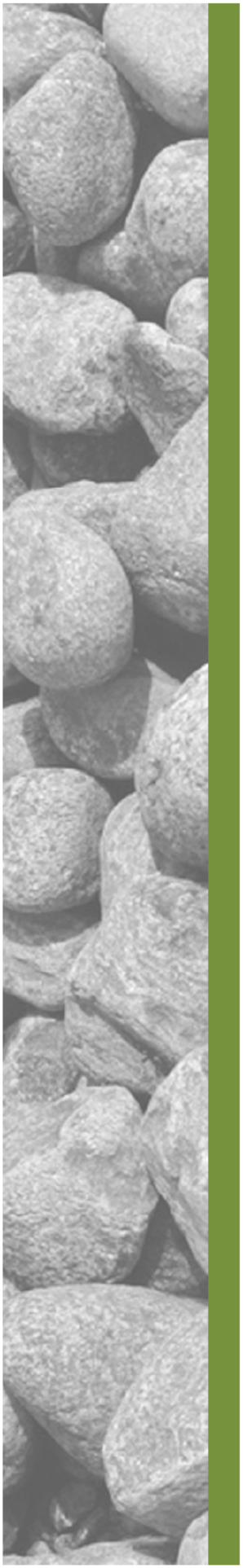
Summary Report

Paton Aggregates & Soils Ltd.

Trafalgar Expansion pit

Part of Lot 17, Concession 2 NTR
Municipality of Thames Centre
(Formerly North Dorchester)
County of Middlesex

Submitted March 2026



Harrington McAvan Ltd

102 - 41 Main Street, Unionville, ON L3R 2E5
T: 905-294-8282 | F: 905-294-7623
E: markham@harringtonmcavan.com

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Summary Statement

Introduction

This report has been prepared in support of an application for a Class "A" licence, pit below water by Paton Aggregates & Soils Ltd., as required by the *Aggregate Resources of Ontario standards: A compilation of the four standards adopted by Ontario Regulation 244/97 under the Aggregate Resources Act.* It summarizes the information and conclusions of the consultants who have contributed to the preparation of the site plans including:

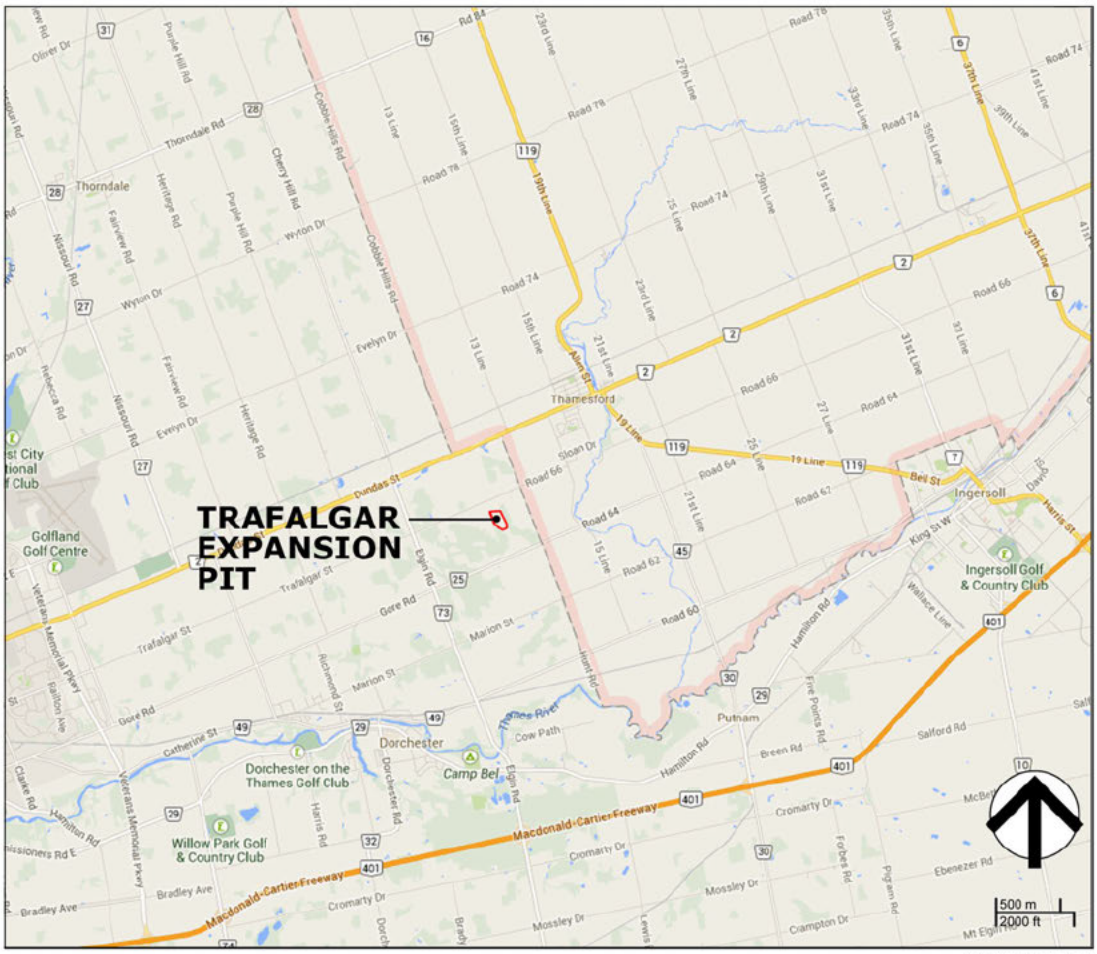
- Hydrogeology: Groundwater Science Corp.
- Natural Environment: Terrastory Environmental Consulting Ltd.
- Cultural Heritage: Timmins Martelle
- Agricultural Impact Assessment: Esher Planning Inc.

