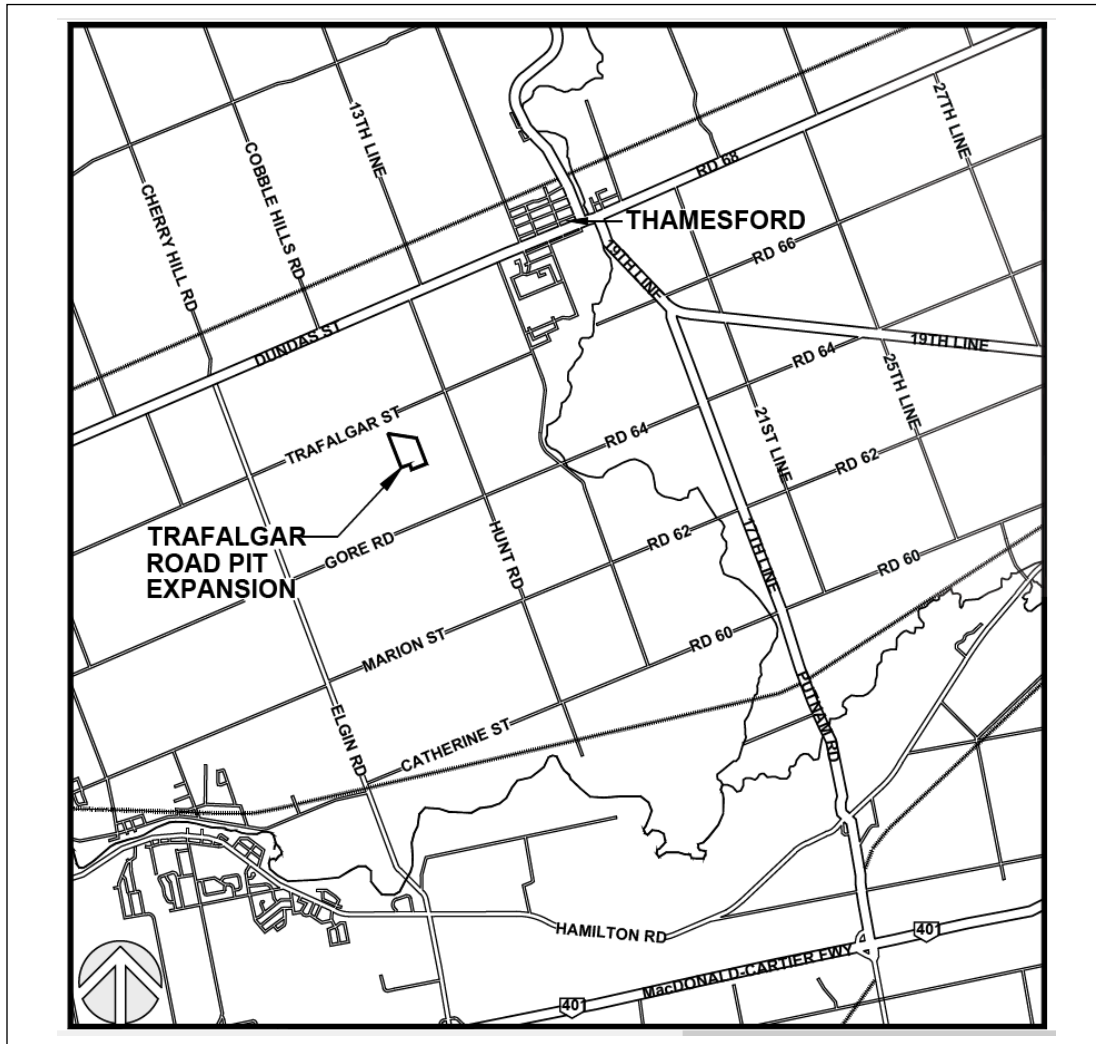
In my professional opinion, the proposal represents good land use planning.

Prepared by:



Melanie Horton, MCIP, RPP
Esher Planning Inc.

FIGURE 1: LOCATION



Paton Aggregates and Soils Ltd.

