



PLANNING ADDENDUM REPORT

PREPARED FOR:

Highland Line Pit
Thomas Cavanagh Construction Limited
Part of Lot 5, Concession 10, Dalhousie
Township, Township of Lanark Highlands,
Lanark County

File no. 0851E

January 2025

Your Vision

Designed | Planned | Realized

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1.0 Introduction

Thomas Cavanagh Construction Ltd. ("Cavanagh") is in the application process for a 'Class A' Licence to operate a pit below water under the Aggregate Resource Act ("ARA") for the lands legally described as Part of Lot 5, Concession 10, Geographic Township of Dalhousie, in the Township of Lanark Highlands (**Figure 1**). To permit the proposed Highland Line Pit, the following planning applications were submitted in January 2023 in conjunction with the ARA Class A application:

1. An Official Plan Amendment to the County of Lanark Sustainable Communities Official Plan to redesignate the subject lands from 'Rural' to 'Licenced Aggregate Extraction Operation';
2. An Official Plan Amendment to the Township of Lanark Highlands Official Plan to change the designation of the subject lands from 'Rural Communities' to 'Mineral Aggregate Resource Policy Area – Pit'; and,
3. A Zoning By-Law Amendment application proposing that the subject lands be rezoned as Mineral Aggregate Resources Pit (MXP) Zone from the current Rural (RU) and Mineral Aggregate Reserve (MAR-h) zones.

To provide an update on the application process of the Highland Line Pit and to address the comments received from the Township of Lanark Highlands in their Planning Report, dated March 14th, 2023, a Planning Addendum Report has been prepared which serves as an addendum to the Planning Justification Report, prepared MHBC, in December 2022.

The submitted Highland Line Pit ARA and Planning Act applications originally proposed to licence an area of approximately 50.6 hectares (125.0 acres) with an extraction area of 35.1 hectares (86.7 acres). Through consultation with the public, technical review agencies and Indigenous Communities, Cavanagh has reduced the licensed area of the pit to 37.6 hectares (92.9 acres). In conjunction with this change, the proposed extraction area will be reduced to 28.4 hectares (70.2 acres). This results in a decrease of the licensed area and extraction area of approximately 26% and 19%, respectively.

Both the ARA Application and the Planning Act applications were deemed complete and are currently undergoing the review process. Cavanagh has completed the required 60-day consultation period under the ARA, which included hosting an open house, notifying landowners within 120 metres of the site and publishing the notice in a local newspaper and on-site notice sign. Cavanagh has a project website which includes the application materials and updates on the application process. As required by the ARA, Cavanagh is attempting to address comments received through the review process.

In addition to the reduction of the proposed licence and extraction areas, Cavanagh has committed to make the following changes to the Highland Line Pit application:

1. Reduce the proposed maximum annual tonnage limit from 1,000,000 tonnes to 500,000 tonnes.

2. Reduce the maximum hourly number of trucks leaving the pit from a maximum of 30 to 15 trucks per hour.
3. Remove aggregate recycling activities from the proposed pit operation including asphalt and concrete recycling and storage.
4. Reduction of the proposed hours of operation for the pit to remove overnight operations (from 24 hours to 6 am to 9 pm).

2.0 Policy Review

This section presents an update to the assessment of the proposed Highland Line Pit relative to the policies and provisions of the Township of Lanark Highlands Official Plan.

The Township of Lanark Highlands Official Plan (“Township Official Plan”) was approved by the Ministry of Municipal Affairs and Housing on December 17, 2012, and the Ontario Municipal Board on August 4, 2016. The Township Official Plan was updated through Official Plan Amendments #1 and #2 and updated by Official Plan Amendment #8, as modified and approved by Lanark County on June 26, 2024. It should be noted that the Highland Line Pit application was submitted and deemed complete prior to OPA #8 being approved.

2.1 Township of Lanark Highlands Official Plan

The Township Official Plan is a planning document designed to manage future growth, development, and change in Lanark Highlands for the next 20 years.

The Township Official Plan designates the subject lands as ‘Rural Communities’ on Schedule A (**Figure 2**)¹. The majority of the surrounding lands are also designated Rural Communities. The closest Village & Hamlet Communities designation is over 1 km north of the subject lands (McDonald’s Corners). The subject and surrounding lands do not contain any areas designated Provincially Significant Wetlands on Schedule A. There are several designated pits located along Highland Line including the Tackaberry Pit east of Leo Jay Lane and the Arnott Brothers McKinnon Pit located north of Highland Line (**Figure 3**).

Over two-thirds of the subject lands are identified as ‘Sand and Gravel Reserves’ on the development constraints mapping on Schedule B of the Township Official Plan (**Figure 4**). The subject lands are not located within any areas identified as Organic Soils, Flood Plains or Area of Natural & Scientific Interest (ANSI) on Schedule B.

The Aggregate Resources Inventory Paper #189 identifies the majority of the subject lands within a sand and gravel deposit (**Figure 5**). The subject lands are located within Selected Sand & Gravel Resource Area #3 of primary significance while the eastern portion of the subject lands are identified within an area of tertiary significance.

The northeastern corner of the subject lands is identified as ‘Wetlands’ in Schedule C, Natural Heritage Features of the Township Official Plan (**Figure 6**). There is also a Watercourse which contains a Natural Corridor and Linkages on the eastern half of the subject lands. The Official Plan states that these linkages and corridors mostly follow watercourses and wetlands and are intended to function as connections between significant features.

¹ The term ‘subject lands’ as used in this report and identified on the enclosed maps refers to the lands proposed to be licensed for the pit as modified through the application process.

The identified wetland on the subject lands is located outside of the proposed extraction area with a 30m setback.

According to Section 5.2.2.3, the Township recognizes that the exact boundaries of certain elements of the Natural Heritage System are mapped using digital data which have not been ground checked. Schedule C provides a general sense of where the feature may be located. As confirmed through the Natural Environment Report ("NER") and Water Report, there is no watercourse on the subject lands. This feature is an intermittent watercourse which originates within the wetland adjacent to Barbers Lake. Extraction will be setback at least 30 m from this wetland which ensures that extraction is greater than 30 m from the intermittent watercourse.

The subject lands do not contain any of the following features identified on Schedule C of the Township Official Plan:

- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Life Science
- Provincially Significant Wetlands
- Green Gems
- Community Forests
- Significant Woodlands

Section 2.5 of the Township Official Plan identifies several guiding objectives of the Plan within the context of implementing the Provincial Policy Statement and Lanark County Sustainable Communities Official Plan. Relevant to the proposed application is the following objective:

"To protect the natural resources and natural heritage features of the Township, such as wetlands, ground and surface water quality, forestry resources, aggregate resources, sensitive waterfront areas, and other identified environmental features which have contributed to the natural character of the Township" (Section 2.5.1).

Section 3.1 - Waterfront Communities

Section 3.1 of the Township Official Plan outlines the policy framework for Waterfront Communities which encourages continued sustainable waterfront development in a manner which protects the environment and property rights of landowners.

The Waterfront Communities is defined as *"those lands generally extending inland 150 metres from any lake or watercourse as shown on Schedule A, except that:*

- 1. lands which ecologically, physically, visually or functionally relate to the water body, although extending beyond 150.0 metres from the waterbody shall be deemed to be within the Waterfront Communities;*

2. *lands which do not ecologically, physically or functionally relate to the water body, although within 150.0 metres of the waterbody shall be deemed not to be within the Waterfront Communities; and,*
3. *lands within the Village and Hamlet Communities designation on Schedule A to this Plan shall be deemed not to be in the Waterfront Communities”(Section 3.1.1.1).*

According to Schedule A (**Figure 3**), a watercourse is identified on the eastern portion of the subject lands and Barbers Lake is located within 150 m of the subject lands. While the extent of the Waterfront Communities is not shown graphically on Schedule A, the related policies would apply to a portion of the subject lands within 150 m of Barbers Lake and the watercourse as field-verified by WSP and Cambium.

The watercourse as identified on Schedule A is based on mapping from Land Information Ontario (LIO). As is the case with other features identified in LIO, they are generally not ‘ground-truthed’ and are based on air photo interpretation. This is acknowledged in Section 5.2.2.3 of the Township Official Plan. As confirmed through the Natural Environment Report and Water Report, there is no watercourse on the subject lands. This feature is an intermittent watercourse which originates within the wetland adjacent to Barbers Lake. Extraction will be setback at least 30 m from this wetland which ensures extraction is greater than 30 m from the intermittent watercourse. However, the Waterfront Communities policies would still apply to the proposed application since the subject lands (reduced licensed area) are within 150 m of Barbers Lake and the intermittent watercourse.

The separation distance from Long Sault Creek to the proposed pit has been increased from 200 m to approximately 300 m which is beyond the 150 m distance cited in the Waterfront Communities policies.

As recommended in the NER, the proposed extraction area and licence limit will follow a 30 metre setback from the wetland associated with Barbers Lake to ensure these features and their ecological functions are protected.

As noted in the NER submitted in support of the applications, the proposed extraction limit is separated from the waterfront along Barber Lake and the identified watercourse by a wetland consisting of cattail marsh (ELC code MAS3-1), coniferous swamp (ELC code SWC3-1) and a 30 m setback from the wetland limits comprised of fallow agricultural field (ELC code CUM1A), logged/regenerating mixed forest (ELC code FOM2-2) and deciduous thicket (ELC code CUT1). Given the varied and largely anthropogenically influenced vegetation communities within the setback and proposed extraction area, and the distance between these communities and Barbers Lake and the intermittent watercourse, there are no evident ecological or physical connections between proposed extraction area and waterfront that would be affected by the proposed pit.

As noted in the Level 1 and Level 2 Water Report (WSP Golder, 2022), no adverse effects to groundwater and surface water resources, or their uses, are anticipated as a result of the proposed pit. As aggregate extraction below the groundwater table will occur without dewatering, there will be no significant lowering of the groundwater table and thus no potential for the proposed extraction activities to cause drawdown of the groundwater table that would interfere with local water supply wells as determined in the Water Report.

The water balance assessment within the Water Report determined that there will be a decrease in water surplus (i.e., surface water runoff) from the site under operational conditions. Rehabilitated conditions are expected to have a similar decrease in surplus compared to existing conditions. Runoff volumes to Barbers Lake and the wetland are expected to decline, however base flow to Barbers Lake is expected to increase slightly as a result of increased infiltration at the pit. The change from site runoff to infiltration is expected to decrease peak flow from the site and slightly increase a steadier base flow. Overall, the surface water impacts associated with the proposed Highland Line Pit are anticipated to be marginal. As such, no adverse effects to groundwater and surface water resources are anticipated as a result of the proposed pit.

