AGRICULTURAL IMPACT ASSESSMENT
FOR
0 & 8673 EIGHTH LINE, HALTON HILLS

PREPARED FOR:

MAPLE MIST DEVELOPMENT CORP.
C/O TRINISON MANAGEMENT CORP.

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1. INTRODUCTION

1.1 Retainer

Colville Consulting Inc. has been retained by Maple Mist Development Corp. c/o Trinison Management Corp. to complete an Agricultural Impact Assessment (AIA) for the lands located at 0 & 8673 Eighth Line, Halton Hills. These lands, herein referred to the Subject Lands, are rectangular in shape, with a combined parcel size of approximately 41.12 hectares (102.1 acres). The Subject Lands are located along Eighth Line, generally in between 5 Side Road to the north and Steeles Avenue to the south, south of the Town of Georgetown, and west of the City of Mississauga. The Subject Lands are designated Prime Agricultural Area in Map 1E of the Region of Halton's Official Plan.

1.2 Development in Ontario

1.2.1 Planning Framework

The *Provincial Planning Statement 2024 (PPS)* provides the framework for land use planning and development in Ontario. It provides policy direction on matters of provincial interest related to land use planning and development. The intent of the planning statement is to ensure "Ontario's vibrant agricultural sector and sensitive areas will continue to form part of the province's economic prosperity and overall identity. Growth and development will be prioritized within urban and rural settlements that will, in turn, support and protect the long-term viability of rural areas, local food production, and the agri-food network. In addition, resources, including natural areas, water, aggregates and agricultural lands will be protected."

1.2.2 Guidance Documents

This AIA refers to several provincial guidance documents, materials, and technical criteria that are frequently considered when preparing an AIA. These guidance documents are meant to inform and assist planning authorities and decision-makers when implementing the policies of the *PPS*. The guidance documents also provide practitioners with direction on what the Province considers important and how studies such as an AIA are to be undertaken. As stated in the *PPS*, "Information, technical criteria and approaches outlined in provincial guidance are meant to support implementation but not add to or detract from the policies of this Provincial Planning Statement".

1.3 Qualified Professionals

The Ontario Ministry of Agriculture, Food and Agribusiness and the Ministry of Rural Affairs (formerly combined and referred to as OMAFRA) prepared the draft Agricultural Impact Assessment Guidance Document and published it in 2018. This document provides guidance on how to prepare an AIA and the qualifications practitioners must have in order to prepare an AIA. It states that qualified persons should have knowledge in:

- Agri-businesses, agricultural supply chain linkages, rural/agricultural economic development in Ontario, and within the GGH, the *agri-food network*, where relevant;
- Rural and agricultural land use planning;

- Canada Land Inventory (CLI) classifications of capability for agriculture assessment and, where relevant a practical understanding of soil science, including the ability to review technical information from non-agricultural disciplines and assess its relevance and utility in identifying potential agricultural impacts; and
- Assessment and evaluation of the potential effectiveness of agricultural impact mitigation measures to reduce impacts.

On Page 10, the guidance document goes on to say that Qualified Persons (QPs) "should have demonstrable experience evaluating and assessing agricultural impacts and university or college degree(s) in one or more of the following: agriculture, soil science, geoscience, landscape architecture, resource management-related disciplines, environmental-related disciplines, agricultural engineering, or land use planning."

Also on Page 10, the guidance document states that the authors of the AIA, and those contributing to it, should have a "relevant academic base, Ontario experience, and preferably membership in a professional organization with a code of ethics and ongoing professional development requirements". As an example of such a professional organization, it specifically refers to the Ontario Institute of Agrologists (OAI) and registered professional agrologists (P.Ag.). All QPs should have demonstrated experience providing objective, professional judgment, advice, and testimony as an expert witness.

Colville Consulting Inc. was established in 2003 and provides agricultural and environmental consulting services to both private and public sector clients throughout Ontario. Colville Consulting Inc. has extensive experience preparing Agricultural Impact Assessments for proposed developments related to settlem*ent area* boundary expansion applications across the province of Ontario.

1.4 Description of Proposed Development

While there currently is no proposed site plan available for the Subject Lands, the proposed *development* seeks to expand the *settlement area* for the purposes of establishing employment uses. Should the lands be added, it is anticipated that they would form part of a future phase of the Premier Gateway Employment Area, which currently exists to the south. Potential land uses would vary from light/heavy industrial and/or employment supportive commercial uses.

1.5 Purpose of Study

An AIA is one of several studies that are required to be submitted in support of an Official Plan Amendment (OPA) for *settlement area* boundary expansion (SABE) to include the Subject Lands within the Urban Boundary. It is required to address Halton Region's Official Plan Policy Section 77, which requires that an AIA investigate the "potential impact of urban development on existing agricultural operations, including the requirement for compliance with the Minimum Distance Separation formulae where an agricultural operation is outside the Urban Area." Provincial policy documents also require that an AIA be completed whenever non-agricultural development is proposed in a prime agricultural area.

This AIA has been prepared in accordance with OMAFRA's Draft Agricultural Impact Assessment (AIA) Guidance Document (2018) and Halton Region's Agricultural Impact Assessment Guidelines (2014). The AIA assesses and evaluates the potential impacts of the proposed development on agricultural operations, the farming community, and the broader *Agricultural System*. In cases where impacts cannot be avoided,

the AIA recommends ways to mitigate adverse impacts. The AIA also assesses whether the proposed development is consistent with provincial, regional, and municipal agricultural policies.

1.6 Study Area

To be consistent with the draft Agricultural Impact Assessment Guidance Document (2018), the AIA must identify a Primary Study Area and a Secondary Study Area. For this AIA, the Primary Study Area (PSA) includes the Subject Lands, while all lands within 1.5 km (1,500 m) of the PSA boundaries comprise the Secondary Study Area (SSA). Figure 1 shows the Study Area, which includes the Primary (Subject Lands) and Secondary Study Areas.

1.6.1 Primary Study Area – Subject Lands

The PSA (i.e., Subject Lands) are approximately 41.12 ha in size. The majority of these lands are currently *idle* and contains, what appears to be, a small laydown yard next to Eighth Line being utilized by Halton Region for civil engineering activity.

1.6.2 Secondary Study Area – Study Area

The SSA, herein referred to as the *Study Area*, includes all lands within 1.5 km (1,500 m) of the Subject Lands' boundaries. The *Study Area* is generally bounded to the north by the intersection of 5 Side Road and Ninth Line, by Ninth Line to the east, Trafalgar Road to the south, and the intersection of 5 Side Road and Trafalgar to the west.

The lands within the *Study Area* are primarily designated Prime Agricultural Area in Map 1E of the Region of Halton Official Plan. There is also a sizeable portion (shown in black on various figures within this report) of the *Study Area* that is currently part of the Provincially Approved ROPA 49 Employment Area, which is a anticipated to be an extension of the existing Premier Gateway Employment Area.