The report is intended to supplement the information contained on the site plans, which have been prepared by Harrington McAvan Ltd (Appendix E), and to assist in the review of the license application which the company has filed with the Ministry of Natural Resources and the planning application filed at the Municipality of Thames Centre.

1.0 Site Description

The proposed licence is for 11.0 hectares (27.2 acres) located in part of Lot 17, Concession 2 NTR, in the Municipality of Thames Centre (formerly Township of North Dorchester), County of Middlesex, on the south side of Trafalgar Street. Refer to location map (figure 1). The area proposed to be extracted is 9.4 hectares (23.2 acres).

The site consists of gently to moderately sloping agricultural fields used to grow cash crops, with a ridge of higher sand hills oriented east-west through the southern part of the site (see figure 2 - photo). Elevations generally range between 283 and 297 m above sea level (a.s.l.), with the highest elevations found in the western part of the sand ridge of the site. The wooded lands to the south are under the same ownership and have been excluded from the area to be licenced (see figure 2 - photo). This large woodlot is zoned Environmental Protection and is part of the Dorchester Swamp, a provincially significant wetland. Refer to Natural Environment report in Appendix B for a detailed description of the woodlot and associated wetlands in the adjacent lands. A house and associated buildings belonging to the owner of the property are located in the northern part of the property and are excluded from the proposed licenced area.



Google Maps, Web

Location Map

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Figure
1

Figure 2

The applicant's Trafalgar Street pit, licence no. 626167 is located directly to the west and Van Bree's licensed Hunt pit no. 625729, is located to the east. There are other licenced pits to the north and northeast of the site, located within the Municipality of Thames Centre and the Township of Zorra.

Figure 3

The surrounding lands are mainly in agricultural use with scattered natural heritage features (figures 3 & 4). There are farm and non-farm residences located along Hunt Road and Trafalgar Street, with the closest off-site residence located on the north side of Trafalgar Street.

Figure 4

1.1 Agricultural Classification

Soils of Middlesex County mapping obtained from the Ministry of Agriculture, Food and Rural Affairs shows the majority of the site within soil types identified as CAD7 – BS33 The Caledon soils are dominant unit over the Burford soils found within the area to be licenced. A portion of the northern part of the property located outside of the area to be licensed is Bryanston silt loam.

The Soils and Canada Land Inventory mapping from the OMAFA (CLI) show classifications of 4T (70%) and 2FM (30%) for the Caledon and Burford soils. The Class 4 soils have severe limitations that restrict the range of crops or require special conservation practices or both. The Class 2 soils are suitable for annual cultivation and all or many common field crops can be grown but have limitations because of adverse topography (T), low natural fertility (F) and moisture limitations due to low moisture holding capacity (M). Refer to figure 5, Soil Capability.

In the soils report no 56 it states on page 44 that, *"The Caledon Association has developed on nearly level to undulating topography where 40 to 100 cm of sandy-textured material overlies gravelly, glaciofluvial outwash material. Cobble-sized coarse fragments also occur in the outwash materials. The gravelly parent material is highly calcareous, often containing coatings and deposits of secondary carbonates in macropores and along root channels. Alternating layers of gravelly materials and sand are common in the subsoil."*

On page 42 of the report it states, *"The Burford Association has developed on gravelly, sandy to loamy-textured, glaciofluvial outwash deposits. Cobble-sized coarse fragments are also present in the outwash materials. In the subsoil, the gravel content is greater than 20% and beds of sand are common. The gravelly material is overlain by thin caps, less than 40 cm in thickness, of sandy or loamy-textured material."*
At the present time, the site is in agricultural use, with the majority of the site cultivated for cash crops (see figure 2 - photo). The yields for the property in 2023 were 152 bushels/acre of corn and 38 bushels/acre of beans in 2024, which is below average for the local area reported by the ministry reports.

Extraction will extend below the groundwater table on the majority of the property, as determined in the hydrogeological assessment by Groundwater Science Corp. and shown on the site plans. As indicated in Section 1.4, there are substantial below water resources that warrant extraction.

Rehabilitation of a pond/wetland will include the following as noted on the site plans:

a) areas of open water as well as shallow and wide near-shore zones (wetlands);

b) the pit floor will be left irregular and the edges of the wetlands will be sculpted to lengthen the shoreline for enhancing biological diversity and productivity;

