

AGGREGATE RESOURCES ACT  
SUMMARY STATEMENT

***GALIBIER MATERIALS INC.***  
***LEWIS PIT EXPANSION***

APPLICATION FOR A CLASS A, CATEGORY 3 LICENSE UNDER THE  
AGGREGATE RESOURCES ACT

WEST HALF LOT 15, CONCESSION 9  
TOWNSHIP OF SPRINGWATER  
SIMCOE COUNTY



*JANUARY 2022*

## Table of Contents

1.0	INTRODUCTION .....	3
2.0	SITE DESCRIPTION .....	4
	Figure 1 – Location Map.....	4
	Figure 2 – Aerial View.....	5
3.0	PLANNING AND LAND USE CONSIDERATIONS.....	6
	Figure 3 - Township of Springwater Official Plan, Schedule A-12, Snow Valley Settlement Area .....	7
4.0	AGRICULTURAL CLASSIFICATION .....	8
	Figure 4: Excerpt from Soils of Simcoe County, Map 3 (OMAFRA, 1962).....	9
5.0	QUALITY AND QUANTITY OF AGGREGATE ON SITE .....	10
	Figure 5: Excerpt from Aggregate Resource Inventory ARIP 188 (2013) .....	10
6.0	HAUL ROUTES AND TRUCK TRAFFIC .....	11
7.0	SOURCE WATER PROTECTION .....	11
8.0	PROGRESSIVE AND FINAL REHABILITATION .....	11
9.0	TECHNICAL REPORTS.....	11
	9.1 Maximum Predicted Water Table Report, MTE Consultants .....	12
	9.2 Natural Environment Report, Roots Environmental .....	13
	9.3 Archaeological Assessment (Stage 1 -3), Archaeological Assessments Ltd.....	13
	9.4 Noise Assessment Report, Valcoustics Canada Ltd. ....	14
9.0	CONCLUSION.....	14
	STATEMENT OF QUALIFICATIONS .....	16

## 1.0 INTRODUCTION

This report has been prepared in support of an application under the Aggregate Resources Act (ARA) for a Class "A" license, pit above water. This application would allow for the expansion of an existing licensed pit operation (Lewis Pit, ARA licence #3560). The Summary Statement has been prepared in accordance with the requirements set out in the "Aggregate Resources of Ontario: Technical Reports and Information Standards", dated August 2020, published by the Ministry of Natural Resources and Forestry.

Galibier Materials Inc. holds an existing Class A license for the Lewis Pit, with access onto George Johnston Road, with a licensed area of 20.16 hectares. The proposed expansion would add an additional 21.1 hectares to the Lewis Pit operation, with extraction proposed on 17.5 hectares. The pit expansion would utilize existing infrastructure including the entrance and haul route that is currently in place for the existing Lewis Pit.

A resource investigation on the expansion lands confirmed the presence of high-quality sand and gravel resources suitable for a wide range of aggregate products. The proposed expansion will allow Galibier Materials Inc. to continue to service the market in this area with a supply of high-quality sand and gravel for use in construction projects.

The proposed Lewis Pit Expansion is within the Planning jurisdiction of the Simcoe County Official Plan and Township of Springwater Official Plan and is governed by the Township of Springwater's Comprehensive Zoning By-law.

The following information and reports have been prepared in support of this application, in accordance with ARA Provincial Standards:

- Maximum Predicted Water Table Report, MTE Consultants.
- Natural Environment Report, Roots Environmental.
- Stage 1 & 2 and Stage 3 Archaeology Assessment Reports, Archaeological Assessments Ltd.
- Noise Impact Assessment Report, Valcoustics Canada Ltd.
- Aggregate Resources Act Site Plans, MTE Consultants

The operational notes on the license site plans under the Aggregate Resources Act, have incorporated conditions based on the specific technical recommendations in these reports, and are designed to ensure no negative impacts on the natural environment or surrounding community as a result of the proposed pit operation.

## 2.0 SITE DESCRIPTION

The area to be licensed is located in the West Part of Lot 15, Concession 9, in the Township of Springwater, Simcoe County. Seadon Road forms the southerly limit of the site, and the western property limit abuts George Johnston Road. The area to be licenced is 21.1 hectares with a proposed extraction area of 17.5 hectares.