A monitoring program has been proposed to measure and evaluate the actual effects on groundwater levels associated with long term pit operations and to allow a comparison between the actual effects measured with those predicted. The monitoring program has been further expanded to include surface water levels, water temperature, and water quality parameters in the area between the proposed extraction area and Barbers Lake.

Infiltration and surface water runoff functional connections between the proposed extraction area and the waterfront are not anticipated to be affected by the proposed pit.

As such, policy 3.1.1.2 requires that *"in considering the precise location of where the Waterfront Communities policies apply, the following matters shall be considered:*

- 1. the extent to which the lands or the existing or proposed use of the lands are associated with or impact upon the waterfront;*
- 2. the existence of topographic features or other terrain constraints which would limit or orient the proposed use of the land toward or away from the waterbody; and,*
- 3. the presence of man-made features which would orient the proposed use of the land toward or away from the waterbody."*

Based on the analysis above and the completed technical studies, the proposed pit will have no adverse impact on the waterfront and therefore are not associated with the waterfront as it does not ecologically, functionally or physically relate to the waterfront. The analysis was conducted based on the findings of the technical reports that assessed the subject lands surrounding natural environment and the impacts on the surface water and groundwater, as well as the changes made to the proposed extraction limit of the pit.

There are no topographic features or terrain constraints which would orient the proposed use toward the waterbody (Barbers Lake). The existing wetland and natural features located between the waterbody and subject lands provide sufficient separation of a minimum of approximately 100 m from the proposed extraction area and Barbers Lake. Furthermore, there will be no site alteration such as berms or earthworks within this setback area, and this area will remain naturalized.

The Township Official Plan outlines objectives for developments in the 'Waterfront Communities' from Section 3.1. An analysis of these objectives is described below in Table 1.

Table 1 - Policy analysis of the Waterfront Communities Objectives, Section 3.1.2 of the Township Official Plan.

Objective	Response
<p>1. To protect the visual qualities of the lakes and rivers and to protect or enhance the natural shoreline character.</p>	<p>Impacts to the visual qualities of the waterfront including Barbers Lake and the intermittent watercourse will be mitigated as a result of separation distance, existing ground elevations and by maintaining the wetland and a 30 m buffer. Extraction is proposed to occur at a lowest elevation nearest the lake at approximately 186 masl as compared to the surface elevation of the lake which is at approximately 182 masl. Extraction will commence in Extraction Area 1 closest to Highland Line. This means that a working face will shield aggregate operations from Barbers Lake as extraction proceeds in a southerly direction.</p>
<p>2. To protect wetlands, wildlife habitat areas and fish habitat from incompatible development.</p>	<p>The Natural Environment Report and updated ARA Site Plan ensure that wetlands and wildlife habitat are protected. The Department of Fisheries and Oceans (DFO) has reviewed the proposal and, with implementation of their recommendations, is of the opinion that it will not require authorization under the Fisheries Act (e.g. it is not anticipated to cause harm to fish or fish habitat).</p> <p>The Ministry of the Environment, Conservation and Parks (MECP) has provided confirmation that the proposed pit will not require an Endangered Species Act (ESA) authorization as the mitigation measures are confirmed to be sufficient.</p>
<p>3. To maintain or improve the ecological, scenic or recreational character of the Township’s lakes and rivers and those lands that are visually connected to the shoreline.</p>	<p>A Level 1 and 2 Water Report and Maximum Predicted Water Table Report were completed by WSP (formerly WSP Golder) which determined that no adverse effects to groundwater and surface water resources and their uses are anticipated as a result of the proposed Highland Line Pit. Further, a Natural Environment Report was conducted by Cambium (formerly WSP Golder) to evaluate the potential impacts of the proposed operation on natural features within the Site (the original area proposed to be licenced)</p>
<p>4. To ensure that shoreline development does not have an adverse impact on the quality of lake water and, wherever possible, to rehabilitate and naturalize shoreline areas that are currently developed.</p>	

	<p>and Study Area (the Site and surrounding 120 m, plus Barbers Lake) and to provide recommendations to ensure any potential negative impacts are mitigated. These recommendations are contained on the ARA Site Plans for the operation and progressive rehabilitation of the proposed pit.</p> <p>As well, it is important to note that aggregate extraction is an interim land use; the site will be progressively rehabilitated as a lake with littoral zones that will enhance the future ecological and scenic character of the lake and shoreline areas, as well as provide naturalized wildlife habitat areas, in line with the objectives for Waterfront Communities.</p>
<p>5. To encourage an increased awareness of the sensitivity of the environment and environmental stewardship of lands in the Waterfront Communities.</p>	<p>The changes made to the pit application and additional technical study show an increased awareness of the sensitivity of the environment and environmental stewardship of lands in the Waterfront Communities.</p>
<p>6. To ensure that development, redevelopment and the increasing use of shoreline properties does not result in additional environmental impacts or increase municipal servicing costs.</p>	<p>The Natural Environment Report includes recommendations to ensure that potential negative impacts to the environment are mitigated. These recommendations have been included on the ARA Site Plans to ensure compliance during the operation of the proposed pit. Furthermore, additional conditions and changes have been made to the ARA Site Plan to mitigate and reduce potential environmental impacts. The proposed aggregate operation does not require municipal servicing.</p>
<p>7. To promote the maintenance and enhancement of native vegetation buffer areas in all shoreline areas of the Township.</p>	<p>The separation distance between the proposed pit and Barbers Lake is approximately 100m at its closest point. Native vegetation will be retained along shoreline areas and the intervening wetland will be protected with a 30 m setback. There will be no site alteration or development within this native vegetation buffer area.</p>
<p>8. To promote the use of septic systems and tile beds that utilize phosphorous retaining soils.</p>	<p>No septic system is proposed as a part of this application.</p>

9. To encourage and support the development of lake management plans that identify and protect the unique social, cultural and ecological values of different lakes in the Township.	N/A
10. To protect areas of archaeological potential.	Areas of archaeological potential have been conserved as a result of the preparation of Archaeological Assessments and corresponding clearance letters from Ministry of Citizenship and Culture. Areas that were not fully cleared archaeologically have been removed from the proposed licensed area of the pit.
11. To preserve the dark sky through sensitive lighting design and installation.	<p>There is limited lighting required for an aggregate operation which typically takes place during daytime hours. Any lighting required for the pit will be minimal and adhere to dark sky principles.</p> <p>As a result of public comments, Cavanagh is adjusting the proposed hours of operation to remove overnight operations (from 24 hours to 6 am to 9 pm).</p>

Section 3.1.3 of the Township Official Plan identifies the permitted uses in those areas subject to the Waterfront Communities policies which include the following:

- single-detached dwelling units;
- recreational commercial uses;
- service commercial uses;
- tourist commercial uses;
- recreational vehicle or travel trailer parks subject to an approved Site Evaluation Report in accordance with section 8.4.5; and
- public open space.

An aggregate operation is not identified as a permitted use although the policies of Section 3.1.4 would appear to infer that the list above may not be exhaustive e.g. policies regarding rural commercial and industrial uses in Section 3.1.4.11. An aggregate operation is also not permitted in the Rural Communities designation that applies to the subject lands. Therefore, in accordance with Section 4.1.3.1 of the Township Official Plan, an Official Plan Amendment application was submitted to permit the proposed pit which was deemed complete by the Township and is currently under review.

It should be noted that there are other existing aggregate operations within 150 m of lakes and watercourses in Lanark Highlands where the Waterfront Communities policies would apply. This includes

pits in close proximity along Highland Line including those that were also subject to a Township Official Plan Amendment to permit the pit (see **Figure 2**).

Section 3.1.4 of the Township Official Plan provides general policies that apply to development within the Waterfront Communities. Most of the policies apply to residential and accommodation development which is not applicable to the proposed pit application.

Section 3.1.4.11 states *"Other rural commercial and industrial uses that are permitted under the Waterfront Communities policies should generally be located on a maintained public road and include an undisturbed 30 metre waterfront setback. Common activity areas should be avoided from incorporating shoreline access unless such access is deemed essential for their intended functions"*.

The proposed pit fronts on Highland Line, a municipal road that is publicly maintained and would be used to access the pit. An undisturbed 30 m waterfront setback will be in place. As noted, the proposed pit is approximately 100 m from Barbers Lake at its closest point with a topographical difference of at least 4 m. The setback from the intermittent watercourse is approximately 35 m. No activities will require shoreline access as part of the proposed aggregate extraction operation and the shoreline area will be undisturbed.

Section 3.1.5.3 states that the Official Plan is committed to the establishment of a "30 metre setback" from water and the "15 m vegetated buffer" along shorelines as the key planning tools to minimize negative development impacts on waterfronts. The 30 m setback area is intended to be a strip of unaltered, naturalized land abutting the shoreline. The 30 m setback and 15 m vegetated buffer are *"intended to help achieve the Official Plan's broader Waterfront Development and Environmental policies"*.

As identified on the updated ARA site plan and **Figure 7**, these key planning tools are satisfied. The setback from Barbers Lake and the intermittent watercourse is approximately 100 m and 35 m, respectively. These setbacks will be unaltered, naturalized land abutting the shoreline of Barbers Lake. Furthermore, there is no development proposed within 30 m of the high-water mark.

Section 3.1.5.28 states that waterfront development shall be required to demonstrate a net environmental gain in regard to increased setbacks, drainage design, new septic system, increased buffers, vegetation and habitat. This is achieved through the amended pit application which has incorporated increased setbacks and buffers. Unlike other forms of waterfront development, the proposed pit will be an interim land use which will be progressively rehabilitated as two lakes with littoral zones that will enhance the future ecological and scenic character of the lake and shoreline areas, as well as provide naturalized wildlife habitat areas, in line with the objectives for Waterfront Communities. Furthermore, it will create additional waterfront areas within Lanark Highlands.

Regardless of the 'Waterfront Communities' policies, the proposed pit application has been submitted in accordance with the policies of the Provincial Planning Statement ("PPS"). The PPS provides policies regarding the protection of the environment and its natural resources including fish habitat, wetlands and surface water features. The PPS states that there must be no negative impacts on significant natural features and their ecological functions and that sensitive surface water features and their hydrologic

functions must be protected, improved or restored. As previously discussed, the DFO and MECP have reviewed the proposal and have confirmed that it will not require authorizations to perform the proposed activities as it is in accordance with the requirements of the Endangered Species Act and the Fisheries Act.