FIGURE 1
Location Map

Agricultural Impact Assessment for 0 & 8673 Eighth Line

Prepared for:

Maple Mist Development Corp.

Prepared by:

COLVILLE CONSULTING INC.

DATE: December 2024

FILE: C24046

2. SCOPE OF STUDY

Following pre-consultation discussions with the Halton Region planning staff, a Terms of Reference (ToR) for the AIA was submitted (October 28, 2024) for the Subject Lands. The ToR is provided in Appendix B of the AIA. Based on the approved ToR, the scope of the AIA is consistent with the Draft Agricultural Impact Assessment Guidance Document (2018), which includes:

- a review of applicable agricultural policies, land use information, and other background information for lands within the surrounding area (e.g., aerial photography);
- a review of data sources such as AgMaps, the Agricultural Systems Portal, and OMAFRA's digital soil resource database (for soil and CLI information, parcel fabric and land fragmentation, artificial drainage, agri-food components, etc.);
- a land use survey of all lands within one and a half kilometres (1.5 km) of the Subject Lands and a characterization of the area;
- an assessment of the *Minimum Distance Separation (MDS)* requirements for the proposed SABE using the 2017 *MDS I formula*;
- the identification of agricultural resources and investments in agricultural land improvements;
- the identification *agricultural uses*, *agriculture-related uses*, and where possible, the identification of *on-farm diversified uses*;
- an assessment of the level of fragmentation of agricultural lands in the *Study Area*;
- an assessment of alternative locations for the proposed *settlement area* boundary expansion;
- an assessment of the relative agricultural priority of the lands;
- an assessment of the potential impacts of the proposed SABE on the *Agricultural System*, agricultural resources, farm operations, and the broader *agri-food network*;
- the recommendation of potential mitigation measures that can be implemented to avoid or minimize potential impacts to the extent feasible;
- an assessment of net impacts following the implementation of recommended mitigation measures;
- an assessment of the proposed development's consistency with agricultural policies of the *Provincial Planning Statement*, the Region of Halton Official Plan, and the Town of Halton Hills Official Plan; and
- the preparation of a report summarizing our findings.

3. METHODOLOGY

The study methodology for the AIA was prepared in accordance with OMAFRA's AIA Guidance Document. It includes a review of relevant provincial and municipal agricultural policies, other agricultural-related sources of information, and the completion of field inventories. Upon compilation and assessment of the data, the potential impacts of the proposed development will be considered and recommendations to avoid and/or minimize potential impacts will be made. The AIA also assesses the proposed development's consistency with provincial and municipal agricultural policies.

3.1 Background Data Collection

The following information sources were reviewed for this study. A more detailed list of the information sources reviewed is provided in Section 11 of this report.

- *Provincial Planning Statement* (2024);
- Region of Halton Official Plan and Land Use Schedules (2024);
- Town of Halton Hills Official Plan and Land Use Schedules (2024 Consolidation);
- Soils of Halton County - No. 43 of the Ontario Soil Survey, 1971;
- OMAFRA's digital soil Resource Database to obtain soil series and CLI agricultural capability mapping and data;
- OMAFRA's The Minimum Distance Separation (MDS) Document: Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks. Publication 853 (2016);
- OMAFRA's Artificial Drainage Systems mapping;
- OMAFRA's AgriSuite, AgMaps and Agri-Systems databases;
- Halton Regional Official Plan Agricultural Impact Assessment (AIA) Guidelines Document (2009);
- OMAFRA's Draft Agricultural Impact Assessment (AIA) Guidance Document (2018); and
- Ortho-rectified, digital aerial photography viewed using Google Earth™.

Aerial photography covering the *Study Area* and the parcel fabric were examined to assess the presence of *non-agricultural land uses*, *agricultural uses*, *agriculture-related uses*, *on-farm diversified uses*, and the level of fragmentation based on the lot fabric. This review will provide a general impression of the agricultural activity and level of agricultural investments in the area surrounding the Subject Lands.

3.2 Field Inventories

The field inventories were completed on October 8, 2024. Field inventories included a reconnaissance-level land use survey of the surrounding area to identify agricultural operations, relative level of investment in agriculture, the cropping pattern observed, and the mix of land uses within the Subject Lands and *Study Area*. Information required to calculate the *MDS I* setback requirements was also collected during the land use survey.

3.2.1 Land Use Survey

The land use survey identified the number and type of *agricultural uses* (both existing and *retired*), *agriculture-related uses*, *on-farm diversified uses* within the area, and the extent and type of *non-agricultural land uses* in the area. Field crops observed were identified and mapped. Visual evidence of agricultural land improvements was recorded where identified. Visual evidence of structural deterioration of agricultural buildings was also noted.

3.2.2 MDS Calculations

The *MDS* is a land use planning tool developed by OMAFRA to minimize land use conflicts and nuisance complaints arising from odours generated by livestock operations. The *MDS* calculates a recommended separation distance between a *livestock facility* or *manure storage* and other land use(s). The most recent version of the *MDS* guidelines, The Minimum Distance Separation (MDS) Document, Publication 853 (2016), came into effect on March 1st, 2017.

The *MDS* uses two separate formulae depending on the type of land use proposed; *MDS I* and *MDS II*. The *MDS I formula* is used when a proposed new non-agricultural *development* is proposed in proximity to *livestock facilities*. The *MDS II formula* is used to calculate the distance from proposed new, enlarged, or remodeled *livestock facilities* and existing or approved *development*.

The *MDS I formula* is required for the proposed development. The information required by the *MDS I formula* was obtained through a combination of sources. As per the MDS Guidelines, Colville attempted to gather information directly from the landowner/tenant. Where landowners could not be contacted or were not available, self-addressed envelopes were left in mailboxes of potential livestock operations. However, due to the amount of active construction within the *Study Area*, increased instances of "No Trespassing" signs and closed gates were observed.

To determine the *minimum distance separation* requirements, we used OMAFRA's Agricultural Planning Tools Suite (AgriSuite). It provides the most up to date software developed by OMAFRA to calculate the *MDS I* requirements for the *livestock facilities* and *unoccupied livestock facilities* that are structurally sound and capable of housing *livestock*. To determine the *MDS I* setback requirements, specific information regarding each *livestock facility* is required. This includes:

- the type(s) of *livestock* housed in the facility;
- the maximum capacity of the barn housing *livestock*;
- the type(s) of *manure storage* facility;
- the size of the property upon which the *livestock facility* is located; and
- the type of land use(s) proposed.

This information was collected for all livestock facilities (active and retired). In cases where we were not able to collect information directly from the landowner, we used visual observations of the *livestock facility* and determined the most likely type of livestock housed and the type of manure system used. These observations were supplemented with aerial photography and web mapping tools such as Google Earth. Barn capacity and lot size were determined using these on-line mapping tools.