The expansion area consists of predominantly forested lands. A detailed description of the woodlot can be found in the Natural Environment Report. Adjacent land uses include the existing Lewis Pit to the north (owned by Galibier Materials Inc.) as well as the Springwater Township gravel pit, agricultural uses to the south and west, and estate residential uses located to the east of the subject lands. A closed landfill site (Vespra Site Number 14) is located to the west across George Johnston Road.

**Figure 1 – Location Map**

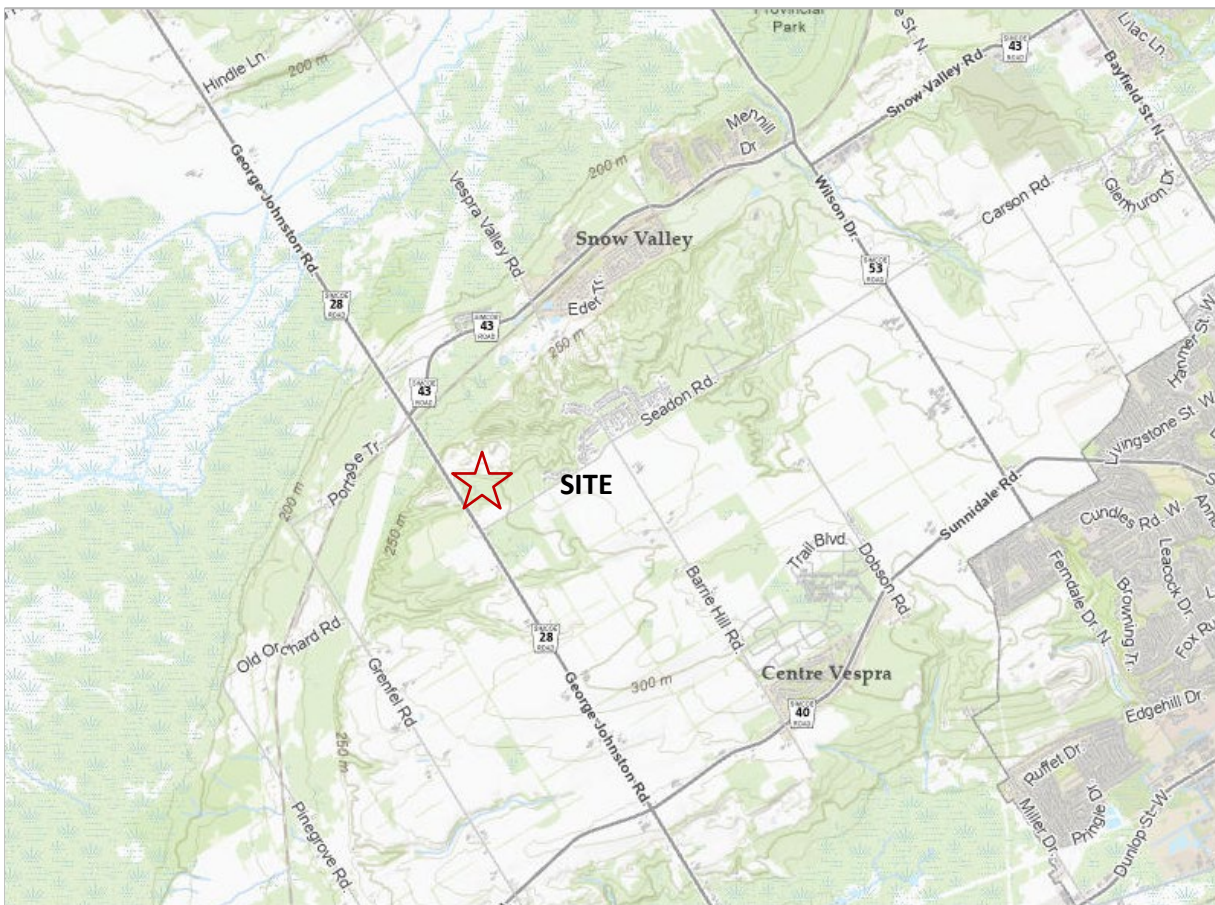




Figure 2 – Aerial View



As detailed on the Site Plans, aggregate extraction would progress from the existing Lewis pit to the south, in four phases as shown on the Operations Plan. Processing equipment would include a crusher, screening plant, conveyors and as wheel loaders and haul trucks and other equipment. Additional equipment, such as bulldozers and scrapers, may be used as part of site preparation and rehabilitation. The proposed license limit for the expansion is 750,000 tonnes. Tonnage would be combined with the existing Lewis Pit operation, which is currently approved for 750,000 tonnes, so that no increase in truck traffic and no change in the access or haul route is proposed.