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR

Municipality of Thames Centre, Middlesex County



FIGURE 2: SURROUNDING LANDS

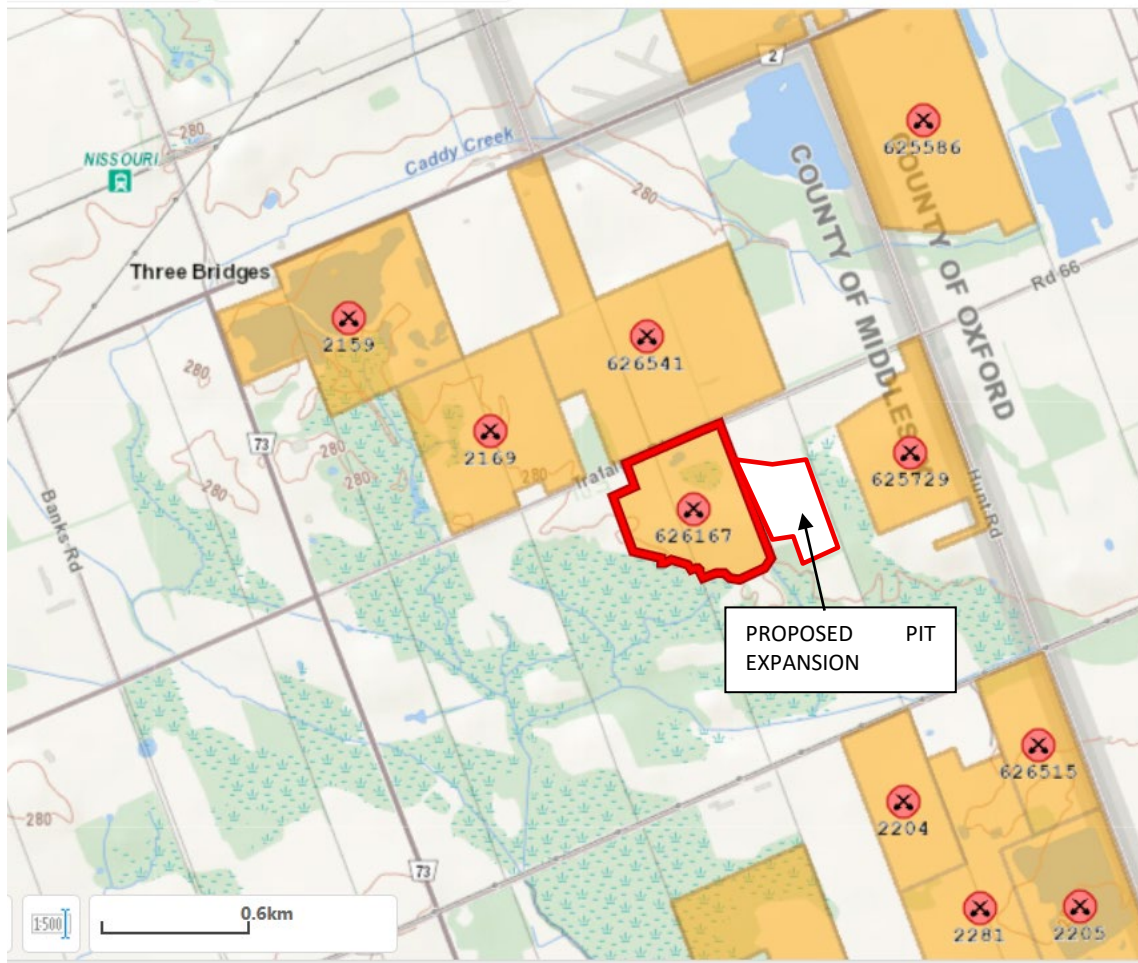


Paton Aggregates and Soils Ltd
TRAFALGAR EXPANSION PIT

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FIGURE 3: GRAVEL PIT LICENCES