The *MDS* only applies to land uses proposed outside of the existing *settlement area* boundary. This means that any livestock operations that have been identified within the current approved employment lands will not have an enforceable setback from its barn or *manure storage*.

3.3 Evaluation of the Agricultural System

An *Agricultural System* includes a continuous and productive land base comprised of prime agricultural areas, including specialty crop areas, and *rural lands*, as well as a complementary *agri-food network* that together enable the agri-food sector to thrive. An evaluation of the *Agricultural System* and associated features within the *Study Area* was completed through a reconnaissance level land use survey on October 18, 2024, and online review to assist in identifying agricultural related features.

Potential features identified include regional infrastructure and transportation networks, on-farm buildings and infrastructure, agricultural services, as well as small towns and hamlets that are supportive of agriculture and are important to the viability of the agri-food sector. The evaluation of the *Agricultural System* within the *Study Area* is used to identify the features and provide insight into the significance of those features on the overall *Agricultural System* within the area.

3.4 Evaluation of Alternative Locations

The *PPS* directs *settlement area* boundary expansion to avoid prime agricultural areas, where possible. Where prime agricultural areas cannot be avoided, policy directs development to lower priority agricultural lands. Therefore, an evaluation of potential alternative locations in the form of an Alternative Site Assessment was completed as a part of this AIA. The area evaluated as potential for alternative site locations were along the entirety of the employment land expansion that was most recently approved as part of ROPA 49 and includes lands both presently designated prime agricultural and those that are not.

3.5 Evaluation of Agricultural Priority

The *PPS* directs development to "lower priority agricultural lands" when prime agricultural areas cannot be avoided. Although the *PPS*, nor other provincial planning documents, do not specifically define "lower priority agricultural lands", there are a number of considerations used by OMAFRA to determine the 'agricultural priority' of an area. These considerations include criteria such as the current land use, amount of capital investment in agricultural infrastructure, amount of land under active cultivation, existing degree of lot fragmentation to the surrounding agricultural land base, and proximity to incompatible (e.g., urban) land uses. This AIA considers these criteria to assess the agricultural priority of the Subject Lands.

3.6 Identification of Potential Impacts and Mitigation Measures

Potential impacts of the proposed development were identified following an assessment of the agricultural resources on and adjacent to the Subject Lands. Direct impacts are those that directly impact the Subject Lands and include:

a) Interim or permanent loss of agricultural land, including the quality and quantity of farmland lost;
b) The type of *agricultural*, *agriculture-related* or *on-farm diversified uses* being lost and the significance this has for supporting other agricultural production in the surrounding area;
c) The loss of existing and future farming opportunities;

d) The loss of infrastructure, services or assets important to the surrounding agricultural community and agri-food sector;
e) The loss of agricultural investments in structures and land improvements (e.g. artificial drainage);
f) The disruption or loss of function to artificial drainage and irrigation installations; and
g) Changes to the soil drainage regime.

Indirect impacts can negatively affect adjacent lands, farm operations and farm practices. They include:

a) Fragmentation of agricultural lands and operations;
b) *Minimum Distance Separation* changes (where applicable) that will constrain future farm operations;
c) Changes to surface drainage features which could influence adjacent lands;
d) Changes to landforms, elevations and slope that could alter microclimatic conditions (e.g. modification to slopes that may reduce or improve cold air drainage opportunities and changes to elevation may have an impact on diurnal temperatures);
e) Changes to hydrogeological conditions that could affect neighboring municipal or private wells, sources of irrigation water and sources of water for livestock;
f) Disruption to surrounding farm operations, activities and management (e.g. temporary loss of productive agricultural lands, cultivation, seeding, spraying, harvesting, field access, use of road network);
g) The potential effects of noise, vibration, dust, traffic and vandalism and trespassing on agricultural operations, lands, activities and investments;
h) Potential compatibility concerns between agricultural operations employing *normal farm practices* and new non-farm development (e.g. nuisance complaints); and,
i) The inability or challenges to move farm vehicles and equipment along roads due to increased traffic caused by haul routes, changes in road design.

Mitigation measures will then be developed for both direct and indirect impacts identified, which avoid or minimize potential impacts on the *Agricultural System*.

3.7 Assessment of Consistency with Agricultural Policies

All planning decisions must be consistent with the *PPS* and conform to applicable provincial land use plans. Municipalities also have their own agricultural policies which the proposed development must adhere to. The AIA has included a review of applicable provincial and municipal agricultural policies to assess the consistency of the proposed development with the applicable agricultural policies.

4. AGRICULTURAL POLICIES

4.1 Provincial Planning Statement (2024)

Land use policy and development in Ontario are directed by the policies within the *Provincial Planning Statement.* The *PPS* was issued under the authority of Section 3 of the Planning Act and came into effect on October 20, 2024. Section 3 of the Planning Act states that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act.

4.1.1 Prime Agricultural Areas

Section 4.3 of the *Provincial Planning Statement* specifically deals with agricultural policy. Section 4.3.1.2 states that "As part of the agricultural land base, prime agricultural areas, including specialty crop areas, shall be designated and protected for long-term use for agriculture". The *Provincial Planning Statement* defines prime agricultural areas as areas where *prime agricultural lands* predominate. *Prime agricultural lands* include specialty crop areas and Canada Land Inventory (CLI) Classes 1, 2, and 3 soils, in this order of priority for protection.

4.1.2 Policies for Removal of Lands from Prime Agricultural Areas

Policy 4.3.4.1 of the *Provincial Planning Statement* states that "Planning authorities may only exclude land from prime agricultural areas for expansion of or identification of settlement areas in accordance with policy 2.3.2."

Policy 2.3.2.1 states that "in identifying a new settlement area or allowing a settlement area boundary expansion, planning authorities shall consider the following:

a) the need to designate and plan for additional land to accommodate an appropriate range and mix of land uses;

b) if there is sufficient capacity in existing or planned infrastructure and public service facilities;

c) whether the applicable lands comprise specialty crop areas;

d) the evaluation of alternative locations which avoid prime agricultural areas and, where avoidance is not possible, consider reasonable alternatives on lower priority agricultural lands in prime agricultural areas;

e) whether the new or expanded settlement area complies with the minimum distance separation formulae;

f) whether impacts on the agricultural system are avoided, or where avoidance is not possible, minimized and mitigated to the extent feasible as determined through an agricultural impact assessment or equivalent analysis, based on provincial guidance; and

g) the new or expanded settlement area provides for the phased progression of urban development."

Policy 2.3.2.2 states that "Notwithstanding policy 2.3.2.1.b), planning authorities may identify a new settlement area only where it has been demonstrated that the infrastructure and public service facilities to support the development are planned or available."

This AIA will assess the proposed SABE's consistency with policy 2.3.2 of the *PPS*.