### 3.0 PLANNING AND LAND USE CONSIDERATIONS

In addition to the Aggregate Resources Act (ARA) license application, Planning Act approvals (Official Plan and Zoning By-law Amendments) are required to permit the proposed use. These applications are being filed concurrently with the Township of Springwater.

The Planning Justification Report for the related Planning Act applications provides a comprehensive review and analysis of the proposal in the context of provincial and local planning documents and policy. This includes: the Provincial Policy Statement (PPS, 2020), the Growth Plan for the Greater Golden Horseshoe, 2019, the Simcoe County Official Plan, the Township of Springwater Official Plan as well as the Zoning-By Law for Springwater.

The property is located within the Snow Valley Settlement area. The existing Lewis Pit is zoned Mineral Extractive (ME-1) and the proposed expansion area is currently zoned Agricultural (A). The expansion lands are predominantly forested, and logging activities have occurred historically on the property. The close proximity of the aggregate to the growing communities in this area will continue to provide a supply of construction materials that may be utilized for future developments in the area.

#### **Approvals Required for the Proposed Lewis Pit Expansion**

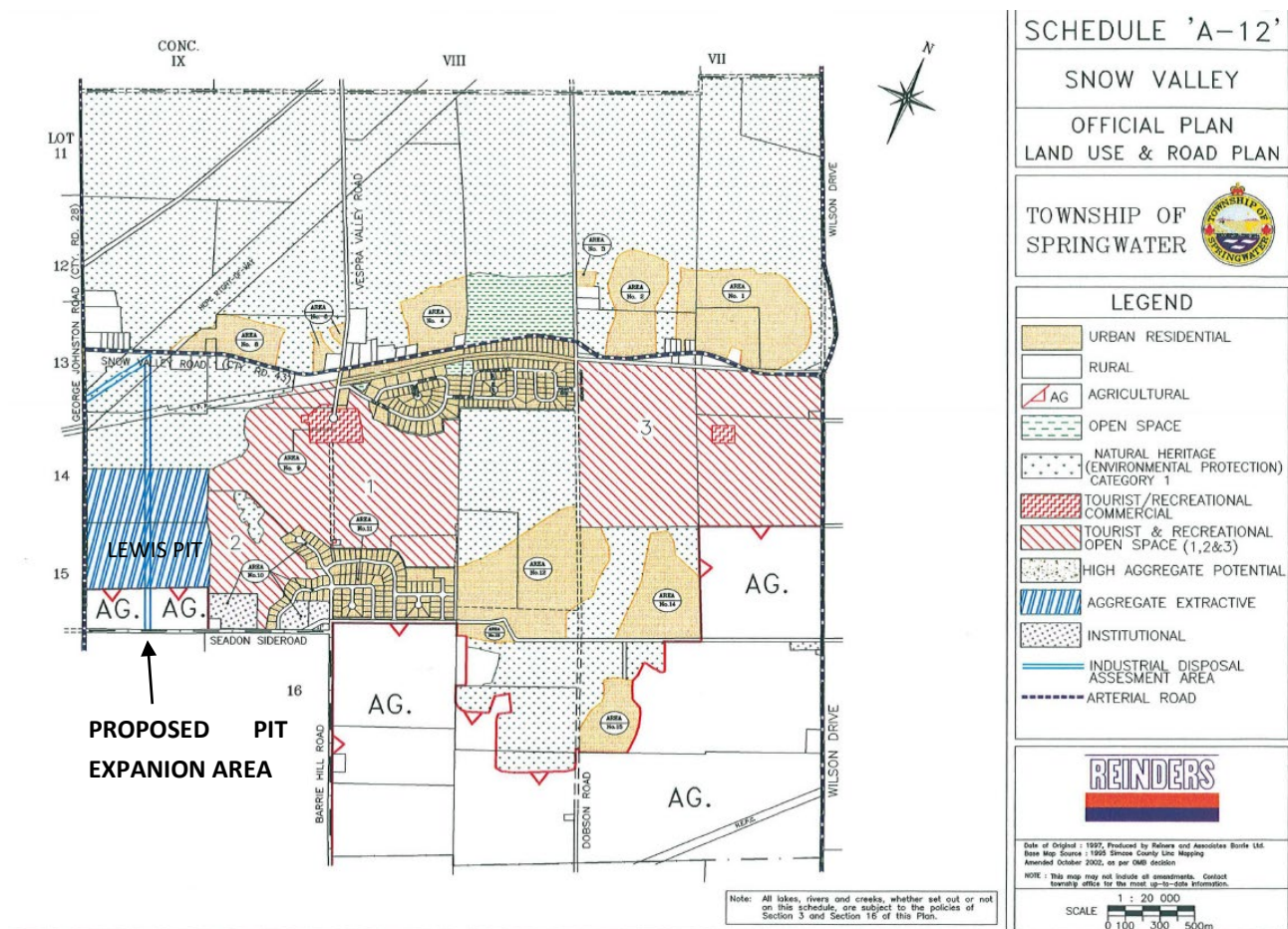
1. Township of Springwater Official Plan - An Official Plan Amendment (OPA) is required to re-designate the proposed area to be licensed of the lot from “Agricultural” to “Mineral Extractive”.
2. Township of Springwater Zoning By-law – A Zoning By-Law Amendment (ZBA) is required to rezone the area to be licensed from “A” (Agricultural) to “ME” (Extractive Industrial)
3. A Ministry of Northern Development, Natural Resources and Forestry Aggregate Resources Act Licence is required for a Class “A” Category 3 Pit above water to remove sand and gravel.