c) underwater habitat enhancement will employ logs, stumps and rock (see typical

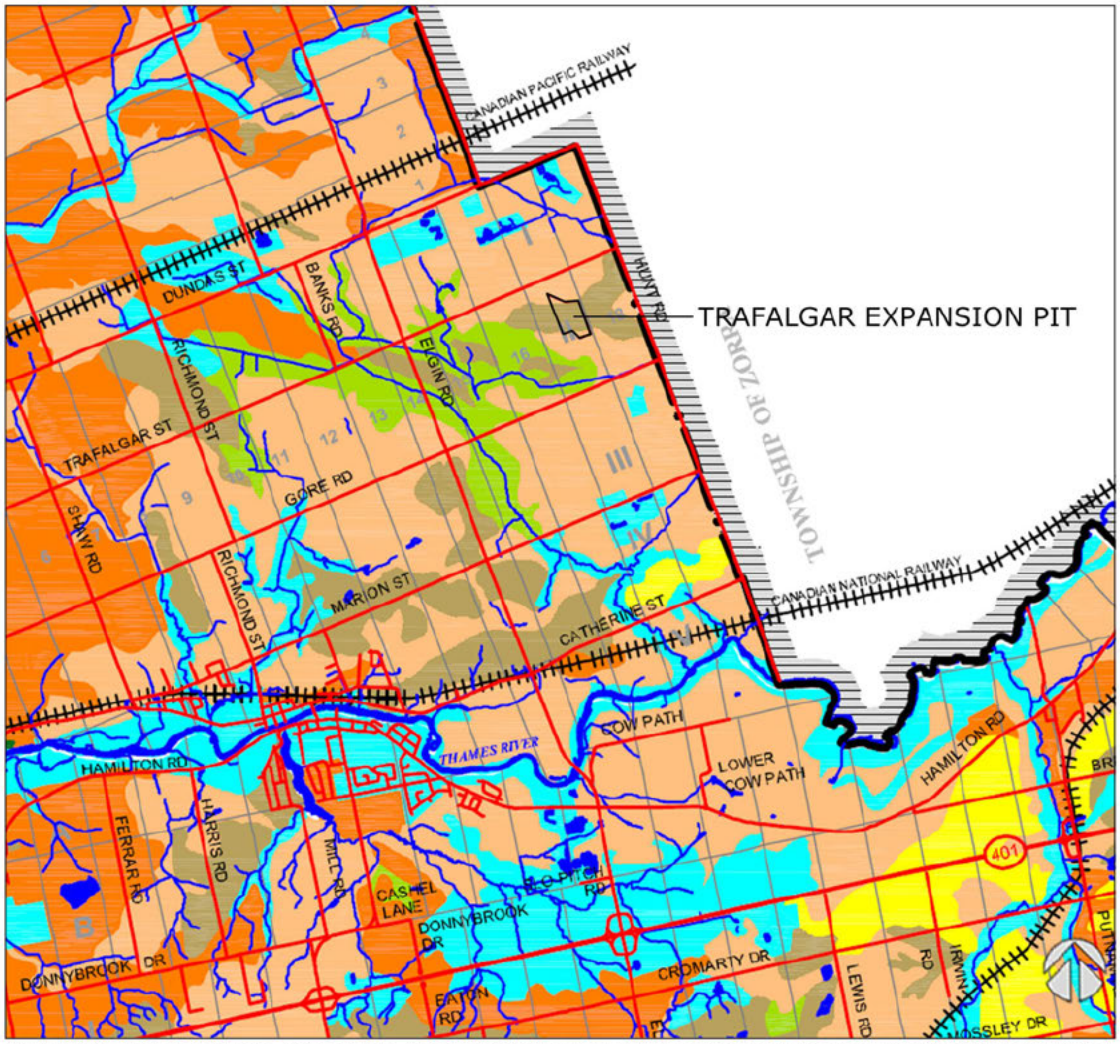
shoreline habitat details) and

d) the pond/wetland will be naturally seeded from the existing wetland species such as willow, red osier dogwood, arrowhead, rushes, sedges and grasses.

Rehabilitation techniques to restore remaining areas to be extracted to agricultural use, will include the following as indicated on the site plan:

- Deep ripping to eliminate compaction, where necessary
- Backfilling the areas with available on-site overburden and rough grading
- Removal of stones larger than 100 mm, as required
- Spreading of available on-site topsoil and fine grading
- Seeding with an appropriate grass/legume mixture
- Using accepted farming practices to restore to agricultural use

Provincial Policy Statement (2024), section 4.5.4 (2) states that, *"Despite policy 4.5.4.1 (b), complete rehabilitation to an agricultural condition is not required if: a) the depth of planned extraction makes restoration of pre-extraction agricultural capability unfeasible; and (b) agricultural rehabilitation in remaining areas is maximized."*



Municipality of Thames Centre, Official Plan, Appendix 2 Soil Capability for Agriculture, Office Consoildation November 2022

Soil Capability

LEGEND:

- CLASS 1 — NO SIGNIFICANT LIMITATIONS IN USE FOR CROPS
- CLASS 2 — MODERATE LIMITATIONS THAT RESTRICT RANGE OF CROPS OR REQUIRE MODERATE CONSERVATION PRACTICES
- CLASS 3 — MODERATELY SEVERE LIMITATIONS THAT RESTRICT RANGE OF CROPS OR REQUIREMODERATE CONSERVATION PRACTICES
- CLASS 4 — SEVERE LIMITATIONS THAT RESTRICT RANGE OF CROPS OR REQUIRE MODERATE CONSERVATION PRACTICES OR BOTH
- CLASS 5 — VERY SEVERE LIMITATIONS THAT RESTRICT THEIR CAPABILITY TO PRODUCTING PERENNIAL FORAGE CROPS, AND IMPROVEMENT PRACTICES ARE FEASIBLE
- CLASS 6 — ONLY CAPABLE OF PRODUCTING PERENNIAL FORAGE CROPS. IMPROVEMENT PRACTICES ARE NOT FEASIBLE
- CLASS 7 — NO CAPABILITY FOR ARABLE AGRICULTURE OR PERMANENT PASTURE
- O — NOT PLACED IN CAPABILITY CLASSES (INCLUDING, BUT NOT LIMITED TO ORGANIC SOILS, VALLEY COMPLEXES, ERODED CHANNELS, ALUVIAL DEPOSITS, AND AREAS NOT MAPPED)
- LAKE OR RIVER/ STREAM
- MUNICIPAL BOUNDARY
- ROADS
- RAIL LINE

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Figure **5**

1.2 Planning and Land Use Considerations

The subject lands fall within the Planning jurisdiction of the County of Middlesex Official Plan and the Municipality of Thames Centre Official Plan (see figure 6). The Planning Report which was prepared for this application evaluates the proposed land use within the context of both Official Plans, as well as within the context of Provincial legislation including the Planning Act and the Provincial Policy Statement (2024). The complete planning report can be found in Appendix F of the report.

The proposed Trafalgar Street Pit will require approvals from the Municipality of Thames Centre, specifically, amendments to the local Official Plan and Zoning Bylaw are required to allow for the proposed development (see figure 7). In addition to the Planning Act applications for Official Plan amendment and rezoning, the proposed pit will require an Aggregate Resources Act License from the Ministry of Natural Resources. Technical reports have been prepared as part of the applications to evaluate the impacts of the proposal on the natural environment, hydrologic and hydrogeological features and traffic. The applications will be circulated to the Upper Thames Valley Conservation Authority, the Ministry of Agriculture and Food and the Ministry of Environment, Conservation and Parks. The Ministry of Citizenship and Multiculturism (MCM) has already provided a clearance letter for the site and a copy forwarded to MNR.