Section 4.1 - Mineral Aggregates

The Township Official Plan states that resource lands make up a significant component of land uses in Lanark Highlands and that mineral resources are important to the overall economic base of the Township. Aggregate resources have been evaluated and appropriate land use policies have been developed to ensure the wise use and conservation of these resources for future generations.

The PPS requires that mineral aggregate resources be protected for long-term use and that as much of the mineral aggregate resources as is realistically possible shall be made available as close to market as possible. Further, extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts according to the PPS. Thus, consideration of the two policy frameworks, i.e. Official Plan and PPS, is required to assess mineral aggregate resource extraction in the Township.

The proposed Highland Line Pit will allow for the utilization of sand and gravel resources and will contribute to the local economic base by providing employment opportunities and high quality construction materials within the Township and local market area. Further, in alignment with Township's goals for mineral resource management, the ARA site plan for the proposed pit has been designed based on input from technical studies to meet the requirements of the Aggregate Resources Act and to ensure social, environmental and economic impacts are minimized. The site plan will become legally binding on the licensee at the time of Licence issuance and will provide for the wise use of this non-renewable and economically crucial natural resource.

New or Expanded Mineral Aggregate Resource Policy Areas

Section 4.1.3 of the Official Plan provides policies regarding new or expanded Mineral Aggregate Uses. An amendment to the Official Plan is required for the establishment of a new licensed operation. As noted, an amendment was submitted to the Township in January 2023 and is currently in the application review process.

With regard to Official Plan amendments to permit new aggregate operations, Policy 4.1.3.2 provides:

Where an Official Plan amendment is proposed which could result in the redesignation of lands to Mineral Aggregate Resource Policy Area in order to facilitate the establishment or addition of previously unlicensed area to a licensed extraction operation and where the limits of the extraction operation could ultimately be located within 300 metres (984 feet) of a residential, institutional or commercial use on another lot for a licensed pit and 500 meters (1640 feet) for a licensed quarry, such proposed amendment shall be supported by the following:

1. *Hydrogeological investigations, in accordance with the Aggregate Resources Act, conducted by a qualified professional, which demonstrate conclusively that the extraction operation will not result in negative impacts on the existing non-extraction development's water and sewer services;*
2. *Any other investigation as required by the approval authority such as traffic studies, noise studies, vibration studies, slope stability studies etc. are carried out and demonstrate conclusively that the proposed extraction operation can proceed without negative impacts on the existing non-extraction development. Such studies are to be carried out by qualified professionals.*

In support of the proposed applications, hydrogeological investigations were conducted by WSP Golder through the completion of a Maximum Predicted Water Table Report and Level 1 and Level 2 Water Report which adhere to ARA requirements as well as Official Plan requirements. These reports conclude that no adverse impacts are anticipated on the groundwater and surface water resources as a result of the proposed aggregate operation. Extraction will not require dewatering, eliminating the possibility of groundwater table drawdown, and, subsequently, minimizing the possibility for interference with local supply wells and lowering of the groundwater table as confirmed in the Water Report. Additionally, due to the primary water supply deriving from bedrock there is a considerable reduction in the potential for the local groundwater to experience impacts from the proposed aggregate extraction.

Other investigations were undertaken in support of the Highland Line Pit application which were previously summarized in the Planning Justification Report, prepared by MHBC, in December 2022. Those include archaeological assessments, traffic, noise and natural environment studies.

Additional study and analysis have been prepared in response to comments received on the application in addition to the changes made to the application.

Mineral Aggregate Reserves

The majority of the subject lands are identified as 'Sand and Gravel Reserves' on the Development Constraints mapping on Schedule B of the Township Official Plan (**Figure 4**). As a result of the approval of the new Township Official Plan (OPA 8), this Schedule was updated to incorporate ARIP 189 (**Figure 5**) which identifies larger portions of the subject lands within a Selected Sand and Gravel Resource Area than what was previously identified in the Official Plan at the time of submission of the application.

Potential pit and quarry resources are identified as Mineral Aggregate Reserve on Schedule B as a constraint overlay. It is the intent of the Township Official Plan that these areas be protected by directing permanent development away from them and adjacent lands. This overlay serves to protect aggregate resources for extraction. The Highland Line Pit proposes to permit the extraction of aggregate resources that the Plan has explicitly protected for this purpose.

Residential and other sensitive land uses shall not be located within 300 m of an area intended for a licenced pit operation according to Policy 4.1.4.1 of the Township Official Plan unless it can be demonstrated that such uses will not preclude or hinder existing and future extractive operations. This further demonstrates the planned intent for the subject lands and area.

Section 4.1.6.1 states that progressive rehabilitation of extraction sites to accommodate subsequent land uses is a requirement of the Official Plan. Rehabilitation is to be carried out on a progressive basis and shall be in accordance with the approved rehabilitation plan submitted to Ministry of Natural Resources as part of the site plan for licensing purposes. A rehabilitation plan was included in the ARA Site Plan as part of the licence application. Rehabilitation must be carried out in a progressive manner as outlined on the site plan.

3.0 Revised Official Plan Amendments & Zoning By-law Amendment

The MHBC Planning Justification Report (December 2022) included draft amendments to the County of Lanark Sustainable Communities Official Plan, and Township of Lanark Highlands Official Plan and Zoning By-law. The draft amendments were included in Appendices B to D.

As a result of the changes made to the application in response to comments from the community, review agencies and Indigenous communities, revised draft Official Plan Amendments and Zoning By-law Amendment have been prepared. The changes specifically reflect the reductions in the proposed licensed area and extraction area of the pit. The revised draft amendments are enclosed in Appendix A of this Report.

4.0 Summary and Conclusions

Thomas Cavanagh Construction Ltd. is in the application process for a new pit for the lands legally described as Part of Lot 5, Concession 10, Geographic Township of Dalhousie, in the Township of Lanark Highlands. The required applications to permit the pit were submitted in January 2023.

To provide an update on the application process of the Highland Line Pit and to address the comments received from the Township of Lanark Highlands in their Planning Report, dated March 14th, 2023, this Planning Addendum Report was prepared which serves as an addendum to the MHBC Planning Justification Report dated December 2022.

In our opinion, the proposed Highland Line Pit conforms with the Township of Lanark Highlands Official Plan including the Waterfront Communities policies and OPA 8 which was approved approximately one and a half years after the applications were submitted to the Township.

Respectfully submitted,

MHBC



Neal DeRuyter, BES, MCIP, RPP



Chelsea Brooks, MA, MSc



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Yara Elmahdy, BES

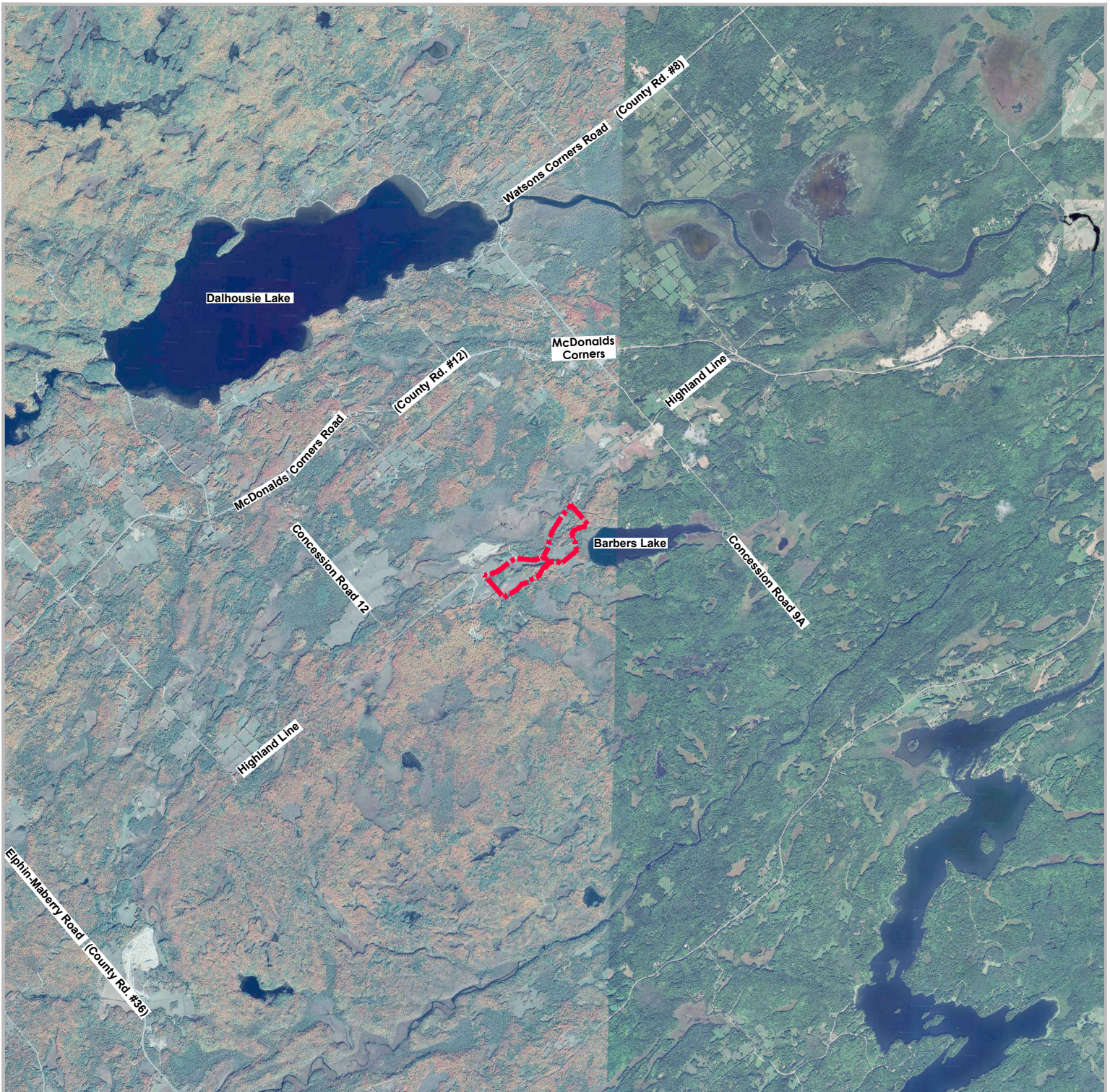


Figure 1
Location Map

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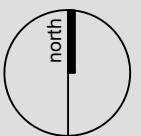
Subject Lands

DATE: January 2025

SCALE: NTS

FILE: 0851E

DRAWN: DGS



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 LINERPTJANUARY2025\LOCATION MAP.DWG