The applications to permit the expansion of the pit are supported by a series of technical studies which assess the impact of the proposed operation on neighbouring residents, the natural environment, and water resources. The Site Plans detail the manner in which operations will be carried out as described by the sequence of mining and progressive rehabilitation.

The operations and the rehabilitation of the pit have been designed to minimize impacts and propose that the lands will be returned to forested area through progressive rehabilitation. The Natural Environment Report has evaluated the impacts of the proposal on significant wetlands, woodlands, fish habitat, and habitat of endangered species and threatened species located on the site and on adjacent lands. The report identifies measures to ensure there are no negative impacts on these natural features or their functions.

The existing Lewis pit and the proposed expansion area is designated in the County Official Plan as a Settlement area.

**Figure 3 - Township of Springwater Official Plan, Schedule A-12, Snow Valley Settlement Area**



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.

The Planning Justification Report provides a detailed policy analysis and concludes that the proposed pit:

- Is designed through the implementation of technical recommendations to mitigate potential negative impacts on the natural environment or groundwater resources;
- Is designed to mitigate potential impacts from noise and dust of the proposed operations;
- Will be progressively rehabilitated to a forested use, compatible with the surrounding lands uses;
- Conforms with the policies of the County of Simcoe Official Plan and the Township of Springwater Official Plan;
- Represents wise management and use of resources;
- Is consistent with the Provincial Policy Statement, 2020.