4.2 Region of Halton Official Plan (2024)

As of July 1, 2024, the Halton Region Official Plan is no longer a Regional Plan. It is now a Local Plan of the four Local Municipalities in Halton and has been reviewed for reference. Map 1E of the Region of Halton Official Plan designates the Subject Lands as Prime Agricultural Area within the *Agricultural System*. The Regional Council supports the concept of "sustainable development", which meets the need of the present without compromising the ability of future generations to meet their own need. Planning decisions in Halton "will be made based on a proper balance among the following factors: protecting the natural environment, preserving Prime Agricultural Areas, enhancing its economic competitiveness, and fostering a healthy, equitable society."

Section 139.9 of the Official Plan outlines policy regarding *prime agricultural areas* and states that "The purpose of the Prime Agricultural Areas, as shown on Map 1E, is to assist in interpreting policies of this Plan and to assist the City of Burlington and the Towns of Milton and Halton Hills in developing detailed implementation policies for their respective Official Plans."

Section 139.9.2 states in part that "it is the policy of the Region to:

2. Within the Greenbelt Plan Area, prohibit the redesignation of land within Prime Agricultural Areas to permit non-agricultural uses, except where permitted by the Greenbelt Plan.
3. Outside the Greenbelt Plan Area, permit the removal of land from Prime Agricultural Areas only where the following have been demonstrated through appropriate studies to the satisfaction of the Region:
    a) necessity for such uses within the planning horizon for additional land to be designated to accommodate the proposed uses;
    b) amount of land area needed for such uses;
    c) reasons for the choice of location;
    d) justification that there are no reasonable alternate locations of lower capability agricultural lands;
    e) no negative impact to adjacent agricultural operations and the natural environment;
    f) there are no reasonable alternatives that avoid Prime Agricultural Areas as shown on Map 1E; and
    g) the land does not comprise a specialty crop area."

Section 77 of the Official Plan states in part that it is the policy of the Region to "Require the Local Municipalities to prepare Area-Specific Plans or policies for major growth areas, including the development or redevelopment of communities. The area may contain solely employment lands without residential uses or solely an Intensification Area. Such plans or policies shall be incorporated by amendment into the Local Official Plan and shall demonstrate how the goals and objectives of this Plan are being attained and shall include, among other things:

q) an Agricultural Impact Assessment on potential impact of urban development on existing agricultural operations, including the requirement for compliance with the Minimum Distance Separation formulae where an agricultural operation is outside the Urban Area."

This AIA addresses Section 77 and Section 139.9.2 2 & 3 for the land in the Subject Lands and *Study Area*.

4.3 Town of Halton Hills Official Plan

Schedule A1 of the Town of Halton Hills Official Plan designates the Subject Lands as Agricultural Area, within the Agricultural/Rural Area of the Plan. Section A3.3.1 states that the Agricultural Area designation "applies to lands that are predominantly utilized for agricultural purposes, and which have an agricultural character. The Agricultural Area primarily consists of lands that are classified as Class 1, 2, or 3 soils according to the Canada Land Inventory. The lands within this designation are considered by this plan to form a major component of the Town's Prime Agricultural Area."

Section G2.3 outlines the requirements for expansion of the *settlement area* boundary, and states that "In addition to the requirements of the Regional Official Plan, the expansion of any urban boundary may only be considered provided that:

a) the expansion area serves as a logical extension to the existing built-up area;
b) the expansion area can be easily integrated with the fabric of the existing built-up area;
c) the expansion area can be appropriately services;
d) an appropriate housing mix, as determined by the Municipal Housing Statement, is provided for on the lands;
e) new employment lands are an integral component of the expansion;
f) the lands can be easily accessed by existing arterial roads and will not contribute to traffic congestion within the existing community;
g) prime agricultural lands shall only be included if no reasonable alternatives exist;
h) the expansion area shall conform with the 'environment-first' objectives of this Plan;
i) the lands are not located within the *Protected Countryside Area* designation; and,
j) the scale of the expansion is in keeping with the Community Vision, Goals, and Strategic Objectives of this Plan."

This AIA will assess the proposed SABE's consistency with Section G2.3 g) of the Town of Halton Hills Official Plan.

5. STUDY FINDINGS

5.1 Physiography

The Subject Lands are located within the Peel Plain Physiographic Region (Chapman and Putnam, 1984). This physiographic region lies between the South Slope to the north, south, and east, and the Niagara Escarpment to the southwest. The Peel Plain is a level-to-undulating tract of clayey soils with a gradual and fairly uniform slope toward Lake Ontario. The *morainal till* is derived predominantly from the underlying shale and limestone bedrock. Although there is some well-drained soil associated with the Region, according to Chapman and Putnam, the dominant soil is the imperfectly drained Peel clay. Peel clay soils are productive soil when surface drainage is enabled.

Until 1940, practically all the land in the Peel Plain was used for agriculture. Now, a large portion of this land has been developed for urban related development or lies fallow. Where the lands are cultivated, they are typically leased by farmers and used for cash crop production.

5.2 Climate

Climate data is available through Environment Canada's National Climate Data and Information Archive's online database. Climate Normals and Extremes for Burlington Station (1991-2020) were obtained from the online database (Appendix C).

Records show that this area receives an average of 806.8 mm of precipitation annually (Environment Canada website); 697.4 mm of rainfall and 114.5 cm of snowfall. The daily average temperature ranges from a high of 22.1°C to a low of -5.0°C.

The Ministry of Agriculture and Food Factsheets provide data on crop production and growing seasons across Ontario. The rate of development of crops from planting to maturity is mainly dependent upon temperature. Regions within the area begin to experience average temperatures greater than 10°C starting April 29th, before reaching temperatures greater than 12.8°C for three consecutive days around May 15th. During this time, and up until the season's average ending date, October 8th, the area accumulates an average of between 2700 and 3200 crop heat units (CHU).

On average, the last spring frost in the area occurs on May 3rd. The first fall frost is expected on October 8th. This provides the surrounding area with a growing period of between 150 and 170 days. The climate in the area provides a good overall growing period that can support a wide range of crops.

5.3 Agricultural Crop Statistics

Agricultural crop statistics are available from OMAFRA and Statistics Canada's Agriculture and Food Statistics Census of Agriculture. The Subject Lands are located within the Census West Ontario Region, Halton Region. Agricultural crop statistics were obtained from the online database and are included in Appendix D. This data provides a general overview of agriculture and agri-food operations in the area but is unlikely to be inclusive of all operations present at the time of this report.

The County and Township Agricultural Profile for Halton includes data from 2011, 2016, and 2021 census periods. The total number of farms in Halton Hills decreased from 180 to 147 from 2016 to 2021, while total cropland increased from 30,614 acres in 2016 to 31,830 acres in 2021.