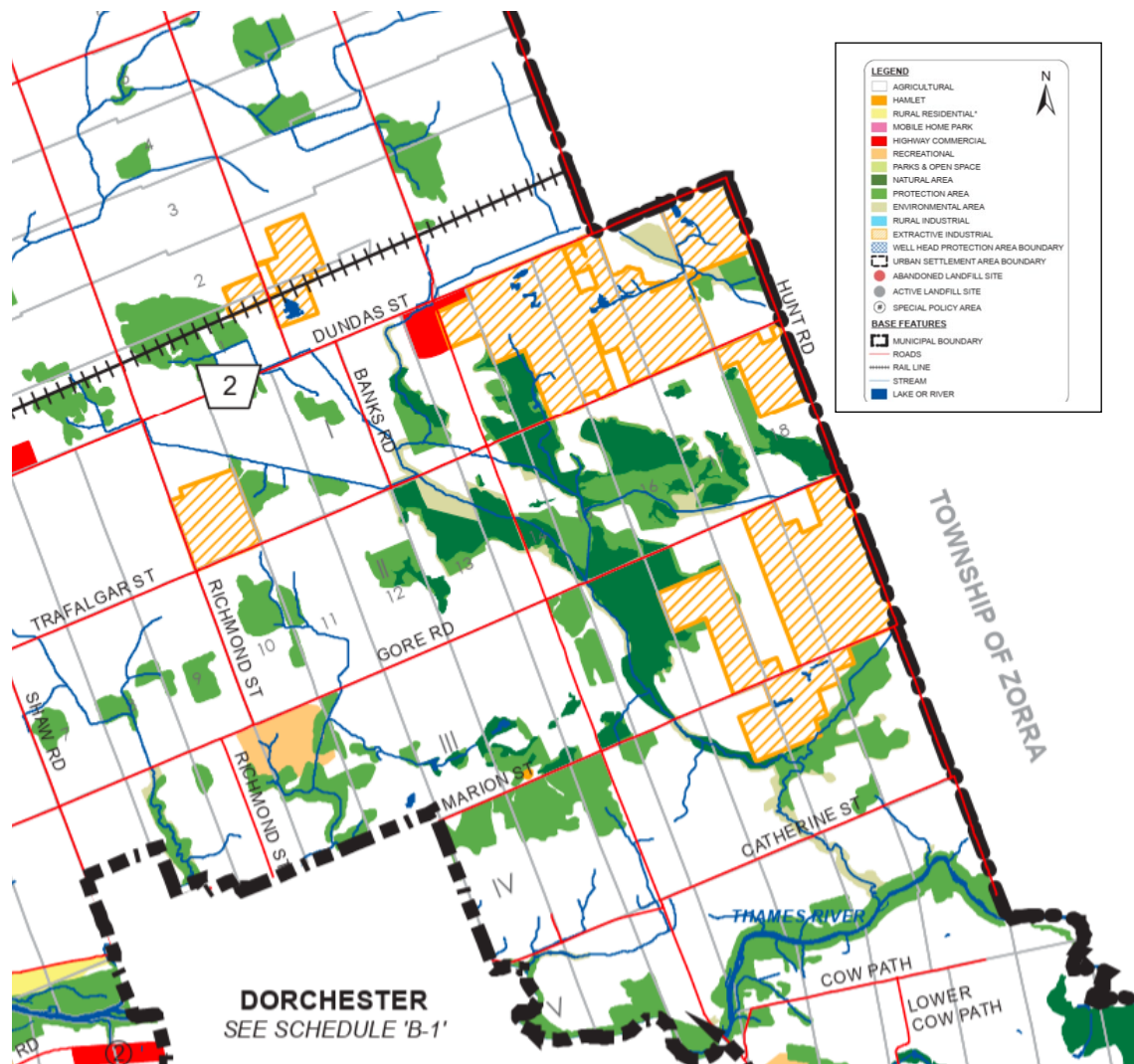


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**FIGURE 4: THAMES CENTRE OFFICIAL PLAN
LAND USE SCHEDULE A**

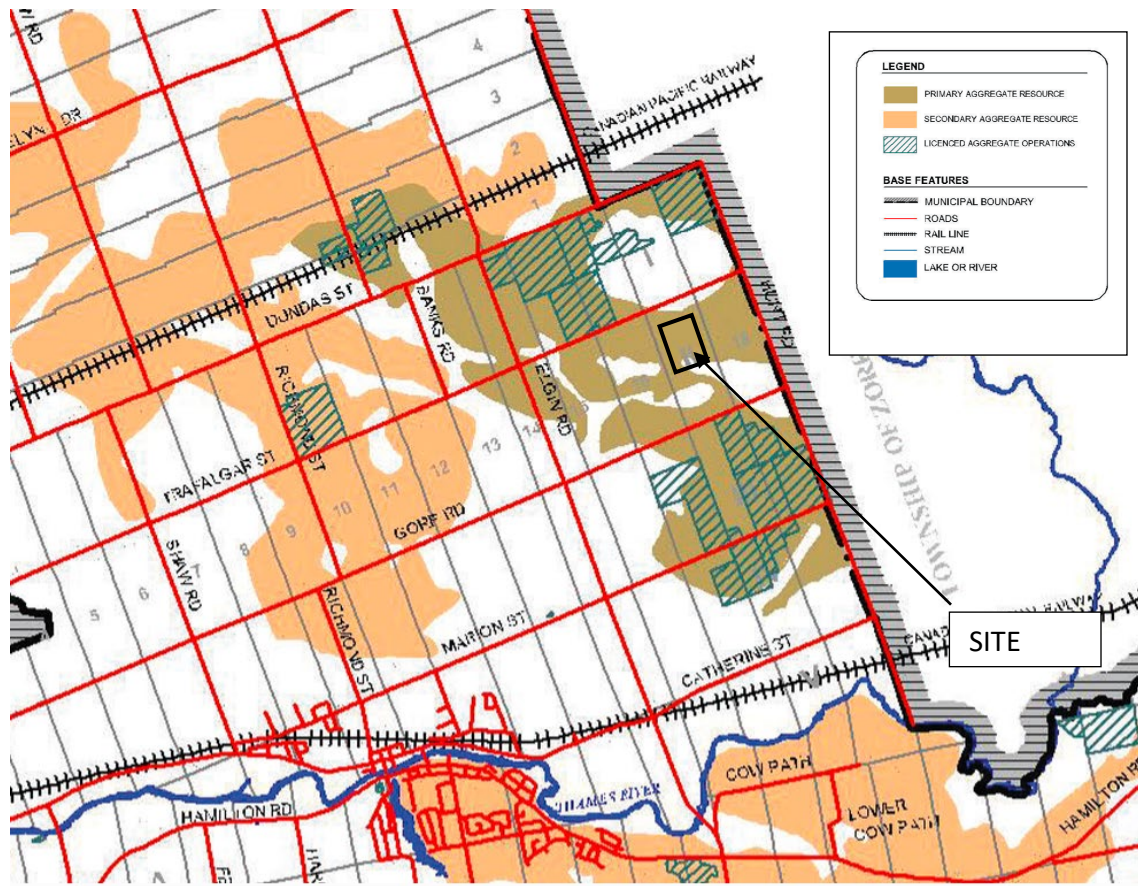


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Municipality of Thames Centre, Middlesex County