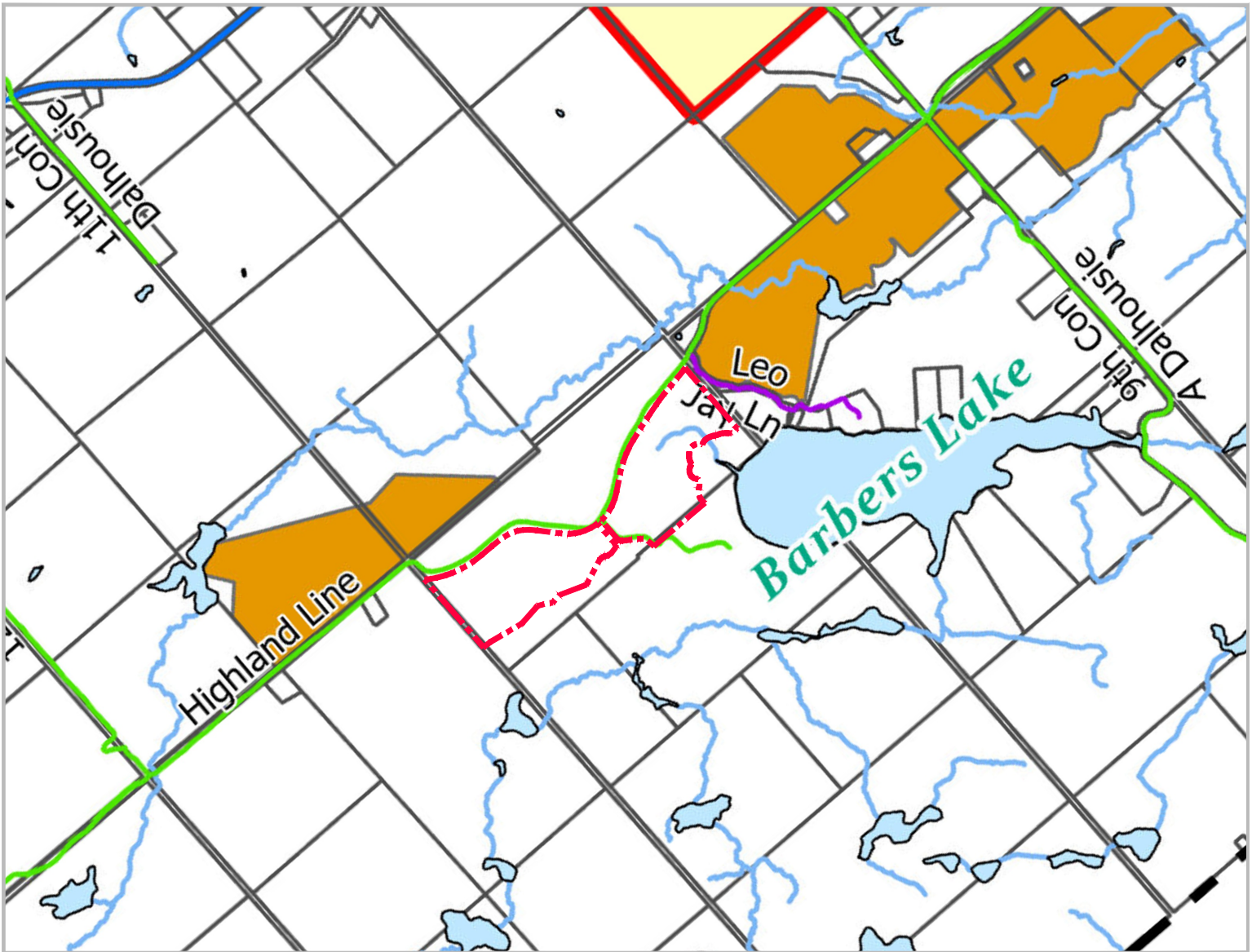
**Thomas Cavanagh
 Construction Limited**
 Part of Lot 5, Concession 10
 (Geographic Township of Dalhousie)
 Township of Lanark Highlands
 County of Lanark

Base Map Source:
 Google Imagery 2019-2023



**PLANNING
 URBAN DESIGN
 & LANDSCAPE
 ARCHITECTURE**

200-540 BINGEMANS CENTRE DR., KITCHENER, ON, N2B 3X9 | P: 519.576.3650 | WWW.MHBCPLAN.COM



- Provincial Highway
- County Road (ROW 26 Metres)
- Municipal Road (ROW 20 Metres)
- Private Road (ROW 20 Metres)
- Waterbody
- Watercourse
- Pit
- Quarry
- Both (Pit and Quarry)
- Village & Hamlet Communities
- Provincially Significant Wetlands (PSW)
- Rural Communities
- Utility
- Snowmobile Trail
- Township Boundary

Figure 2
Township of Lanark Highlands
Official Plan
 Schedule A
 Land Use and Transportation

Thomas Cavanagh Construction Limited
 Part of Lot 5, Concession 10
 (Geographic Township of Dalhousie)
 Township of Lanark Highlands
 County of Lanark

LEGEND

Subject Lands

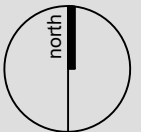
Base Map Source:
 Township of Lanark Highlands Official Plan,
 Schedule A - Land Use & Transportation (June 26, 2024)

DATE: January 2025

SCALE: 1:25,000

FILE: 0851E

DRAWN: DGS



K:\0851E-THOMAS CAVANAUGH CONSTRUCTION-HIGHLAND LINE\RPT\JANUARY2025\TOWNSHIP OF LANARK HIGHLANDS OP LAND USE.DWG



**PLANNING
 URBAN DESIGN
 & LANDSCAPE
 ARCHITECTURE**

200-540 BINGEMANS CENTRE DR., KITCHENER, ON. N2B 3X9 | P: 519.576.3650 | WWW.MHBCPLAN.COM

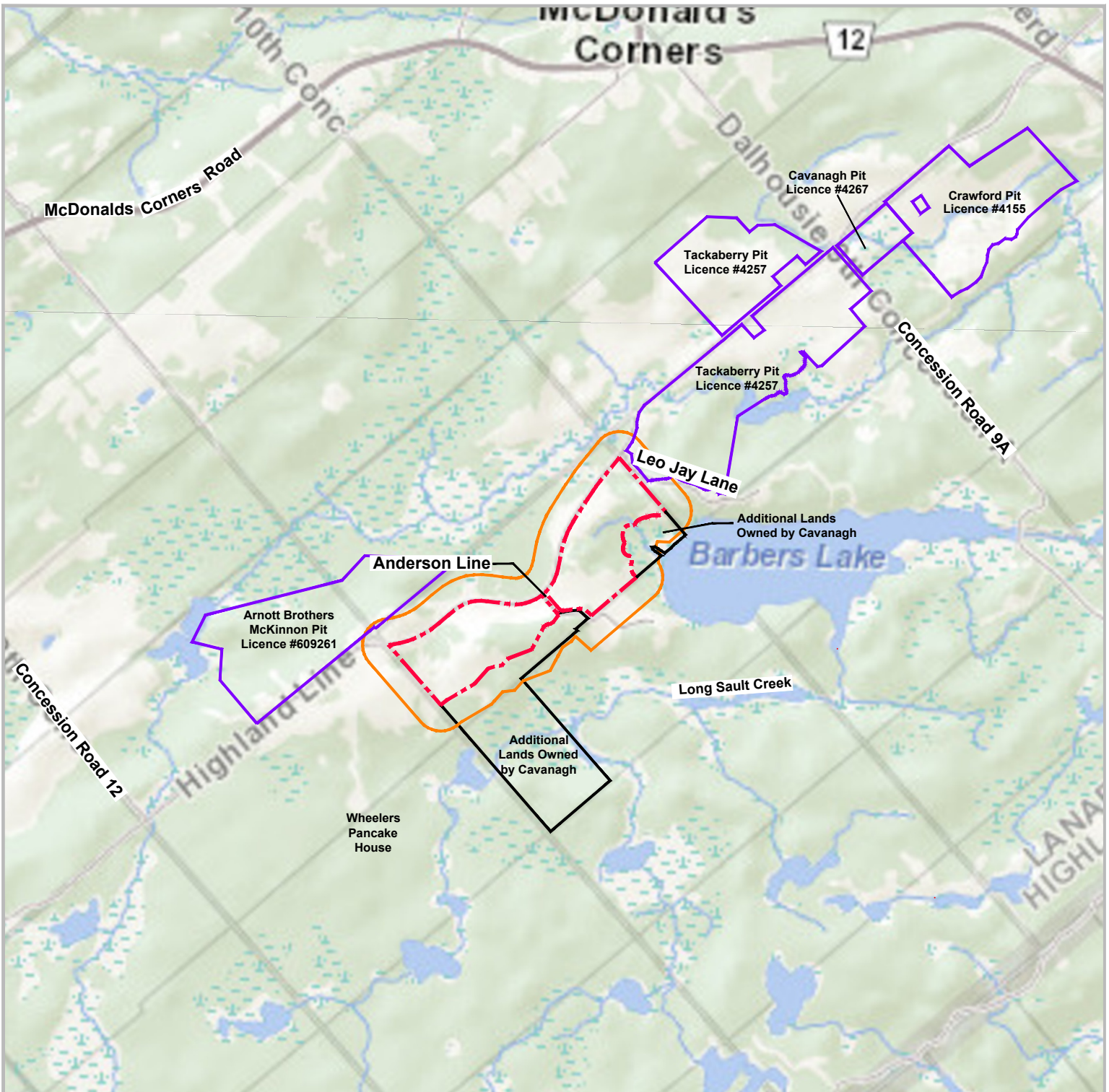





Figure 3
Context Map

LEGEND

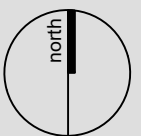
-  Subject Lands
-  120m from Subject Lands
-  ARA Licence Boundary