Field crops grown in Halton Hills include winter wheat, oats for grain, barley for grain, mixed grains, corn for grain, corn for silage, hay, soybeans, and potatoes. Field crop production between 2016-2021 decreased for barley for grain, corn for grain, corn for silage, and hay, while winter wheat, oats for grain, mixed grains, and potatoes all increased. Fruit crops in Halton Hills include apples, peaches, and strawberries. Fruit crop acreage decreased from 121 acres to 72 acres, from 2016 to 2021. Vegetable crops include sweet corn, tomatoes, green peas, and green or wax beans. Vegetable crop acreage increased from 442 acres to 458 acres from 2016 to 2021.

5.4 Specialty Crop Areas

The *PPS* defines a *Specialty Crop Area* as: "areas designated using guidelines developed by the province, as amended from time to time. In these areas, specialty crops are predominantly grown such as *tender fruits* (peaches, cherries, plums), grapes, other fruit crops, vegetable crops, greenhouse crops, and crops from agriculturally developed organic soil, usually resulting from:

a) soils that have suitability to produce specialty crops, or lands that are subject to special climatic conditions, or a combination of both;

b) farmers skilled in the production of specialty crops; and

c) a long-term investment of capital in areas such as crops, drainage, infrastructure and related facilities and services to produce, store, or process specialty crops."

There are two *specialty crop areas* recognized by the Province through the Greenbelt Plan: the Niagara Peninsula Tender Fruit and Grape Area and the Holland Marsh. The province also recognizes *specialty crop areas* identified by municipalities which have included *specialty crop areas* in their land use schedules. Neither the Subject Lands, nor any portion of the *Study Area*, are located within a *specialty crop area*. Additionally, the Subject Lands do not exhibit any of the characteristics of a *specialty crop area*.

5.5 Regional Soils

5.5.1 Soil Series

The *Soils of Halton County – Report No. 43* of the Ontario Soil Survey (J.E. Gillespie, R.E. Wicklund, & M.H. Miller, 1971) includes a soil map that shows the distribution of the various soil series mapping in the county. The county level survey mapped the soils at a scale of 1:63,360 which is appropriate for county level planning decisions.

The digital Provincial Soil Resource database is compiled and administered by OMAFRA and includes most of the soil surveys completed in Ontario. Much of this information is accessible from the Province's Agricultural Information Atlas (AgMaps). This is an interactive online application that enables users to obtain agricultural information for Ontario such as soils and drainage, as well as data layers from other Government of Ontario ministries (e.g., lot boundaries). The database was accessed in October 2024.

The *Soils of Halton County* mapping shows that the entirety of the Subject Lands is comprised of one soil polygon, which is consistent with online mapping reviewed. Figure 2 shows the regional scale mapping obtained from the provincial database for the *Study Areas*. The Subject Lands are entirely comprised of Chinguacousy Clay Loam soil, which is the poorly drained member of the Oneida catena.

Legend

- Subject Lands
- 1500 Meter Study Area
- Approved Employment Area (ROPA 49)

Soil Symbol

Soil Sereis Name → **OID** ← Stoniness
Slope Class → **D2**

Soil Series

OID - Oneida Soils
CGU - Chinguacousy Soils
JDD - Jeddo Soils

Slope Classes (%)

A a - Level slopes (0.0 - 0.5%)
B b - Nearly level slopes (0.5 - 2.0%)
C c - Very Gentle slopes (2.0 - 5.0%)
D d - Gentle slopes (5 - 9%)
E e - Moderate slopes (9 - 15%)
F f - Strong slopes (15 - 30%)
G g - Very Strong slopes (30 - 45%)
Simple Slopes (uniform, lengths > 50 metres) denoted in upper case
Complex Slopes (short, irregular slopes) denoted in lower case

Stoniness/Rockiness

0 - Non
1 - Slightly
2 - Moderately
3 - Very
4 - Exceedingly
5 - Excessively

CLI Class

- Class 1
- Class 3

CLI Subclass

D - Undesirable soil structure/low permeability
T - Topography
W - Excess water

0 — 500 M — 1KM

1:14,825

Figure 2
Regional Soils & CLI Mapping

AIA for 0 & 8673 Eighth Line

Prepared for:

Maple Mist Development Corp.

Prepared by:

COLVILLE CONSULTING INC.

DATE: December 2024

FILE: C24046

Oneida Series

The Oneida soils are the moderately well-drained members of the Oneida *catena* and occur in association with the imperfectly drained Chinguacousy and poorly drained Jeddo soils. These soils have developed on fine textured glacial till. The till is largely composed of ice-ground materials from the underlying Ordovician rock formations.

The surface layer is friable and easily tilled except on eroded surfaces where plowing has incorporated the subsoil into the surface *horizon*. Where present, the Ae *horizon* is a whitish color when dry and generally 7 to 10 cm thick. In most cultivated areas, the Ae *horizon* has been incorporated into the Ap horizon and is not present in the *soil profile*. The B *horizon* is a reddish brown clayey textured *horizon* (Bt horizon) and overlies the Ck *horizon*. The Ck *horizon* is grayish brown in color and is highly calcareous. The permeability of both the B and C is slow due to the high bulk densities, low pore space volume and clayey textures.

The landscapes associated with the Oneida soils vary from the strongly dissected benches immediately below the escarpment having smooth to nearly level topography.

Chinguacousy Series

The Chinguacousy soils are the imperfectly drained members of the Oneida *catena* and have developed in the clay and silty clay glacial till deposits. These tills were derived principally from locally occurring brown shales, sandstones, and fossiliferous limestone. In Halton Region, these tills are found mostly below the escarpment. The Chinguacousy soils are found on the gently sloping positions in the landscape, the Oneida soils occupy the steeper slopes, and the poorly drained Jeddo members of the *catena* are found in slightly depressional sites.

Chinguacousy clay loam is mapped within the Subject Lands and the *Study Area*, the surface-cultivated layer is dark grayish brown. It is generally friable and easily worked and the underlying Ae *horizon* is light gray in color when dry and mottled closer to the Bt *horizon* that is brown angular blocky material. The underlying calcareous till is at depths ranging from 45 to 75 cm below the surface.

The large acreage of Chinguacousy soils in the Region makes them very important agricultural soils in this area. They are exceptional soils for general farming and are used extensively to produce hay, oats, barley, fall wheat, and ensilage corn.

Jeddo Series

Jeddo soils are found below the escarpment in Milton, Burlington and Oakville occupying depressional areas in association with the Oneida and Chinguacousy soils. The soil parent material is a slightly stony calcareous clay till. The surface plow layer is very dark brown and contains a moderate amount of organic matter. This *horizon* is underlain by a thick, mottled, dark grayish brown gleyed clay loam *horizon* (Bg). The depth to carbonates can vary from 43 to 152 cm.

The surface textures of the Jeddo found within the *Study Area* are clay loam. The Jeddo soils are mainly found in narrow, shallow drainage basins or in the depressional areas associated with undulating or rolling topography. They occur also as *inclusions* in the areas mapped as Chinguacousy.