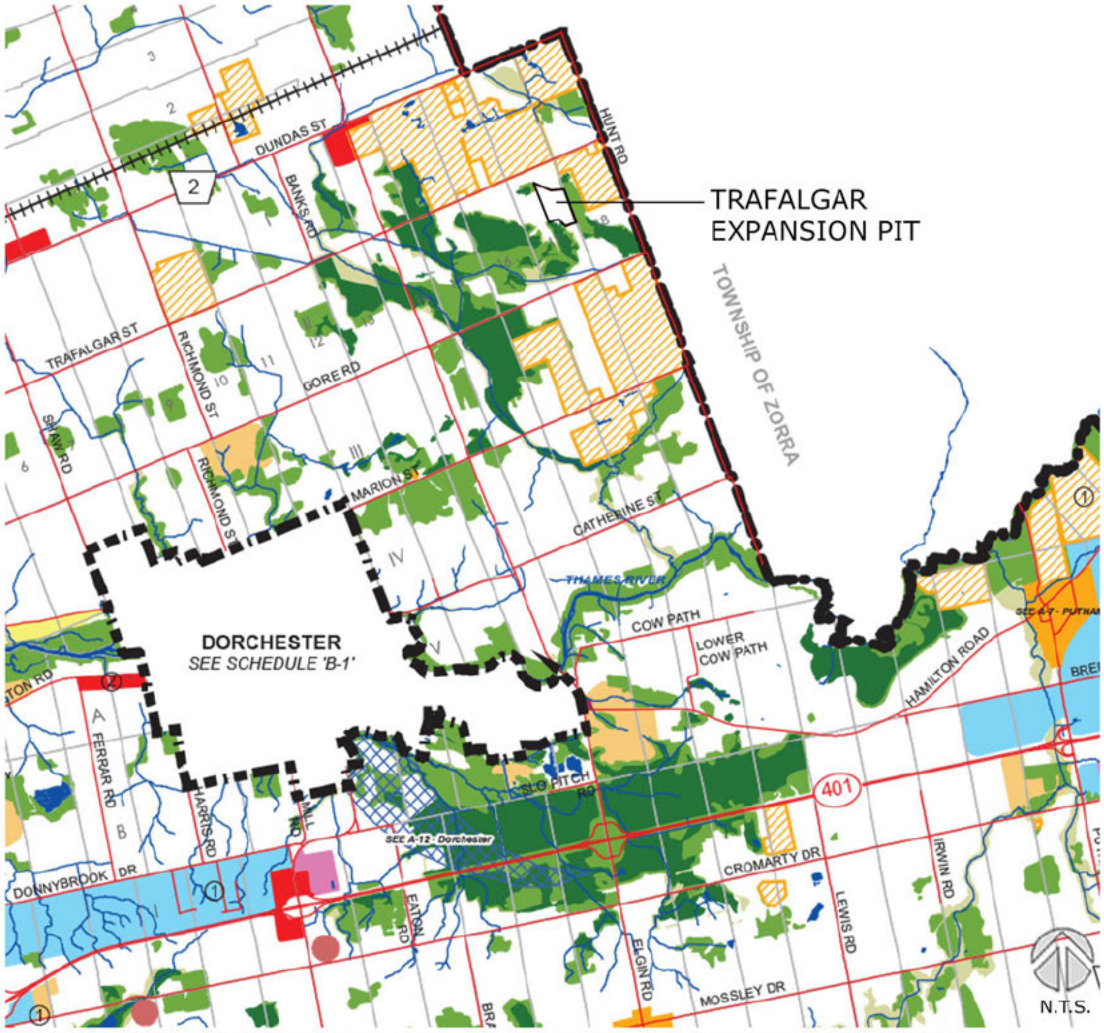
The Planning Act and Resources Act applications to permit the development of the Trafalgar Street pit are supported by a series of technical studies which have assessed the impact of the proposed operation on neighbouring residents, the natural environment, the agricultural capabilities of the land, the impact of roads and municipal water supply. The Site Plans detail the manner in which operations will be carried out as described by the sequence of mining and progressive rehabilitation.

Careful consideration and planning have gone into the design of the operations and the rehabilitation of the pit to minimize impacts and ensure that the lands are returned to agricultural use. The Trafalgar Street property contains significant mineral aggregate resources as identified in the Township's Official Plan. The proposed pit will allow for the utilization of these resources to produce a supply of local bedding sand and construction materials.

The Natural Heritage Report has evaluated the impacts of the proposal on significant wetlands, woodlands, fish habitat, and habitat of endangered species and threatened species. The recommended mitigative measures are incorporated to ensure no negative impacts on these natural features or their functions. The woodlot and wetland feature located on the property will be maintained together with a 30 metre buffer to protect the feature. Storage berms may be constructed along the perimeter of the pit and will also serve as visual screens. The berms will be taken down once the pit operations are complete.

The proposed Paton Expansion pit is located in an Agricultural area of Thames Centre.

The surrounding lands are in mainly agricultural use and extractive industrial. There are farm and non-farm residences located along Trafalgar Street and there are several existing licensed gravel pits located near the site. Mineral aggregate uses are permitted



Municipality of Thames Centre, Official Plan, Schedule A, Land Use Plan, Office Consolidation November 2022

Land Use

LEGEND:

- AGRICULTURAL
- HAMLET
- RURAL RESIDENTIAL
- HIGHWAY COMMERCIAL
- RECREATIONAL
- NATURAL AREA
- PROTECTION AREA
- ENVIRONMENTAL AREA
- RURAL INDUSTRIAL
- EXTRACTIVE INDUSTRIAL
- WELL HEAD PROTECTION AREA
- STREAM/ RIVER/ LAKE
- URBAN SETTLEMENT AREA BOUNDARY
- (#) SPECIAL POLICY AREA
- MUNICIPAL BOUNDARY
- ROADS
- RAIL LINE