**FIGURE 5: THAMES CENTRE OFFICIAL PLAN
AGGREGATE RESOURCES MAP (Appendix 3)**

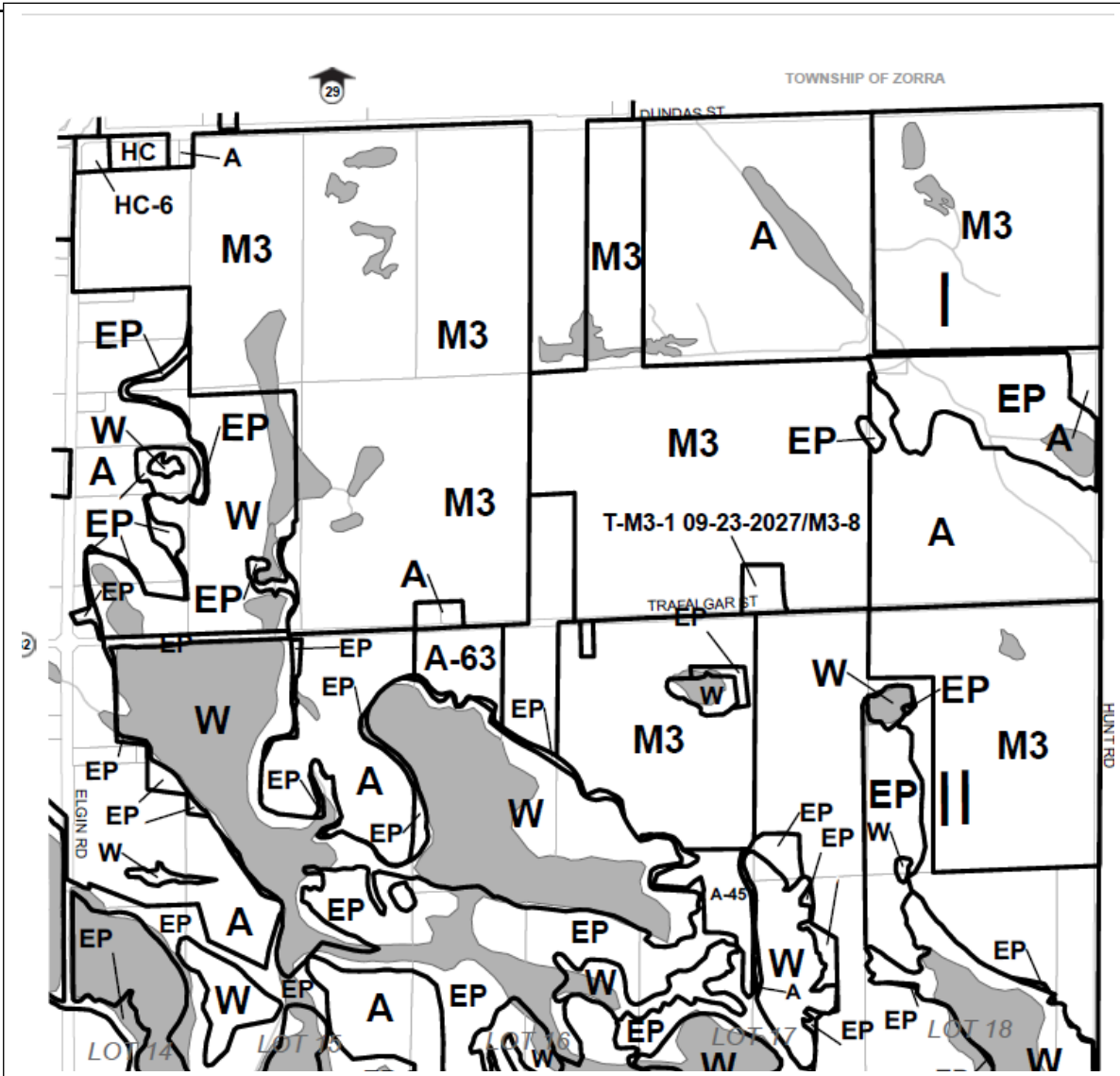


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FIGURE 6: MUNICIPALITY OF THAMES CENTRE, ZONING