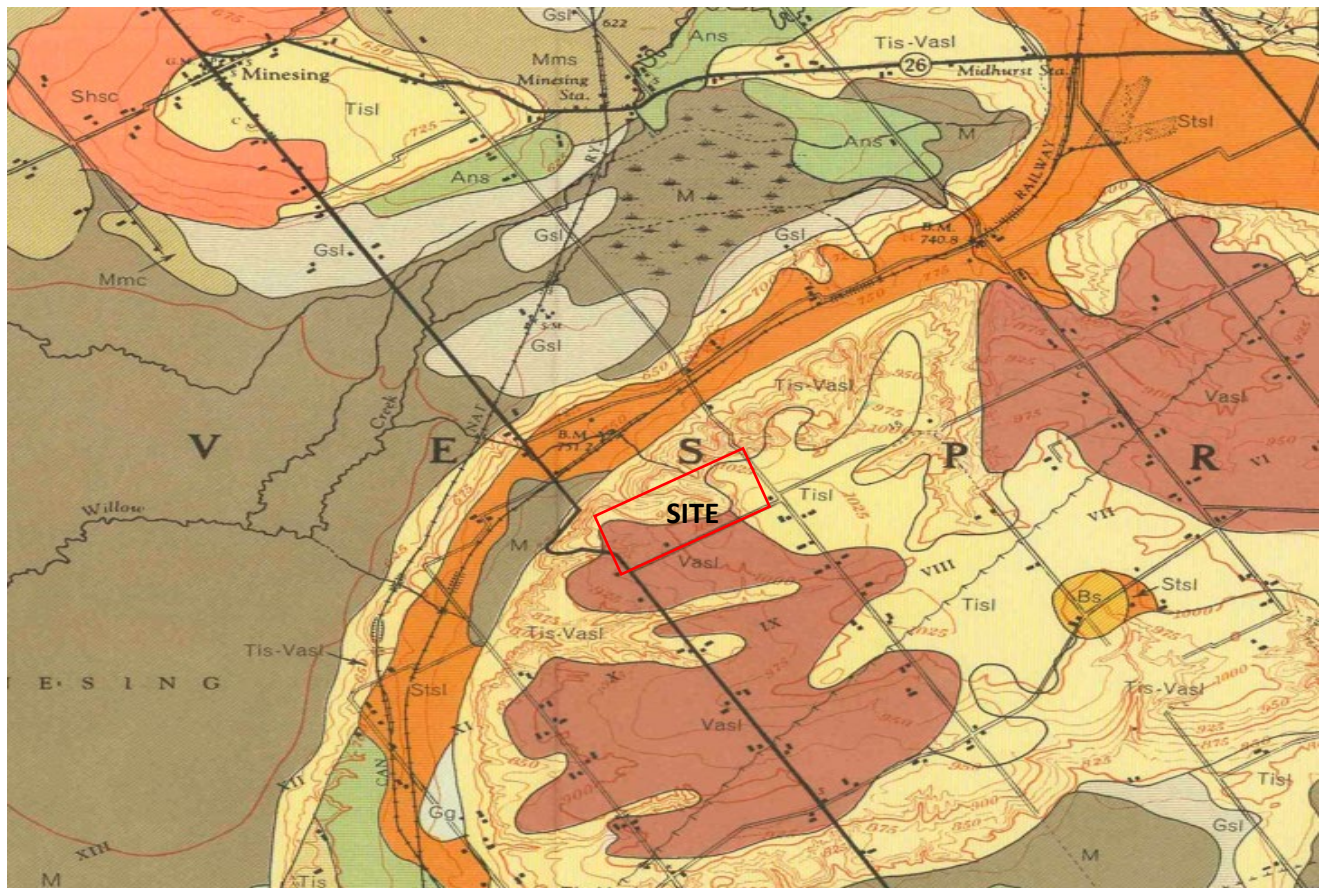
## 4.0 AGRICULTURAL CLASSIFICATION

The Soils of Simcoe County mapping (OMAFRA Soil Report #56, 1992) describes the soils on the subject property as Vasey Sandy loam (see Figure 5). The Vasey soils in the location of the proposed license are developed on a material which has been derived from limestone mixed with varying amounts of granite. The open porous nature of the soil and the rolling topography provide good drainage conditions.

Vasey sandy loam soils have a low natural fertility, are very susceptible to erosion, and tend to be droughty. With the use of adequate amounts of fertilizer and manure, and management practices which will reduce the loss of soil by erosion, parts of the complex can be made to produce good crops. Reforestation has been carried out mainly on the steeper slopes and where wind erosion has been severe. In parts of Simcoe County, these soils support mixed farming with cereal grains, hay and pasture being principal crops grown in the farmed areas.



Figure 4: Excerpt from Soils of Simcoe County, Map 3 (OMAFRA, 1962)



Canada Land Inventory (CLI) mapping from the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) shows the area to be licensed is primarily class 2 agricultural land. The northeast portion of the site and the existing license area are class 7 soils. The majority of the proposed expansion area is currently forested.

Section 2.5.4 of the Provincial Policy Statement (2020) deals with mineral aggregate resources extraction in prime agricultural areas. The PPS definition of “prime agricultural land” includes specialty crop areas and/or Canada Land Inventory Class 1, 2, and 3 lands. The PPS policies allow for extraction of mineral aggregate resources as an interim use, subject to meeting the other policy requirements.

The extracted lands will be progressively rehabilitated using the soil resources on site to restore the area to a forested after use. The area to be restored to the capability of a CLI Class 2 soil will be maximized. This proposal is consistent with the Provincial requirements for mineral extraction in prime agricultural areas as directed by the PPS. It also conforms to the County and the Township planning policies regarding aggregate extraction in agricultural areas.