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Figure
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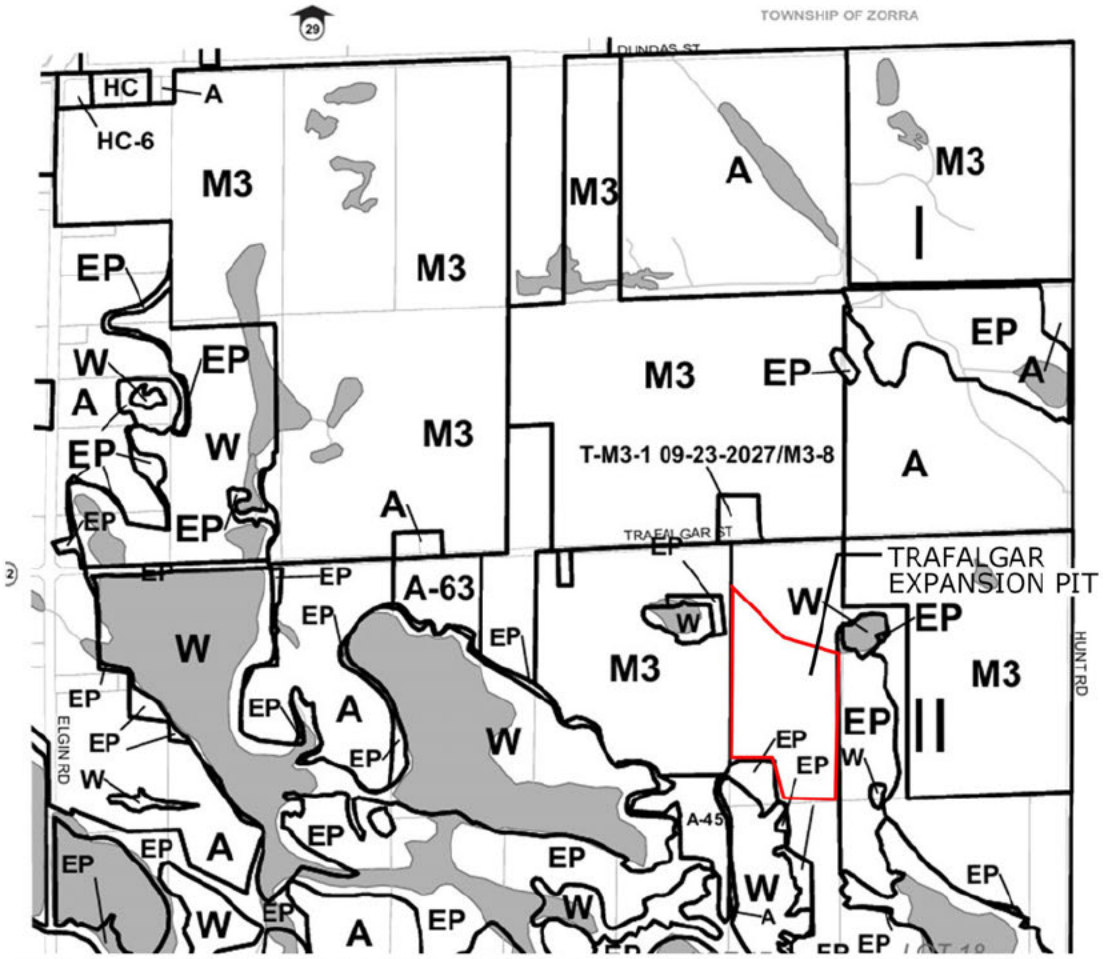

Municipality of Thames Centre, Zoning By-Law No. 75-2006, Schedule A, Map No. 33, Office Consolidation April 2025

Zoning Map

LEGEND:

MUNICIPALITY OF THAMES CENTRE

A	Agricultural Zone
RR	Rural Residential Zone
M2	Rural Industrial Zone
M3	Extractive Industrial Zone
EP	Environmental Protection Zone
W	Wetland Zone

TOWNSHIP OF ZORRA

A1	Limited Agricultural Zone
A2	General Agricultural Zone
RE	Residential Existing Lot Zone
AB	Agri-Business Zone
D	Development Zone
ME	Aggregate Industrial Zone

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Figure **7**

in Agricultural areas provided they meet the other requirements of the Official Plan, and provided that appropriate zoning is in place. The proposed pit is compatible with surrounding land uses.

The site has been designed in accordance with Aggregate Resources Act Provincial Standards, which includes a standard requirement for fencing (1.2 metre height) around the boundary of the licensed area, where required and/or highly visible marker posts. The storage berms will be seeded and maintained through the life of the operation. Existing vegetation along Trafalgar Street will be maintained.

The Traffic consultant has previously indicated that the proposed pit will not require any extension or expansion of municipal infrastructure to accommodate additional truck traffic.

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.

In summary, the proposed Paton Expansion pit:

- Is compatible with the surrounding landscape and reflects the importance of agricultural lands, through progressive and final rehabilitation;
- has no negative impact on the natural environment;
- has a minimal impact on the social environment of the area;
- maintains the intent and purpose of the County of Middlesex Official Plan and the Municipality of Thames Centre Official Plan;
- represents wise management and use of resources; and,
- is consistent with the Provincial Policy Statement.

1.3 Source Protection Area

Surface Water

There are no surface water features within the proposed licence. The coarse, sandy soils on site have high infiltration rates and relatively little surface runoff can be expected on the site except during heavy rainfall events and spring snow melt over frozen ground. Surface drainage is mainly internal and directed to the low areas or depressions within the fields.

Groundwater Table

Groundwater Science Corp. was retained to complete a review of the hydrogeologic information available for the site and surrounding area and determine the groundwater table elevations on site (see Appendix A). The water table at the site was measured and determined by the installation and monitoring of 3 water table wells on the perimeter of the proposed licensed area, supported by additional wells located in the existing pit. The water table was measured to correspond to the top of the saturated zone within the unconfined surficial sand and gravel aquifer. The maximum predicted water table elevation varies across the proposed extraction area from approximately 282.2 masl (at MW6) to 283.4 masl (at MW4).