DATE: November 2022

SCALE: NTS

FILE: 0851E

DRAWN: DGS



K:\0851E-THOMAS CAVANAUGH CONSTRUCTION-HIGHLAND LINE\RPT\JANUARY2025\CONTEXT PLAN.DWG

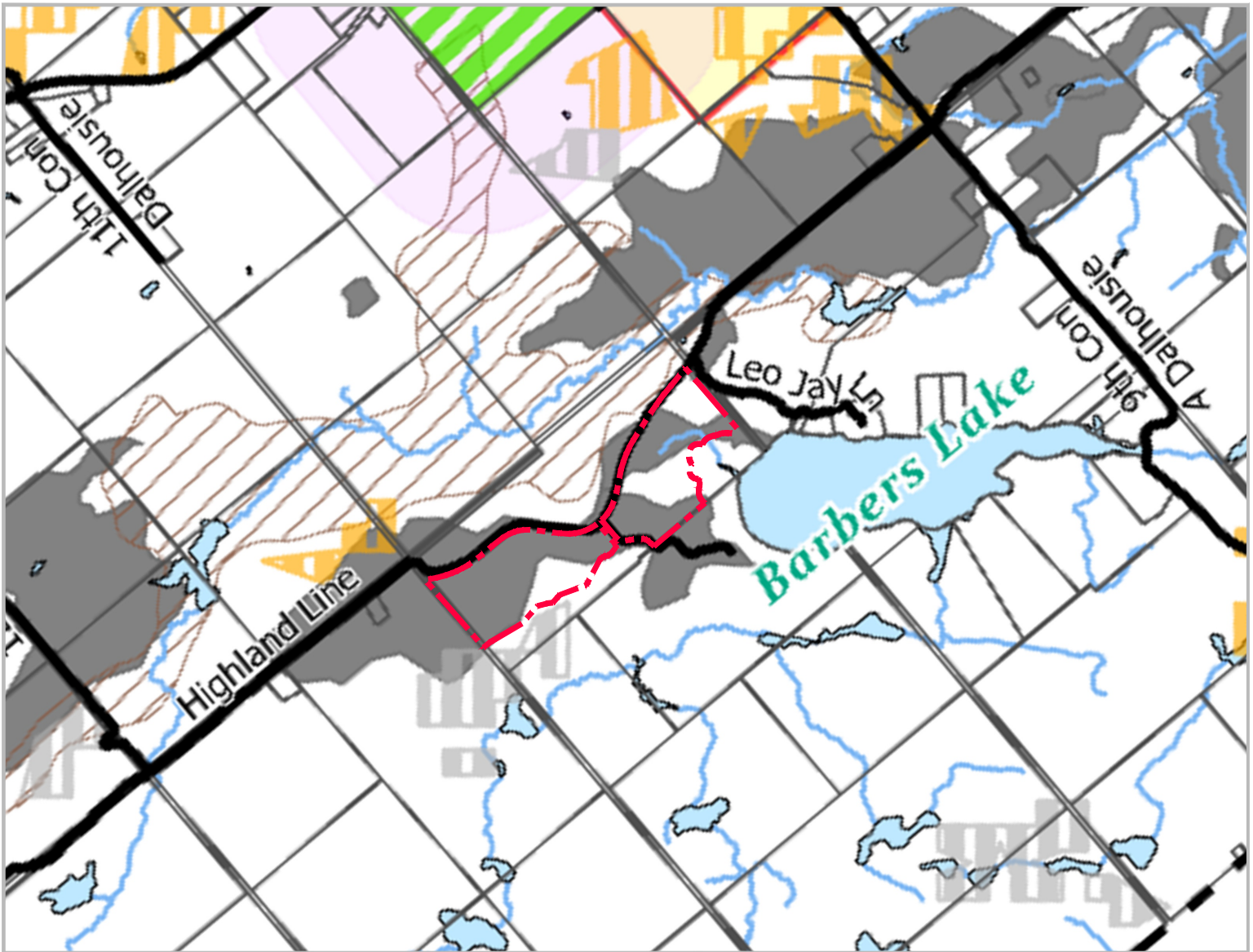
Thomas Cavanagh Construction Limited
 Part of Lot 5, Concession 10
 (Geographic Township of Dalhousie)
 Township of Lanark Highlands
 County of Lanark

Base Map Source:
 agMaps online mapping service ©Queen's Printer for Ontario 2022



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- | | | |
|---|--|--|
| ◆ Abandoned Mine Hazard Sites (AMHS) | ▨ Crown Land | ■ Sand & Gravel Reserves |
| ■ AMHS 1km Buffer | ▧ Area of Natural & Scientific Interest (ANSI) | ▨ Wildland Fire Hazards: Extreme |
| ▨ Waste Disposal Site - Closed | ■ Waterbody | ▨ Wildland Fire Hazards: High |
| ▨ Waste Disposal Site - Open | — Watercourse | ▨ Wildland Fire Hazards: Pine (Needs Evaluation) |
| ▨ Waste Disposal Site - Influence Area (500m) | ▨ Flood Plains | □ Rural Communities |
| ▨ Village & Hamlet Communities | ▨ Organic Soil | — Roads |

Figure 4
Township of Lanark Highlands
Official Plan
 Schedule B
 Development Constraints

LEGEND



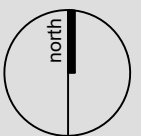
Subject Lands

DATE: January 2025

SCALE: 1:25,000

FILE: 0851E

DRAWN: DGS



K:\0851E-THOMAS CAVANAUGH CONSTRUCTION-HIGHLAND LINE\RP\T\JANUARY 2025\TOWNSHIP OF LANARK HIGHLANDS OP DEVELOPMENT CONSTRAINTS.DWG

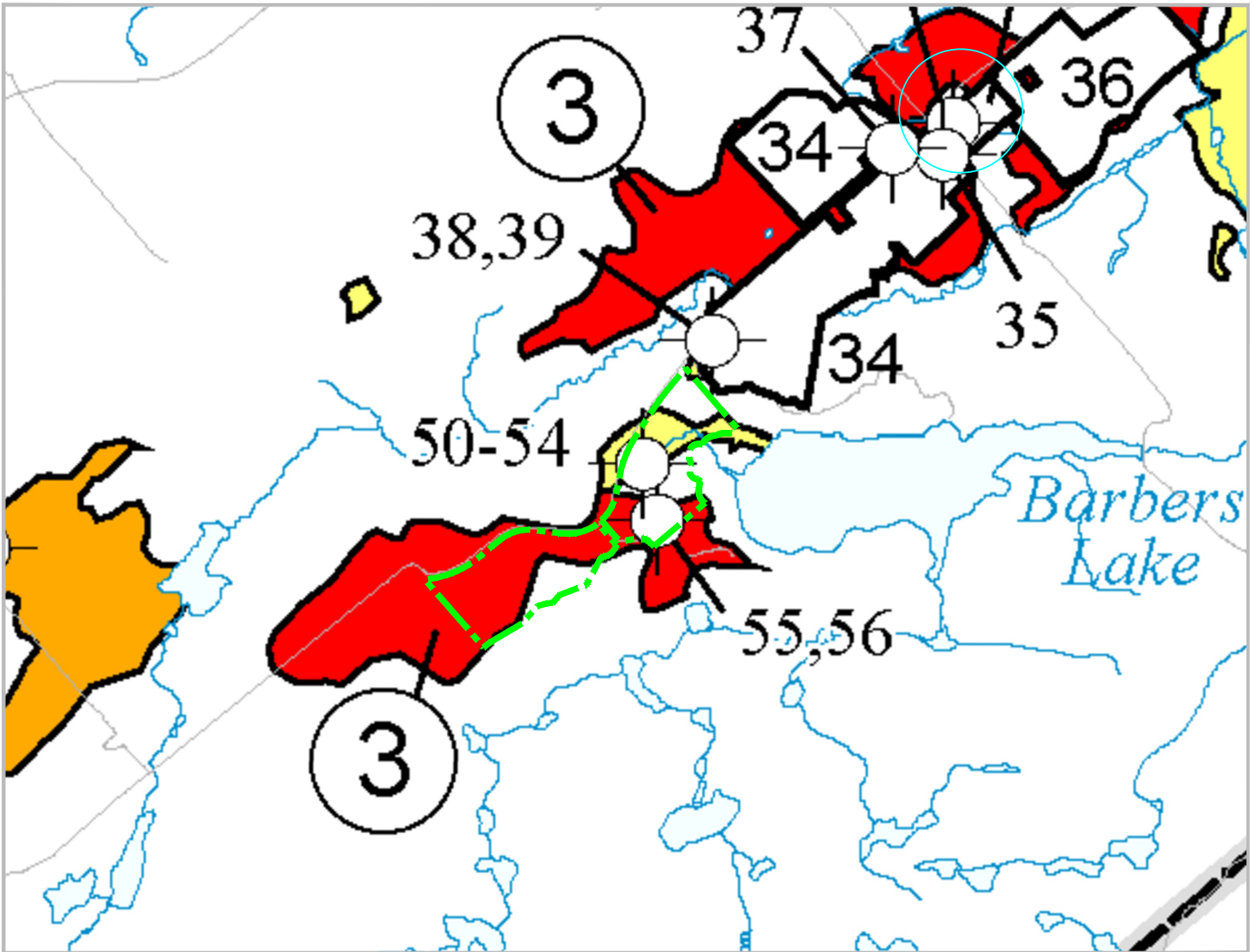
Thomas Cavanagh Construction Limited
 Part of Lot 5, Concession 10
 (Geographic Township of Dalhousie)
 Township of Lanark Highlands
 County of Lanark

Base Map Source:
 Township of Lanark Highlands Official Plan,
 Schedule B - Development Constraints (July 26, 2024)



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SAND AND GRAVEL RESOURCES

SYMBOLS

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

- 1 Licenced property boundary; property number (see Table 2)
- 18 Unlicensed sand or gravel pit (i.e., abandoned pit or wayside pit operating on demand under authority of a permit); property number (see Table 2)
- 30 Borehole location; identification number (see Table 7)
- 10-VLL-004 Sample site; identification number (see Table 9)
- Geological and aggregate thickness boundary of sand and gravel deposits

Figure 5
County of Lanark
Aggregate Resources
Inventory Paper 189
Sand and Gravel
Resources