The range of crops for these soils that may be grown successfully under natural drainage is limited to hay and some late-sown grain crops.

Table 1. Regional Soil Series for Subject Lands		
Soil Series	**Area (Ha)**	**% of Subject Lands**
Chinguacousy Clay Loam	41.12	100.00%
Totals	**41.12**	**100.00%**

Table 2. Regional Soil Series for Study Area		
Soil Series	**Area (Ha)**	**% of Study Area**
Chinguacousy Clay Loam	720.8	63.72%
Oneida Clay Loam	283.3	25.04%
Jeddo Clay Loam	127.1	11.24%
Totals	**1131.2**	**100.00%**

5.5.2 CLI Agricultural Land Classification

The Canada Land Inventory (CLI) is an interpretative system for assessing the effects of climate and soil characteristics on the limitations of land for growing *common field crops*. The CLI system has seven soil classes that descend in quality from Class 1, which has few limitations, to Class 7 soils which have no agricultural capability for *common field crops*. Class 2 through 7 soils have one or more significant limitations, and each of these are denoted by a capability subclass. There are thirteen subclasses described in CLI Report No. 2 (1971). Eleven of these subclasses have been adapted to Ontario soils. More information regarding the CLI Classification system is provided in Appendix E.

Table 3 outlines the CLI Capability Classes for the Subject Lands. As shown in the table, the CLI Capability Classes for the Subject Lands in entirely Class 1.

Table 4 outlines the CLI Capability Classes for the *Study Area*. As shown in the table, the CLI Capability Classes for the *Study Area* includes CLI Classes 1 and 3. CLI Class 1 soils represent the majority of the *Study Area* (63.72%), while Class 3 soils represent the remainder of the area (36.28%). The main limitations for common field crop production in the *Study Area* are related to slow internal drainage (D), adverse topography (T), and excessive soil moisture (W).

Table 3. Regional CLI Capability Ratings for Subject Lands			
Soil Series	**CLI Rating**	**Area (Ha)**	**% of Subject Lands**
Chinguacousy Clay Loam	1	41.12	100.00%
Totals		**41.12**	**100.00%**

Table 4. Regional CLI Capability Ratings for Study Area			
Soil Series	**CLI Rating**	**Area (Ha)**	**% of Study Area**
Chinguacousy Clay Loam	1	720.8	63.72%
Oneida Clay Loam	3T	283.3	25.04%
Jeddo Clay Loam	3DW	127.1	11.24%
Totals		**44.57**	**100.00%**

5.6 Land Use

A reconnaissance level land use survey was completed on October 18, 2024. The land use survey identified the number and type of *agricultural uses* (both active and *retired*), *agriculture-related uses* and *on-farm diversified uses* within the 1,500 m *Study Area*. The land use survey also identified the extent and type of *non-agricultural uses* in the *Study Area*. The crop types observed within the *Study Area* were recorded and mapped; any farm field access locations were also recorded. Inactive *livestock* operations were evaluated to determine whether they should be considered an *unoccupied livestock facility* or a *remnant* farm. *Remnant* farms have no infrastructure that is suitable for housing *livestock*, whereas the infrastructure for an *unoccupied livestock facility* is still in a condition that could permit the keeping of *livestock* with minimal investment. Photographs taken during the land use survey are provided in Appendix F.

The purpose of the land use survey is to document the mix of *agricultural* and *non-agricultural uses* in the *Study Area*; identify agricultural operations that may be sensitive to the introduction of new land uses; and identify *livestock facilities* to calculate the *MDS* setback requirements. All observed land uses are numbered, and short descriptions of these operations are included in the land use survey notes in Appendix G.

The land use survey identified eleven *agricultural uses*, which include (a *beef operation*, *remnant livestock* facilities, *remnant* farms, a *cash crop* operation, equestrian operations, greenhouses and an orchard), and fifteen *non-agricultural uses* (commercial, institutional and interim light industrial), and *non-farm residential* uses. No *on-farm diversified uses* or *agriculture-related uses* were observed. Figure 3, the Land Use Mapping depicts each land use in detail along with cropping pattern for the area.

5.6.1 Agricultural Uses

The *PPS* definition of *agricultural uses*: "means the growing of crops, including nursery, biomass and horticultural crops; raising of livestock; raising of other animals for food, fur or fibre, including poultry and fish; aquaculture; apiaries; agro-forestry; maple syrup production; and associated on-farm buildings and structures, including, but not limited to livestock facilities, manure storages, value-retaining facilities and accommodation for full-time farm labour when the size and nature of the operation requires additional employment."

Farm types were noted and identified as either active or *retired* (i.e., *unoccupied*) *livestock facilities*, *cash crop*, or *hobby farms*. Those inactive or *retired farm operations* were evaluated to determine whether they should be considered as either an *unoccupied livestock facility* or as a *remnant* farm. *Remnant* farms have no infrastructure that is suitable for housing *livestock* whereas the infrastructure for an *unoccupied livestock facility* is still in a condition that could permit the keeping of *livestock* with minimal investment.

Legend

- Subject Lands
- 1500 Meter Study Area
- Approved Employment Area (ROPA 49)

- Cover Crop
- Corn
- Pasture/Forage
- Cultivated
- Idle
- Pumpkins
- Fallow
- Scrub
- Thicket/Forested
- Hay
- Soy Bean
- Active Construction (non-ag)

- Non-farm Residence
- Hobby Farm
- Retired Farm
- Active Farm
- Cash Crop Farm
- Equestrian Operation
- Commercial
- Remnant Farm
- Greenhouse
- Institutional
- Interim Light Industrial

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Figure 3
Land Use Mapping

AIA for 0 & 8673 Eighth Line

Prepared for:

Maple Mist Development Corp.

Prepared by:

COLVILLE CONSULTING INC.

DATE: December 2024	FILE: C24046

As shown in Figure 3, the majority of the lands within the *Study Area* are in common field crop production. These crops include corn, soybeans, cereal grains (e.g. spring wheat) and *pasture/forage* crops. *Forage* crops typically consist of hay and haylage. These crops are typically associated with traditional *cash crop* and *livestock* farm operations.

Within the *Study Area*, we have identified eleven *agricultural uses*, of which one is an active *beef operation* (#10), an active orchard (#19), two equestrian operations (#18 and #20), a greenhouse/garden centre (#8), and one active *cash crop* operation (#16). There are also four *retired farm operations* (#6, #13, #15 and #17) and one confirmed *retired livestock* operation (#9) that no longer appears to be suitable for housing *livestock*. We identified fields in active agriculture production on the Subject Lands, but no farm structures were identified.