Source Protection

As noted on page 8 of the Groundwater Science report, "*There are no well head protection areas (WHPA), or WHPA-Q area, identified at the site or in the immediate area of the site (Source Protection Atlas interactive mapping application). The closest WHPA identified is approximately 2 km northeast of the site, for the village of Thamesford. The area of the site is classified as a significant recharge area, likely due to the surficial soil types present. In addition, due to both the geologic characterization and relatively shallow water table, the site and surrounding area is also identified as a Highly Vulnerable Aquifer, with a designated vulnerable area activity threat category of moderate to low.*"

1.4 Quality and Quantity of Aggregate On Site

The property is located within an outwash deposit no 1 of primary significance, with a stone content greater than 35% and a depth of greater than 6 metres as previously shown on Map 2 in the Ontario Geological Survey *Aggregate Resources Inventory of the Township of North Dorchester, Middlesex County, Paper 74, 1982, Ministry of Natural Resources.* The 1982 report has been updated and the information can also be found in the Ontario Geological Survey, *Aggregate Resources Inventory of the County of Middlesex and the City of London, Paper 78, 2016* and has been mapped within select resource area 6 (see figure 8).

On pages 26 and 27 of the report the following is stated, "*Selected Sand and Gravel Resource Area 6 is 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. At the time of writing, 17 licensed pits (Pit Nos. 88 to 94 and 96 to 104) had been developed in the deposit. A number of former pits previously developed in this deposit have been depleted and rehabilitated.*

This deposit is associated with the Dorchester moraine, a feature suggested as being interlobate in origin (Barnett 1992). Sand and gravel deposits are often overlain by or interbedded with till. Face heights range from 2 to 6 m and expose material that varies considerably. Poorly sorted medium sand with medium to coarse gravel was commonly observed in pit sections. Pockets of material with higher gravel content were also observed and tended to contain cobble material. This deposit may also be more accurately described as a subaqueous fan. Water-well and borehole records indicate up to 20 m of material. Portions of these resources will be below the water table. A number of licensed operations were dredging material from below the water table at the time of field investigation.

The high degree of variability of the material means that a variety of aggregate products can be produced. As gravel and crushable material tend to occur in pockets, the ability to produce Granular A and related products will be dependent on locating these pockets.

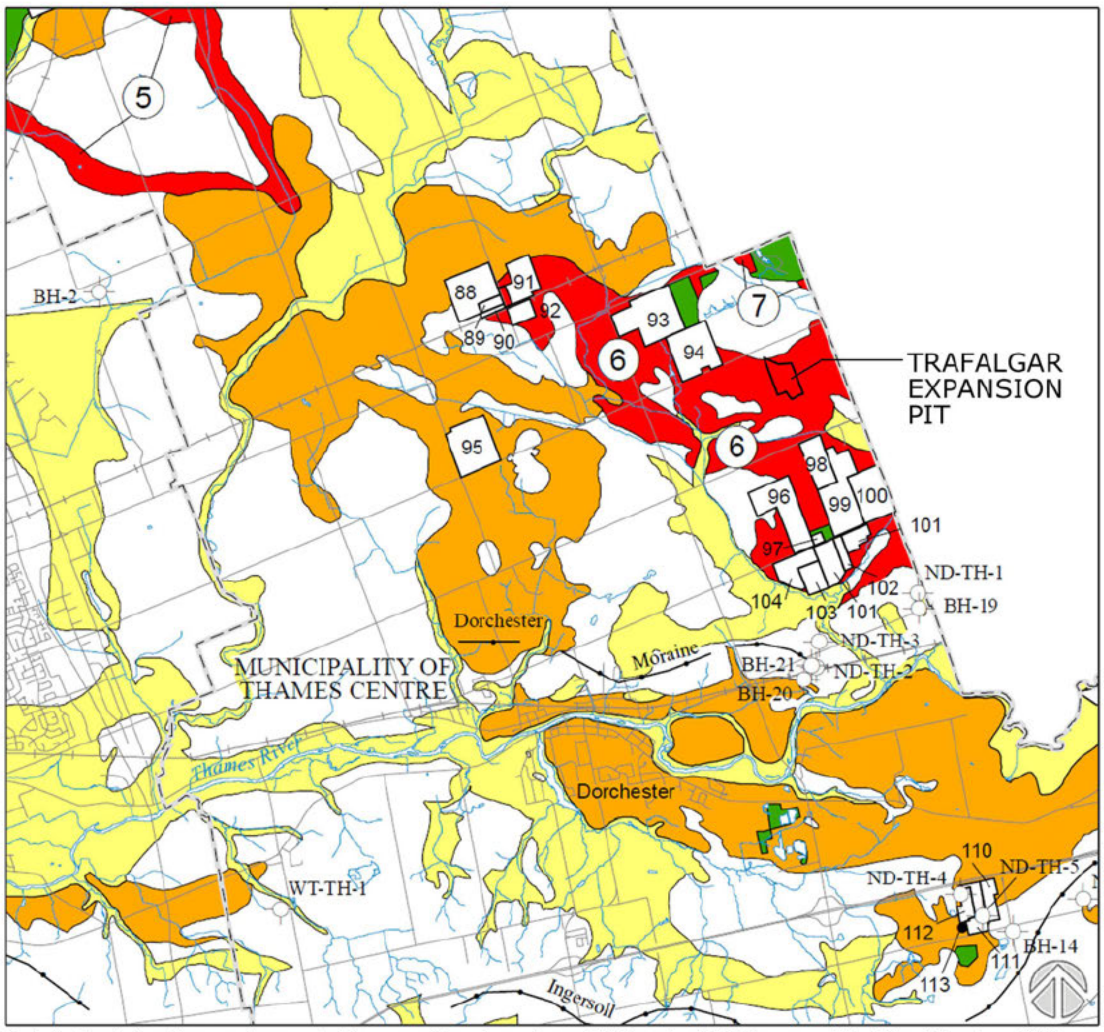
Petrographic Number values vary from 100.0 to 203.2 for Granular and 16 mm crushed and from 117.0 to 230.8 for HMA and concrete stone. Magnesium sulphate soundness test results range from 2.0 to 12.4% for coarse aggregate and from 8.8 to 17.4% for fine aggregate. Los Angeles abrasion values varied from 22.0 to 35.0%. Micro-Deval abrasion tests vary from 10.3 to 14.6% for coarse aggregate and from 9.9 to 15.2% for fine aggregate. Absorption values range from 0.750 to 2.300% and bulk relative density values range from 2.274 to 2.627. Petrographic Number values confirm quality problems with the material of the deposit. The stone quality of material from this deposit is generally too poor for use in HMA (coarse aggregate) and concrete (Coarse aggregate) products. The material will still meet the requirements for Granular A and related products and HMA and concrete (fine aggregate) products."