LEGEND

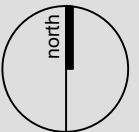
Subject Lands

DATE: January 2025

SCALE: 1:25,000

FILE: 0851E

DRAWN: DGS



K:\0851E-THOMAS CAVANAUGH CONSTRUCTION-HIGHLAND LINE\RP\JANUARY2025\ARIP MAP.DWG

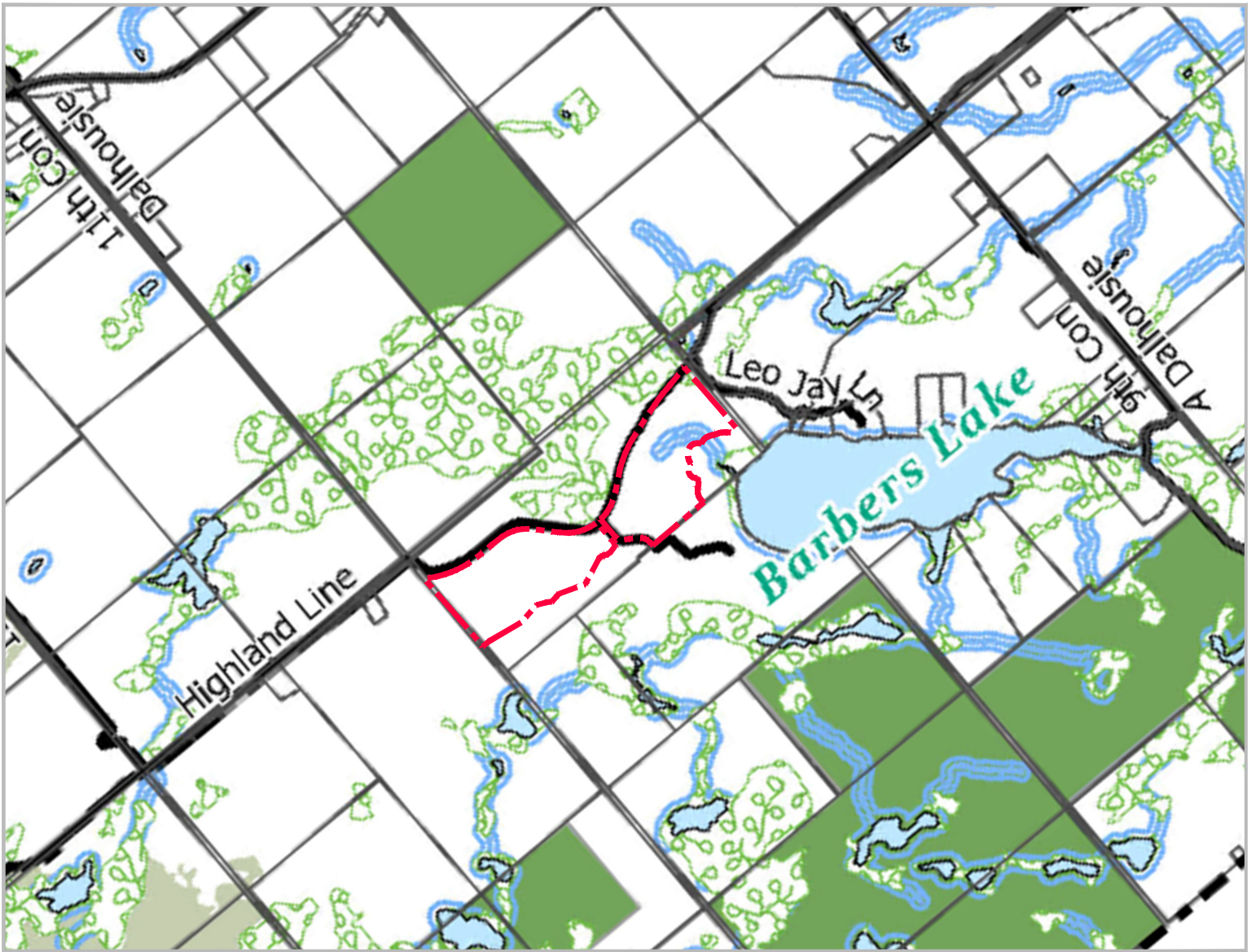
Thomas Cavanagh
Construction Limited
 Part of Lot 5, Concession 10
 (Geographic Township of Dalhousie)
 Township of Lanark Highlands
 County of Lanark

Base Map Source:
 Ontario Geological Survey, Aggregate Resource Inventory Paper 189,
 Map 1 Sand and Gravel Resources for the County of Lanark



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- | | | |
|---|--------------------------------|-----------------------|
| ANSI, Earth Science | Crown Land | Significant Woodlands |
| ANSI, Life Science | Watercourse | Property Fabric |
| Candidate ANSI, Life Science | Watershed Boundary | Roads |
| Waterbody | Natural Corridors and Linkages | Utility |
| Wetlands | Green Gems | Township Boundary |
| Provincially Significant Wetlands (PSW) | Community Forests | |

Figure 6
Township of Lanark Highlands
Official Plan
 Schedule C
 Natural Heritage Features

Thomas Cavanagh Construction Limited
 Part of Lot 5, Concession 10
 (Geographic Township of Dalhousie)
 Township of Lanark Highlands
 County of Lanark

LEGEND

Subject Lands

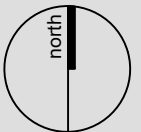
Base Map Source:
 Township of Lanark Highlands Official Plan,
 Schedule C - Natural Heritage Features (July 26, 2024)

DATE: January 2025

SCALE: 1:25,000

FILE: 0851E

DRAWN: DGS



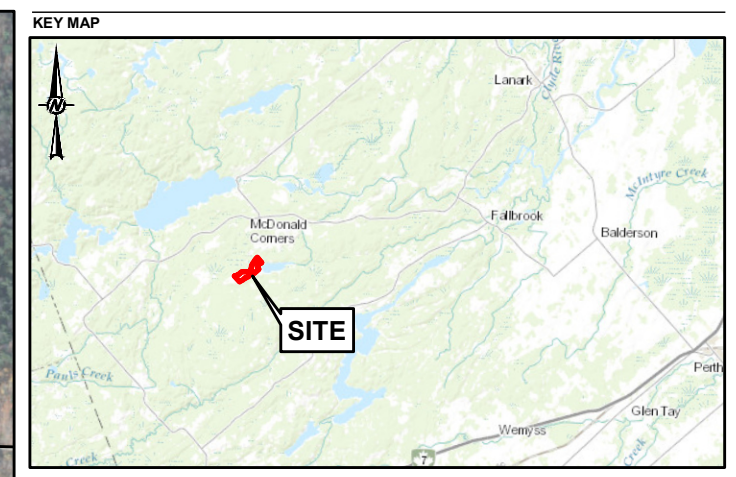
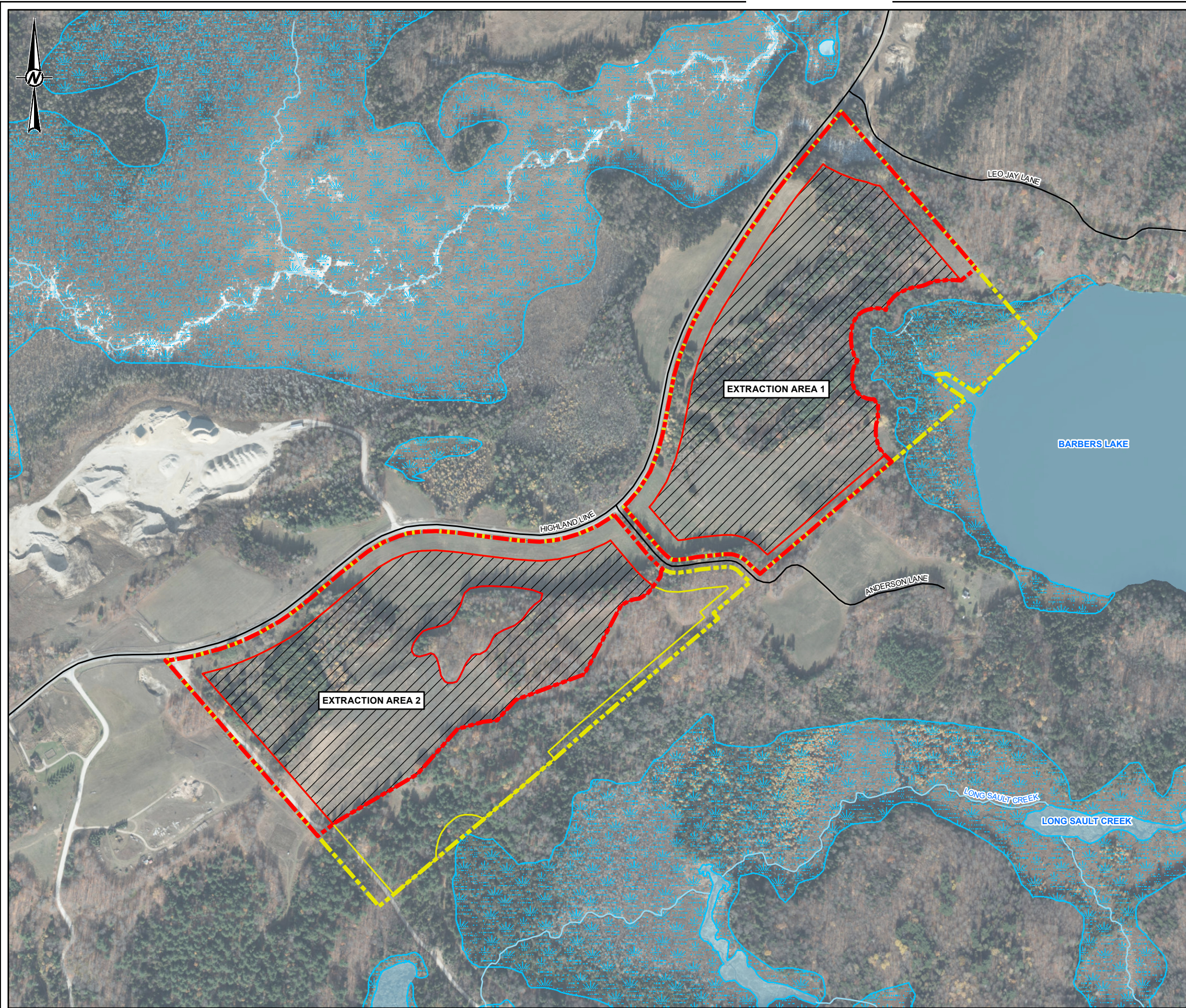
K:\0851E-THOMAS CAVANAUGH CONSTRUCTION-HIGHLAND LINE\REPORT\JANUARY 2025\TOWNSHIP OF LANARK HIGHLANDS OP NATURAL HERITAGE FEATURES.DWG



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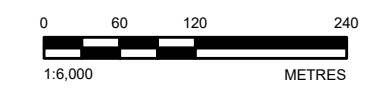
FIGURE 7



SCALE 1:350,000

LEGEND

- UPDATED LICENSED AREA
- UPDATED LIMIT OF EXTRACTION
- UPDATED EXTRACTION AREA
- ORIGINAL LICENSED AREA
- ORIGINAL LIMIT OF EXTRACTION
- ROADWAY
- INTERMITTENT STREAM
- PERMANENT WATERCOURSE
- WETLAND (UNEVALUATED)
- WATERBODY



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. IMAGERY CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEBCO, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
RIDEAU VALLEY CONSERVATION AUTHORITY (RVCA)
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 18N

CLIENT
THOMAS CAVANAGH CONSTRUCTION LIMITED

PROJECT
HIGHLAND LINE PIT PROPERTY, PART OF LOTS 4 & 5,
CONCESSION 10, DALHOUSIE TOWNSHIP, LANARK COUNTY,
ONTARIO

TITLE
UPDATED LICENCED AND EXTRACTION AREA

CONSULTANT	YYYY-MM-DD	2024-12-11
	DESIGNED	BH
	PREPARED	BR
	REVIEWED	BH
	APPROVED	KAM

Path: S:\Client\Thomas_Cavanagh_Construction\Durham_P1909_PROJ\19126620_Cavanagh_ABA\2024_Updated_Licence_Extraction_Area\19126620-0024-CH-0001.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 28mm

A

Appendix A: Revised Draft Official Plan Amendments and Zoning By-law Amendment

Official Plan Amendment No. _____

To the Lanark County Sustainable Communities Official Plan

PART A – PREAMBLE

PURPOSE AND EFFECT OF THE OFFICIAL PLAN AMENDMENT

The purpose of Official Plan Amendment No. _____ is to remove the “Rural” designation and replace it with a “Licensed Aggregate Extraction Operation” designation on Schedule “A” to the Lanark County Sustainable Communities Official Plan (SCOP) for land located at Part of Lot 5, Concession 10, Geographic Township of Dalhousie, now in the Township of Lanark Highlands. The land subject to this Amendment comprises approximately ~~50.637.6~~ hectares

The location of the land subject to this Amendment is shown on Schedule “A” to Official Plan Amendment _____.