## 5.0 QUALITY AND QUANTITY OF AGGREGATE ON SITE

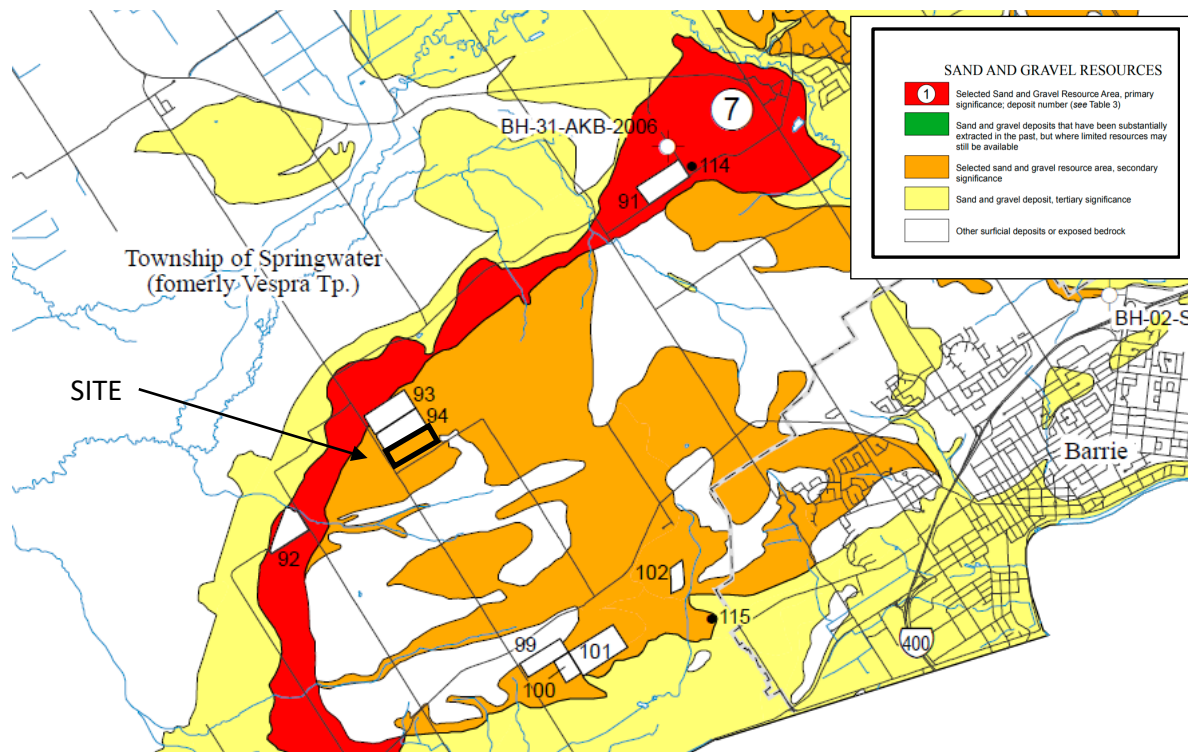
### Geological Information from Published Reports

#### Aggregate Resources Inventory of the County of Simcoe– ARIP 188, 2013

According to the 2013 ARIP report, the majority of the property is within “Selected Sand and Gravel Resource Area 7”. This deposit consists of glaciolacustrine beach deposits. Numerous pits have been developed in this deposit and according to the ARIP report there are currently 8 licensed properties found within the resource area. Pit faces range from 3 to 9 metres and generally expose irregularly stratified, medium gravel with interstratified fine to coarse sand (Hewitt and Cowan 1969). Aggregate material from this deposit has been used for the production of Granular A, Granular B, SSM and HL4 (coarse aggregate) products.

The applicant conducted a resource investigation on the expansion lands which confirmed approximately 15 Million tonnes of commercially viable material on the property.

**Figure 5: Excerpt from Aggregate Resource Inventory ARIP 188 (2013)**



## 6.0 HAUL ROUTES AND TRUCK TRAFFIC

The proposed pit expansion would utilize the existing Lewis Pit entrance/exit onto George Johnston Road. The Pit license proposes an annual maximum material extraction of 750,000 tonnes. This is consistent with the existing Lewis Pit operation. The proposed pit expansion will not result in any increase to truck traffic volumes and there will be no change in the haul routes currently in use for the Lewis Pit.