Based on the eight test pits dug in October 2024, it was determined that the deposit consisted mainly of fine to medium sand. There was no aggregate found in the northern part of the site. The applicant determined that the sand was suitable as bedding sand used in dairy barns. The grain size and consistency of sand with no stones and being disease free make this deposit ideal for use by dairy farms in the local area. The sand will meet their market demands. The location of the three boreholes and test pits completed on site are shown on the existing features plan.

The results of the geotechnical investigations completed by the applicant and drilling by Groundwater Science Corp. indicate that there is a sand deposit of varying thickness within the ridges on the site. Refer to borehole logs found in Groundwater Science Corp.

hydrogeology report for further information about the deposit. Based on the applicant wanting to rehabilitate the majority of the site to a pond, it was determined using the CAD civil program that there is about 787,624 m3 of resources which is the equivalent of 1.26 million tonnes using the industry standard conversion factor. The majority of the sand (>70%) is found above the water table. The aggregate is of good quality to make sand products, including bedding sand. The estimated lifespan of the pit is 10 years based on the estimated rate of extraction of the resources and production to supply their markets.

The hydrogeology of the site is documented in the report completed by Groundwater Science Corp. dated March 2026. The water table is interpreted to be located at elevations ranging between approximately 282.2 m AMSL in the southwest to about 283.4m AMSL in the northeastern part of the site. The proposed maximum depth of extraction will be 4.5 m below the water table in the southeast part of the site.



Ontario Geological Survey, Aggregate Resources Inventory, Paper 78, County of Middlesex and the City of London, 2016

Sand and Gravel Resource

LEGEND:

- 1 — Selected Sand and Gravel Resource Area, primary significance; deposit number (*see* Table 3)
- Sand and gravel deposits that have been substantially extracted in the past, but where limited resources may still be available
- Selected sand and gravel resource area, secondary significance
- Sand and gravel deposit, tertiary significance
- Other surficial deposits or exposed bedrock

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Figure **8**

1.5 Main Haul Routes and Proposed Truck Traffic To and From Site

The majority of the aggregate from the site is expected to be utilized in London and the surrounding area. Therefore, 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. 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. The traffic patterns should remain the same.

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 (see figure 9 - photo). 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.

Figure 9

There should be no significant increase in truck traffic volumes on the designated haul routes associated with this proposal. Truck traffic associated with this aggregate operation will be based on a combined annual maximum tonnage limit of 150,000 tonnes for the existing licence and the proposed licence. 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. "*Assuming approximately 200 working days per year, the daily average extraction would be a maximum of about 750 tonnes or about 25 truck loads. Over a ten hour working day, the average hourly movement would be 2.5 trucks out and 2.5 empty trucks in. For the purposes of this assessment, a trip generation of ten trucks in each of the peak hours, five in and five out, was assumed.*" Refer to the traffic impact assessment for the details of the analysis completed for the adjacent pit, licence no 626167.

1.6 Progressive and Final Rehabilitation

The rehabilitation of the site back to a pond and agricultural after use complies the Provincial Policy Statement (2024). The operation of farm machinery is currently difficult on some of the steep, sandy slopes. All existing 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. Berms/stockpiles may be constructed on the perimeter of the site for storage and/or visual screening and will be used for rehabilitation of the site.

Side slopes may be built using on-site overburden, imported clean soil or with off spec materials found on site required for this purpose to improve the final rehabilitation of the site. This will facilitate both maximum resource utilization as well as timely progressive rehabilitation of the property. Refer to notes on the site plan in Appendix E for details of the progressive and final rehabilitation and hydrogeology notes regarding maximum depth of extraction in the site.

The amount of area disturbed will be minimized to reduce any impacts on the surrounding lands. Importation of clean, excess soil will likely be required for this property because the on-site finer grained materials will be used for blending purposes. Topsoil may also be imported to enhance the final rehabilitation of the side slopes. The final rehabilitation will be compatible with the surrounding lands and land use and maintain the existing natural features on and adjacent to the site. The owner will cultivate the rehabilitated lands and plant the areas with a cover crop of grasses and legumes to get the soil productive and return the land to crops. Coniferous trees will be planted as shown on the site plans will remain after extraction and rehabilitation is completed.

Below water table extraction is proposed for the majority of the site to maximize resource extraction. On completion of the perimeter berms, on-site overburden stripped will be used to progressively backfill and rehabilitate parts of the site. This will minimize the amount of area disturbed at any given time. Importation of excess soil will be limited to 30,000 cubic metres soil required to complete the final rehabilitation of the south slopes as noted on the site plans.

Rehabilitation of a pond/wetland will include the following as noted on the site plans:

a) areas of open water as well as shallow and wide near-shore zones (wetlands);

b) the pit floor will be left irregular and the edges of the wetlands will be sculpted to lengthen the shoreline for enhancing biological diversity and productivity;

c) underwater habitat enhancement will employ logs, stumps and rock (see typical shoreline habitat details) and

d) the pond/wetland will be naturally seeded from the existing wetland species such as willow, red osier dogwood, arrowhead, rushes, sedges and grasses.