The effect of Official Plan Amendment _____ is to allow Thomas Cavanagh Construction Limited to operate a pit extracting sand and gravel resources below the water table (known as the Highland Line Pit).

BASIS OF THE AMENDMENT

The lands subject to the proposed Amendment contain at least 2 million tonnes of high quality sand and gravel resources. These aggregate resources have been identified in both provincial geological mapping (Aggregate Resources Inventory Paper 189) as well as municipal planning documents where they are protected from incompatible development and land uses.

The Amendment would allow for the wise use of aggregate resources in the area, and has been carefully designed to minimize social, economic, and environmental impacts. The proposed pit would utilize existing haul routes (Highland Line towards County Road 12) currently used by other aggregate licenses in the area.

Technical studies have been prepared in support of the proposed pit including a Planning Justification Report and Aggregate Resources Act Summary Statement, Water Report, Maximum Predicted Water Table Report, Natural Environment Report, Noise Impact Assessment, Transportation Impact Assessment, Archaeological Assessment and Aggregate Resources Act Site Plan. The studies have demonstrated that the proposed pit can be operated in a manner in which potential impacts are minimized on surrounding land uses as well as natural features.

The following applications have also been submitted concurrently with this proposed Amendment:

1. Township of Lanark Highlands Official Plan Amendment to add the “~~Mineral Aggregate Resource Policy Area~~—Pit” designation.
2. Township of Lanark Highlands Zoning By-law Amendment to rezone the lands to “Mineral Aggregate Resources Pit (MXP)”.
3. Class A Licence under the Aggregate Resources Act (administered by the Ministry of Natural Resources and Forestry).

PART B – THE AMENDMENT

The Introductory Statement

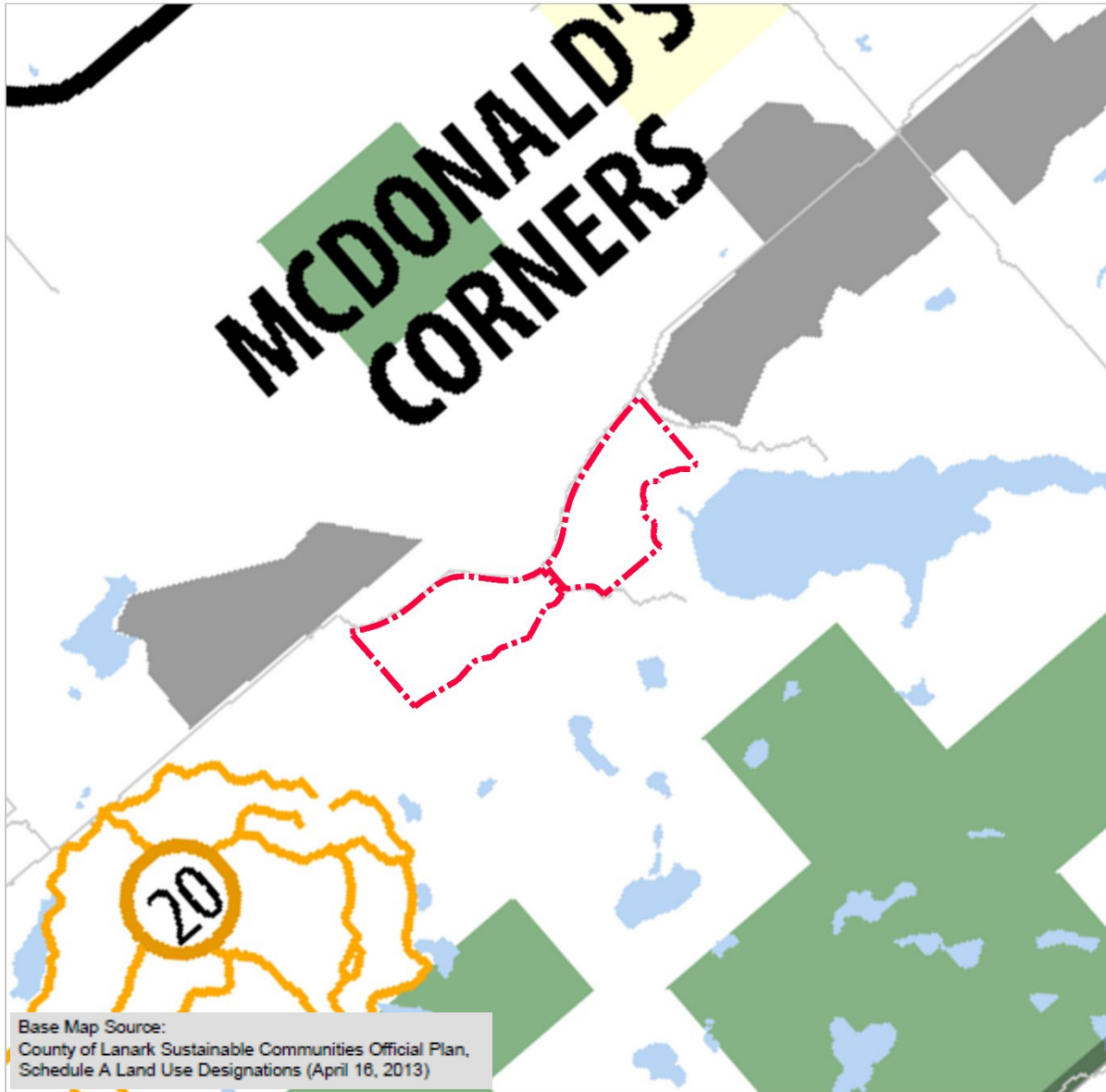
All of this part of the document entitled Part B – The Amendment constitutes Amendment No. _____ to the Lanark County Sustainable Communities Official Plan.

Details of the Amendment

The Lanark County Sustainable Communities Official Plan is hereby amended by amending Schedule “A” to the Official Plan by changing the designation of land described as Part of Lot 5, Concession 10, Geographic Township of Dalhousie, now in the Township of Lanark Highlands as shown on Schedule “A” to this Amendment from “Rural” to “Licensed Aggregate Extraction Operation”.

SCHEDULE "A"

Part of Lot 5, Concession 10, Geographic Township of Dalhousie, now in the Township of Lanark Highlands



Lands to be re-designated from "Rural" to "Licensed Aggregate Extraction Operation"

Official Plan Amendment No. ____

To the Lanark Highlands Official Plan

PART A – PREAMBLE

PURPOSE AND EFFECT OF THE OFFICIAL PLAN AMENDMENT

The purpose of Official Plan Amendment No. ____ is to remove the “Rural Communities” designation and replace it with a “~~Mineral Aggregate Resource Policy Area~~—Pit” designation on Schedule “A” to the Lanark Highlands Official Plan for land located at Part of Lot 5, Concession 10, Geographic Township of Dalhousie, now in the Township of Lanark Highlands. The land subject to this Amendment comprises approximately ~~50.6~~37.6 hectares.

The location of the land subject to this Amendment is shown on Schedule “A” to Official Plan Amendment ____.

The effect of Official Plan Amendment ____ is to allow Thomas Cavanagh Construction Limited to operate a pit extracting sand and gravel resources below the water table (known as the Highland Line Pit).

BASIS OF THE AMENDMENT

The lands subject to the proposed Amendment contain at least 2 million tonnes of high quality sand and gravel resources. These aggregate resources have been identified in both provincial geological mapping (Aggregate Resources Inventory Paper 189) as well as municipal planning documents where they are protected from incompatible development and land uses.

The Amendment would allow for the wise use of aggregate resources in the area, and has been carefully designed to minimize social, economic, and environmental impacts. The proposed pit would utilize existing haul routes (Highland Line towards County Road 12) currently used by other aggregate licenses in the area.

Technical studies have been prepared in support of the proposed pit including a Planning Justification Report and Aggregate Resources Act Summary Statement, Water Report, Maximum Predicted Water Table Report, Natural Environment Report, Noise Impact Assessment, Transportation Impact Assessment, Archaeological Assessment and Aggregate Resources Act Site Plan. The studies have demonstrated that the proposed pit can be operated in a manner in which potential impacts are minimized on surrounding land uses as well as natural features.

The following applications have also been submitted concurrently with this proposed Amendment:

1. Lanark County Sustainable Communities Official Plan Amendment to add the “Licensed Aggregate Extraction Operation” designation.
2. Township of Lanark Highlands Zoning By-law Amendment to rezone the lands to “Mineral Aggregate Resources Pit (MXP)”.
3. Class A Licence under the Aggregate Resources Act (administered by the Ministry of Natural Resources and Forestry).

PART B – THE AMENDMENT

The Introductory Statement

All of this part of the document entitled Part B – The Amendment constitutes Amendment No. _____ to the Lanark Highlands Official Plan.