## 7.0 SOURCE WATER PROTECTION

The proposed expansion is within the South Georgian Bay Lake Simcoe source protection region and is part of the Nottawasaga Valley source protection area. The property is not within a Wellhead Protection Area and there are no proposed activities associated with the expansion that would present a threat to drinking water, as set out in the Source Protection Plan for this area.

## 8.0 PROGRESSIVE AND FINAL REHABILITATION

The proposed pit will be rehabilitated primarily to forested area which will restore the site to its previous use and which will be compatible with the surrounding land uses in the area. Rehabilitation will occur progressively as extraction moves through the site phases. Two areas of rehabilitation will be completed in the extraction area- Reforestation and Field Meadow/Low Density Re-forestation. A wildlife corridor of existing vegetation will be maintained during the first three phases, after which, rehabilitation will occur in Phases 1, 2 and 3 to maintain the corridor during extraction of Phase 4.

The 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. However, acoustic berms required to attenuate noise will remain in place for each phase before being removed and used for rehabilitation of the site. After side slopes are created and required berms are removed from setbacks adjacent to Seadon Road, these areas will be stabilized with a suitable groundcover.

The ARA Site Plans (Rehabilitation Plan) include additional details regarding progressive and final rehabilitation. The final rehabilitation will be compatible with the surrounding lands and land uses and enhance the existing natural features within and surrounding the site.

## 9.0 TECHNICAL REPORTS

Technical reports were completed in accordance with the requirements set out in the Provincial Standards ARA license applications. A brief description of these reports is provided in the following section. The technical recommendations outlined in these reports have been incorporated as conditions and can be found on the Site Plans.

### **9.1 Maximum Predicted Water Table Report, MTE Consultants**

A Hydrogeological Investigation was carried out by MTE with field work and data collection starting in 2019. Four monitoring wells and one test well were installed on the site and these are shown on the Site Plans. In addition to the monitoring wells drilled on-Site, two monitoring wells installed on the existing Lewis Pit were included in the monitoring network used to determine the maximum predicted water table elevation.

The observations pertaining to groundwater conditions at the borehole locations and stabilized groundwater levels in the monitoring wells are recorded in the borehole logs found in the MTE report. In addition, MTE installed three mini-piezometers within the Minesing Wetland Complex located north of the site to measure groundwater elevations in the wetland.

Based on the review of MECP Well Records, MTE identified 14 well records within the study area, which included 8 water supply wells (7 domestic, 1 livestock, 2 observation wells, 3 abandoned wells and 1 test hole). One additional well, not previously mapped by MECP, was identified through a private well survey completed by MTE.

As per the ARA reporting standards, the maximum predicted water table was determined by monitoring groundwater levels for a minimum of one year to account for seasonal variations and influences due to precipitation. The MTE groundwater investigation indicates that the estimated maximum groundwater elevation on-Site ranges from approximately 256 mAMSL in the southeast corner to 251 mAMSL in the northwest corner.

The report recommends that monitoring at the Site should consist of collecting water levels on a seasonal basis, in the spring, summer, and fall, at the on-Site monitoring wells. The results of the groundwater monitoring will be kept on site by Galibier Materials Inc.

There are no surface water features on the site. There is no proposed water diversion, storage or drainage features proposed on the site and no discharge to surface waters. Post rehabilitation, the final grading will direct surface drainage to the southwest portion of the site with no discharge off the property.



## **9.2 Natural Environment Report, Roots Environmental**

Field investigations and data collection included in this submission were initially carried out in 2013 with additional surveys completed between May and September 2020. Field work included surveys of breeding birds, vascular plants, natural feature mapping and incidental observations. Additional surveys for species at risk, including Whip-poor-will and bats were also undertaken in 2013 and 2020. After collecting the background biophysical information and completing the site assessments the data was interpreted to identify any significant natural features and/or significant species on the property or adjacent lands (within 120 metres of the property boundary) and evaluate potential impacts on natural heritage features.

Roots Environmental identified the following natural heritage features on the site and adjacent lands: significant woodlands; candidate significant wildlife habitat; and habitat of endangered and threatened species.

Technical recommendations included a restriction on clearing of vegetation on the site between April 5<sup>th</sup>-August 27<sup>th</sup> (referencing Environment Canada Guidelines for migratory birds) as well as a further restriction between April 1<sup>st</sup> and October 31<sup>st</sup> to avoid potential impacts to bats. Prior to extraction in each of the 4 phases of the pit operation, butternut surveys will be completed to identify and assess tree health and register activities if required in accordance with MECP protocols for butternut.