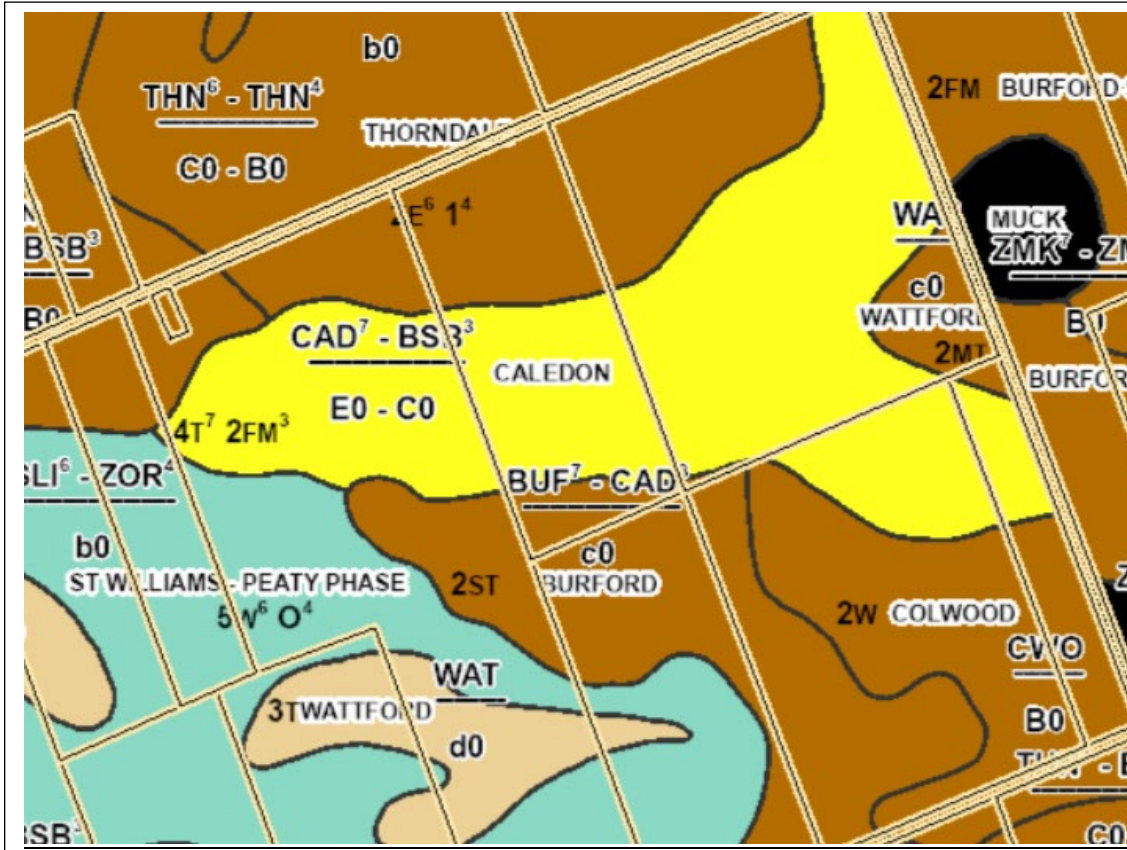


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FIGURE 7: SOILS AND CANADA LAND INVENTORY MAPPING



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