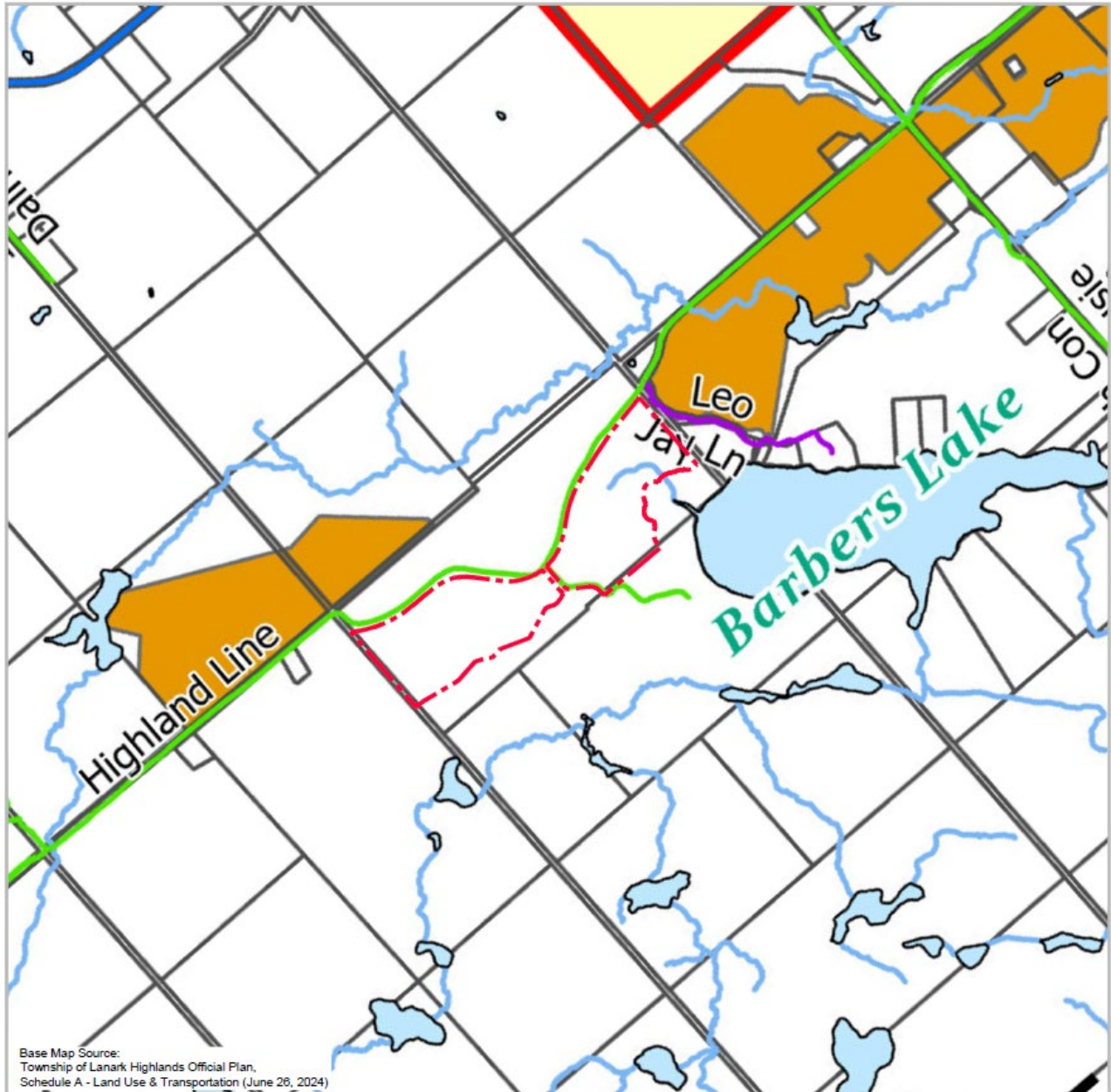
Details of the Amendment

The Lanark Highlands Official Plan is hereby amended by amending Schedule “A” to the Official Plan by changing the designation of land described as Part of Lot 5, Concession 10, Geographic Township of Dalhousie, now in the Township of Lanark Highlands as shown on Schedule “A” to this Amendment from “Rural Communities” to “~~Mineral Aggregate Resource Policy Area~~—Pit”.

LANARK HIGHLANDS OFFICIAL PLAN AMENDMENT NO. _____

SCHEDULE "A"

Part of Lot 5, Concession 10, Geographic Township of Dalhousie, now in the Township of Lanark Highlands



Lands to be re-designated from "Rural Communities" to "~~Mineral Aggregate Resource Policy Area - Pit~~"

**THE CORPORATION OF THE
TOWNSHIP OF LANARK HIGHLANDS**

**BY-LAW NO. _____ - _____
A BY-LAW TO AMEND ZONING BY-LAW NO. 2003-451
(Highland Line Pit – File #ZA-2023-02)**

WHEREAS, the Planning Act, R.S.O. 1990, Chapter P. 13 Section 34 as amended, provides that the Councils of local municipalities may enact by-laws regulating the use of land and the erection, location and use of buildings and structures within the municipality;

AND WHEREAS, By-law No. 2003-451 regulates the use of land and the erection, location and use of buildings and structures within the Township of Lanark Highlands;

AND WHEREAS, the Council of the Corporation of the Township of Lanark Highlands deems it advisable to amend By-law No. 2003-451 as hereinafter set out;

AND WHEREAS, this By-law implements the policies and intentions of the Official Plan for the Township of Lanark Highlands;

NOW THEREFORE BE IT RESOLVED THAT, the Council of the Corporation of the Township of Lanark Highlands enacts as follows:

1. GENERAL REGULATIONS

1.1 THAT By-Law No. 2003-451, as amended, is hereby further amended by amending the zoning on the lands legally described as Pt. Lot 5, Concession 10, former Township of Dalhousie, now in the Township of Lanark Highlands, from Mineral Aggregate Resources Reserve – Hold “MAR-h” and Rural “RU” to Mineral Aggregate Resources Pit - _____ “MXP-__” in accordance with Schedule “A” attached hereto and forming part of this By-law.

1.2 AND THAT all applicable standards of By-law No. 2003-451 and the MXP zone shall apply to the subject property except as amended below:

1.2.1 Minimum Yard Requirements
Front Yard: 0 m

1.3 AND FURTHER THAT this By-law shall come into force and effect with the passing thereof, in accordance with the Planning Act, R.S.O. 1990.

2. EFFECTIVE DATE

ENACTED AND PASSED this ____ day of _____.

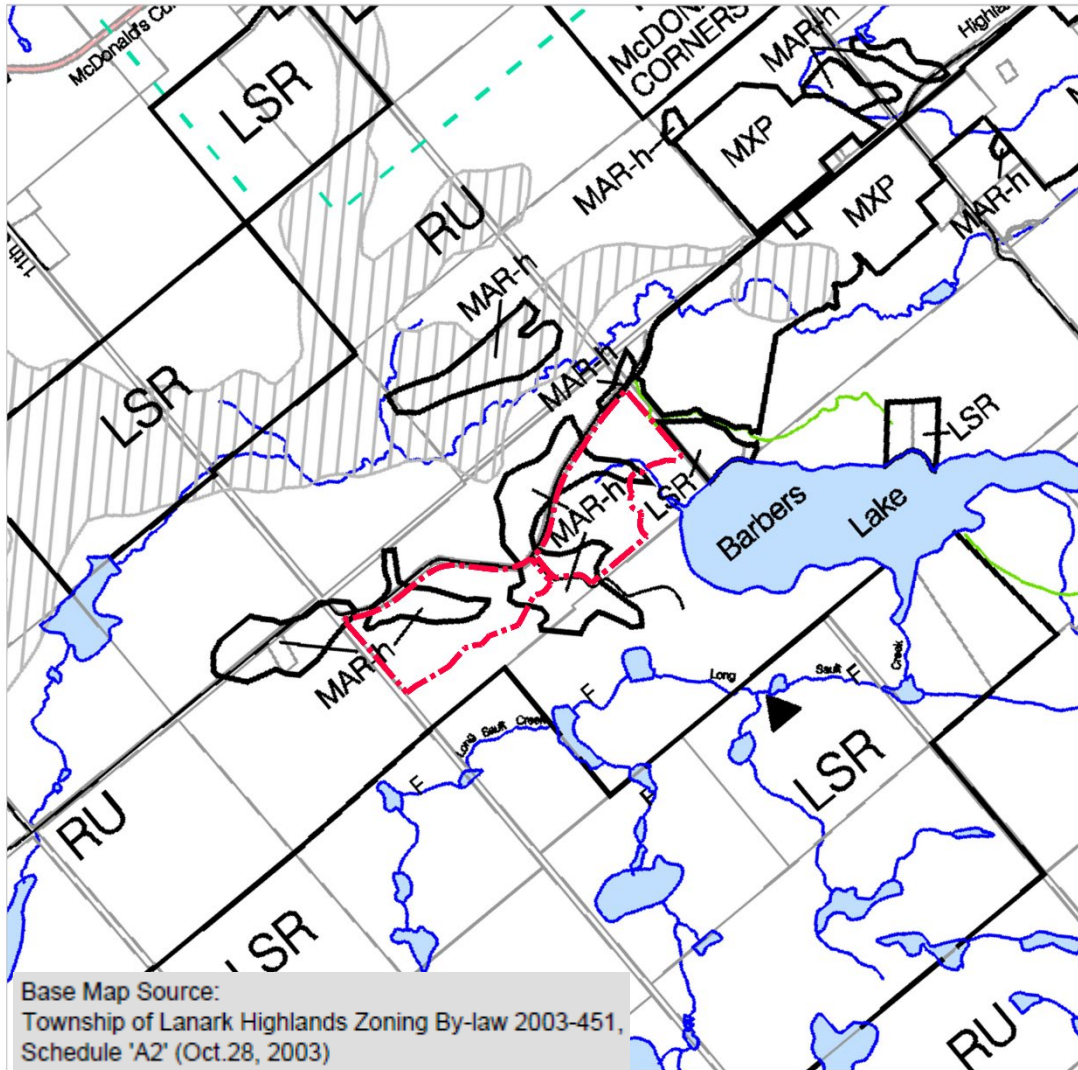
Peter McLaren, Reeve

**Nicole Guthrie
Clerk**

**THE CORPORATION OF THE TOWNSHIP OF LANARK HIGHLANDS
BY-LAW NO. _____ - _____**

SCHEDULE "A"

Pt. Lot 5, Concession 10
Former Township of Dalhousie now in
the Township of Lanark Highlands



Lands to be re-zoned from Mineral Aggregate Resources Reserve – Hold “MAR-h” and Rural “RU” to Mineral Aggregate Resources Pit - _____ “MXP-”

To By-law No. _____ - _____
Geographic Township of Lanark
Township of Lanark Highlands

Area affected by this By-law
Mineral Aggregate Resources Reserve –
Hold and Rural to Mineral Aggregate
Resources Pit - _____

This is Schedule "A" to By-law ___ - ___ passed this ___ day of _____.

Reeve _____

Clerk _____