5.6.2 Agriculture-Related Uses

Agriculture-related uses are farm-related commercial and industrial uses. As defined in the *PPS*, these are uses "that are directly related to farm operations in the area, support agriculture, benefit from being in close proximity to farm operations, and provide direct products and/or services to farm operations as a primary activity". These uses may include:

- retailing of agriculture-related products (e.g., farm supply co-ops, farmers' markets, and retailers of value-added products like wine or cider made from produce grown in the area);
- *livestock* assembly yards;
- farm equipment repair shops;
- industrial operations that process farm commodities from the area such as abattoirs, feed mills, grain dryers, cold/dry storage facilities and fertilizer storage facilities, which service agricultural area;
- distribution facilities;
- food and beverage processors (e.g., wineries and cheese factories); and
- agricultural biomass pelletizers.

No *agriculture-related uses* were identified.

5.6.3 On-Farm Diversified Uses

The *PPS* defines *on-farm diversified uses* as "uses that are secondary to the principal agricultural use of the property and are limited in area. On-farm diversified uses include, but are not limited to, home occupations, home industries, Agri-tourism uses, and uses that produce value-added agricultural products."

No *on-farm diversified uses* were identified.

5.6.5 Land Use Summary

Table 7 below summarizes the types of land uses observed within the *Study Area*.

Table 5. Summary of Land Uses in the Study Area			
Land Use Types	**Total #**	**Active**	**Retired or Remnant**
Agricultural Uses	11	2 – Equestrian Operation 1 – Beef Operation 2 – Active Farms (Orchard & Cash Crop) 1 – Greenhouses	3 – Remnant 1 – Unoccupied Livestock Facilities
Agriculture-related Uses	0	0	0
On-farm Diversified Uses	0	0	0
	Total #	**Type**	
Non-Agricultural	132	6 – Interim Light Industrial 1 – Institutional 8 – Commercial 117 – Non-Farm Residences	

5.6.6 Cropping Pattern

The cropping patterns were determined by identifying crop stubble and other identifying features during the land use survey. The majority of the *Study Area* is *cultivated* for agricultural crops. The crop types observed in the area during the land use survey included corn, soybeans, hay, pumpkins, cover crops and orchard crops.

5.7 Land Improvements

OMAFRA's Agricultural Information Atlas (AgMaps) provides artificial drainage mapping for the province. This online tool was accessed to obtain drainage mapping for the Subject Lands and *Study Area*. Figure 4 below shows the drainage improvements within the Subject Lands and *Study Area*.

5.7.1 Drainage Improvements on the Subject Lands

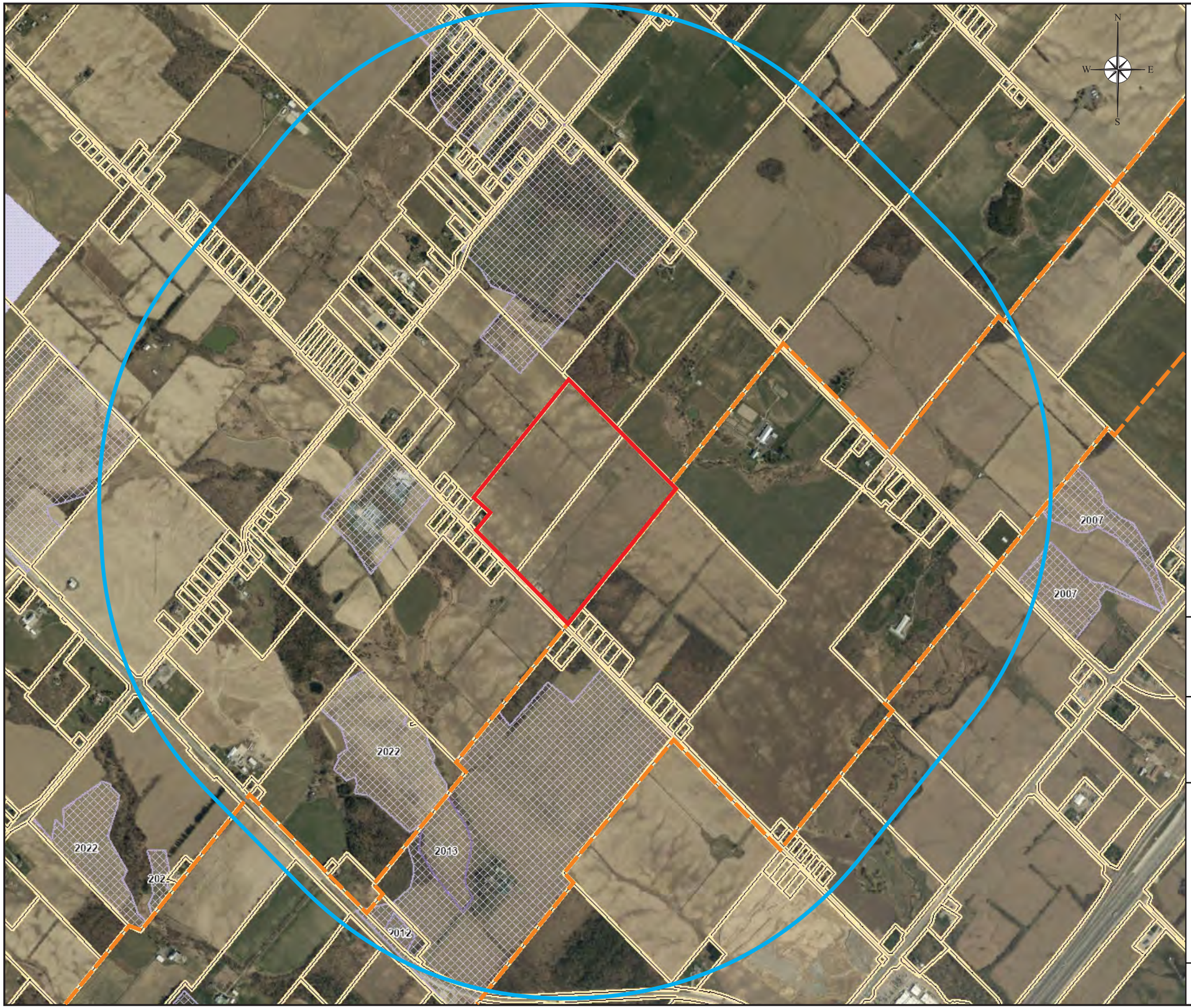
According to OMAFRA's online mapping tool AgMaps, the Subject Lands have not been tile drained and no constructed drains transverse the property.

5.7.2 Drainage Improvements in the Study Area

According to OMAFRA's online mapping tool AgMaps, there are approximately 163.69 hectares of systemic tile drainage present within the *Study Area*. The majority of the systemic tile drainage present in the *Study Area* is located to the southwest of the Subject Lands, with smaller areas to the north. Installation dates for these areas range from 2007 to 2022. No constructed drains transverse the area.

5.7.3 Other Land Improvements

No other investments in land improvements within the Subject Lands nor *Study Area* were identified using the AgMaps Portal or during the land use survey.