The report concludes that with the implementation of the recommended mitigation measures, there will be no negative impact to significant natural features from the proposed pit operation.

## **9.3 Archaeological Assessment (Stage 1 -3), Archaeological Assessments Ltd.**

Archaeological Assessments completed a Stage 1 and 2 archaeological assessment of the property in accordance with the Ministry of Heritage, Sport, Tourism, and Culture Industries' (MHSTCI) 2011 Standards and Guidelines. This assessment identified two archaeological sites which were registered as the Lewis I (BcGw-91) and the Lewis II (BcGw-92) sites. Both sites represent aboriginal campsites dating to the Middle to Late Iroquoian period (ca. A.D. 1250-1650). Both sites have cultural heritage value and a Stage 3 assessment, as required under MHSTCI guidelines, was completed in 2013.

The results of the Stage 3 assessment indicate that both sites likely represent the location of a temporary campsite which was probably used for hunting and/or gathering, or for the tending of

agricultural fields for a brief period of time. As per the MHSTCI's Standards and Guidelines for Consultant Archaeologists (2011: 33), all sites which date to the Late Woodland period are considered to have cultural heritage value and require Stage 4 mitigation if they cannot be avoided and protected from any proposed development project. The two sites must be subjected to Stage 4 mitigation before any development activities take place on this property.

Details of the archaeological investigations, including methodology and mapping, can be found the Stage 1 & 2 and the Stage 3 reports which are included with the ARA application package for the proposed Lewis pit expansion.

#### **9.4 Noise Assessment Report, Valcoustics Canada Ltd.**

Valcoustics completed an analysis of the potential impact of noise from the proposed gravel pit at neighbouring noise sensitive receptors (residential dwellings) in accordance with the Ministry of the Environment, Conservation and Park (MECP) Guidelines. To be conservative, the MECP exclusion limits for a Class 2 Area have been applied for activities in the pit. These are the most stringent applications of the noise guideline limits. The noise impact assessment looked at the overall sound levels from the proposed expansion and took into consideration the sound levels from the existing operation (such as shipping truck movements).

Noise control measures were recommended to ensure that the sound levels from the pit will comply with provincial limits. These measures include sound barriers (berms) along the east, west and south portions of the expansion area together with specific limits on operating equipment. All of the technical recommendations have been incorporated in the site and operating plans.

The Valcoustics report concluded that, with the implementation of the recommended noise control measures, the proposed expansion to the aggregate operation will comply with the Ministry noise guideline limits.

## **9.0 CONCLUSION**

With the investigation and planning undertaken 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 Lewis pit expansion on the surrounding land uses while maximizing the utilization of the aggregate resources and the after-use potential of the property.

In summary, the proposed area to be extracted contains a high-quality aggregate deposit that will provide a supply of construction materials to support growth and development in this area. The application includes a thorough review and assessment of potential impacts on natural heritage features, water resources, cultural heritage resources and adjacent land uses, and mitigation measures have been incorporated into the Site Plans as recommended in the technical reports prepared for this application. The proposed rehabilitation will progressively return the site to a forested area as extraction is completed.

The proposed Lewis pit expansion is consistent with provincial and local policy requirements and represents wise use and management of resources.

A handwritten signature in black ink, appearing to read 'MH', with a stylized, cursive flourish extending to the right.

Melanie Horton, MCIP, RPP

Esher Planning Inc.

January 29, 2022

## STATEMENT OF QUALIFICATIONS

Esher Planning Inc.

Melanie Horton, MCIP, RPP

Esher Planning Inc. has expertise in land use planning and resource management with extensive experience in aggregate resource planning. The firm is an associate member of the Ontario Stone, Sand & Gravel Association (OSSGA).

Ms. Melanie Horton is a Registered Professional Planner and is a member in good standing of the Ontario Professional Planners Institute and the Canadian Institute of Planners. She is past chair of the Natural Resource Working Group for the Ontario Professional Planners Institute (OPPI) and has represented Ontario Planners on a variety of Natural Resource Policy initiatives. Melanie has over 25 years of experience in Aggregate Resource Management and Planning, working in both the public and private sector. She has been coordinating applications for over twenty-five years for pits and quarries across the province.

Ms. Horton has served on numerous provincial advisory committees including the State of the Aggregate Resources Report, and the Aggregate Strategy Working Group.