As noted in the hydrogeological assessment by Groundwater Science Corp., the site acts as a recharge area, with groundwater flow contributing to the local and regional systems. Excavation of the proposed pit will internalize all overland runoff and convert it into infiltration and groundwater recharge through the soils replaced during rehabilitation. Final surface drainage will be internal and directed to proposed pond.

The final rehabilitation to a pond, meadow and forested areas will be compatible with the surrounding natural features and land uses as shown on the site plans.

2.0 Technical Reports

2.1 Hydrogeological Assessment: Groundwater Science Corp. (Appendix A)

The following conclusion is presented in the report:

Based on the results of the impact assessment, and, proposed monitoring and mitigation plan, there are no potential for significant adverse effects to groundwater and surface water resources and their uses; and, there is no potential for significant impacts to local groundwater aquifers, natural environment features or water supply associated with the proposed Trafalgar Expansion pit.

In order to confirm water table elevations at the site, the following monitoring program is recommended:

1. *Water level measurements shall be obtained on a quarterly (seasonal) basis at MW4, MW5 and MW6, as accessible.*
2. *The monitoring results will be summarized annually by the Operator and made available to MNR upon request.*

2.2 Natural Environment Level Two: Terrastory (Appendix B)

The following summary is presented in the technical report:

In accordance with applicable standards for aggregate license applications pursuant to the Aggregate Resources Act, the preceeding Natural Environment Report provides a detailed characterization of the natural environment occurring within and adjacent to the proposed eastward extension of Trafalgar Pit. This NER has been prepared in support of aggregate licence application and Zoning By-law Amendment application submitted for consideration by the Ministry of Natural Resources and Municipality of Thames Centre, along with other agencies or bodies circulated for comment.

The site plan incorporates a 15 m setback from the Significant Woodland and 30 m setback from the Provincially Significant Wetland. These setbacks encompass all candidate/confirmed Significant Wildlife Habitat types as well as habitat for Endangered bats. 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 (eg. Timing restriction on vegetation removal) are further offered herein.

Overall, it has been determined that no negative impacts to the above-noted significant

natural features will occur provided that all technical recommendations offered in Section 6 are implemented in full. The ARA site plan that directs and constrains pit operations incorporates all technical recommendations made herein.

2.3 Archaeological Assessment Stage 2: Timmis Martelle (Appendix C)

The following is stated in the report, *"The Stage 1 assessment revealed that the project area held potential for the discovery of archaeological resources and a Stage 2 survey consisting of a combined test pit and pedestrian survey was recommended and carried out. No archaeological materials were identified and no further archaeological assessment is recommended.*

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the Ontario Heritage Act.

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c. 33 requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Public and Business Service Delivery and Procurement.

Ministry of Citizenship and Multiculturalism (MCM) entered the report into the Ontario Public Register of Archaeological Reports on August 15, 2025 and issued a letter of acceptance.

2.4 Noise Assessment: NA

A noise assessment report is not required as per the combined standards under the Aggregate Resources Act because there are no sensitive receivers located within 150 m of the proposed extraction and/or processing areas. Refer to Aggregate resources of Ontario standards: A compilation of the four standards adopted by Ontario Regulation 244/97 under the Aggregate Resources Act.

2.5 Agricultural Impact Assessment (AIA): Esher Planning (Appendix D)

The following conclusions are presented in the report:

"The purpose of the AIA is to characterize the agricultural features of the Study Area, identify potential impacts to those features, and recommend mitigation measures to eliminate, reduce or mitigate identified impacts. This AIA has described the land uses, agricultural investments, and activities, and components of the agri-food system within

the subject lands and broader Study Area.

The subject lands are located on lands which are considered to be prime agricultural lands. The proposed pit expansion will not have a direct impact on any farm operations, retire any agricultural infrastructure or other agricultural related facilities, or result in the loss of investment in land improvements, such as tile drainage installations.

The subject lands are currently in common field crop production and are leased by a single farmer who will continue to farm the lands until required for extraction purposes. No active livestock operations were identified in either the Primary study area (i.e. the subject lands) or within the Secondary Study area.

2.6 Site Plans: Harrington McAvan Ltd (Appendix E)

3.0 Conclusion

With the investigation and planning which has been prepared to support the extraction and rehabilitation of this site, we are confident that the site plans, as prepared, adequately address and mitigate any potential adverse impacts of the proposed operation on the surrounding land uses while maximizing the after use potential of the property.

HARRINGTON MCAVAN LTD

BJ/wp

Statement of Qualifications

Harrington McAven Ltd
Bernie Janssen, B.E.S.

Harrington McAvan Ltd (formerly Harrington and Hoyle Ltd.) is a firm of landscape architects practicing in Ontario for the past thirty five years. The firm has expertise in landscape architecture, earth sciences, and biology, with a focus on stream and wetland restoration and rehabilitation projects.

Harrington McAvan Ltd have been producing Site Plans for aggregate licenses for the past twenty-one years and in that time have prepared over 150 successful plans. The firm has consulted to the Ontario Ministry of Natural Resources on a variety of new legislative initiatives and was retained in 1990 to prepare the *Generic 'Class A' Site Plans* as examples of new standards required under the Aggregate Resources Act (ARA). The firm is an associate member of the Ontario Stone, Sand & Gravel Association (formerly Aggregate Producers Association of Ontario).

Mr. Bernie Janssen received his Bachelor of Environmental Studies degree from the University of Waterloo in 1983. He had over fourteen years experience working in MNR's aggregate program in the greater Toronto and London areas, dealing with plans, license applications, and reports before joining Harrington and Hoyle Ltd in 1997.

Mr. Janssen specializes in compliance assessments and reports under the ARA, operations planning, and aggregate resource assessment. He was granted approval in 1998 by the Ministry of Natural Resources to prepare site plans under the Aggregate Resources Act.