Legend

- Subject Lands
- Study Area
- Approved Employment Area (ROPA 49)

Agricultural Tile Drainage

- Random
- Systematic

Figure 4
Tile Drainage Mapping

AIA for 0 & 8673 Eighth Line

Prepared for:
Maple Mist Development Corp.

Prepared by:
COLVILLE CONSULTING INC.

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5.8 Fragmentation of Agricultural Lands

Fragmentation of agricultural lands can have a negative impact on the viability of agricultural lands and its long-term preservation for agricultural purposes. Fragmentation of farmlands can lead to a reduction in the economic viability of the agricultural area by reducing the efficiency of which lands are farmed and increasing the operating costs for farmers who must rely on several small and separated parcels. Larger farm parcels can accommodate a wider range of agricultural activities and ensure long term viability of the property. Whereas smaller farm parcels cannot offer the same flexibility and may not be viable as standalone parcels. They generally cannot support a family farm without there being a secondary source of income (off-farm) that is required to maintain the agricultural operation.

Agricultural areas which have been fragmented also often have a higher occurrence of non-farm land uses which in turn can result in more frequent occurrences of conflict arising between farm and non-farm land uses. Agricultural areas with relatively low levels of fragmentation are considered to be more viable economically for agriculture uses and generally have fewer sources of non-farmland use conflicts. In most cases, these areas have a higher priority for protection. High levels of fragmentation in an agricultural area lower the areas agricultural priority.

The *PPS* planning policies recognize the impact of fragmentation on agricultural lands and try to minimize the fragmentation of agricultural lands for *non-agricultural uses*. For example, the *PPS* policies do not permit lot creation in *prime agricultural areas* for non-agricultural related residential purposes. New permitted *development* in *prime agricultural areas* should avoid further fragmentation of the agricultural land base whenever possible.

Based on our review of the lot fabric in the *Study Area* using AgMaps and direct observation, there is a mix of parcel sizes ranging from single residential (< 1 ha) to large agricultural sized parcels (>50 ha). The majority of parcels within the *Study Area* are not suitably sized for a variety of agricultural uses. The lands within the *Study Area* are moderately fragmented and have a high occurrence of *non-agricultural land uses*. Fragmentation of the *Study Area* is shown in Figure 5 below.

Legend

- Subject Lands
- 1500 Meter Study Area
- Approved Employment Area (ROPA 49)
- Parcel

Figure 5
Fragmentation Mapping

AIA for 0 & 8673 Eighth Line

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Maple Mist Development Corp.

Prepared by:

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DATE: December 2024	FILE: C24046

5.9 Minimum Distance Separation

The *MDS I formula* was applied to one active *livestock facility* and one *livestock facility* that may still be capable of housing *livestock* identified within fifteen hundred metres (1,500 m) of the Subject Lands. A few other potential active *livestock facilities* that were identified did not have the *MDS I formula* applied due to them being within the existing employment lands and, therefore, no longer having an enforceable *MDS* setback. The factors used to determine the *MDS I* setback requirements for these facilities include: the type of *livestock*; the maximum capacity of the barn for *livestock*; and the type of *manure storage* system. The *MDS* setback requirements are also calculated based on the type of land use proposed (i.e., Type A or B). *Settlement area* boundary expansion is a Type B land use (a high intensity use). Therefore, *MDS I* setbacks were calculated for a Type B land use.

To obtain the other factors we relied on field observations recorded during the land use survey, aerial photographic interpretation, and site-specific information provided by landowners, where possible. Attempts to speak directly to landowners were challenging due to active road construction. The lot sizes were determined using the AgMaps measuring tool. In some cases, the building capacity was estimated based on the building dimensions as measured using either the AgMaps measuring tool or the Google Earth measuring tool. The *MDS formula* is not applied to farm operations with barns that are not structurally sound and capable housing *livestock*. The *MDS formula* was not applied to farm operations with barns that did not appear structurally sound and capable housing *livestock*.

The *MDS I* setbacks are shown in Figure 6 below, with the results of the *MDS I* setback requirements summarized in Table 6. As shown in Figure 6, the proposed *development* will comply with the *MDS I formula*. The AgriSuite *MDS* reports for these operations are provided in Appendix H.

Table 6. MDS I Setback Requirements for Type B Operations

Site Number	MDS I Setback Requirement – Livestock Facility	MDS I Setback Requirement – Manure Storage	Dist. Between Livestock Facility & Subject Lands	Dist. Between Manure Storage & Subject Lands	Complies with Livestock Setback?	Complies with Manure Storage Setback?
10	426 m	426 m	1269 m	1264 m	Yes	Yes
15	299 m	N/A	1350 m	N/A	Yes	Yes

Legend

- Subject Lands
- 1500 Meter Study Area
- Approved Employment Area (ROPA 49)
- Non-farm Residence
- Hobby Farm
- Equestrian Operation
- Active Farm
- Cash Crop Operation
- Unoccupied Livestock Facility
- Commercial
- Remnant Farm
- Greenhouse
- Institutional
- Interim Light Industrial
- Minimum Distance Separation required from Livestock Facility
- Minimum Distance Separation Required From Manure Storage Area

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Figure 6
MDS Mapping

AIA for 0 & 8673 Eighth Line

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Maple Mist Development Corp.

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5.10 Economic and Community Benefits of Agriculture

Identifying the economic and community benefits associated with agriculture in the *Study Area* is an important consideration and informs the impacts associated with the proposed *development*. The agricultural and agri-food sector is one of the largest primary goods producing sectors and plays a key role in the Town's economy. According to Census of Agriculture data, the total number of farms in the Town of Halton Hills increased from 169 in 2011, to 180 in 2016, before decreasing to 147 farms in 2021. These farms employ residents throughout the Halton Hills area, contributing economically to the area and supporting the *agri-food network*.

In 2021, agriculture, forestry, fishing, and hunting industries employed approximately 305 individuals within the Town of Halton Hills, which is a slight decrease from the 355 individuals employed in 2016. There were approximately 172 agri-food businesses in 2021 within the Town of Halton Hills, which is a slight increase from the 146 agri-food businesses in 2016.

As of 2021, of the 147 total farms within the Town of Halton Hills, four farms were valued under $200,000, two farms were valued between $200,000 and $499,999, 16 farms were valued between $500,000 and $999,999, and 125 farms were valued $1,000,000 and over. Over the past three census periods, the number of farms valued at $1,000,000 and over has increased, with the number of farms valued under $1,000,000 decreasing each year.

There are a significant number of *non-agricultural land uses* located within the *Study Area*. Within the *Study Area*, eleven *agricultural uses* were identified, of which, three were identified to be *remnant* farms. This is indicative of the waning influence the agricultural sector has in the area.

With the implementation of mitigation measures to minimize indirect impacts on surrounding farm operations, it is expected that impacts from the proposed *development* will have a negligible impact on the *agri-food network* in the area.

6. ASSESSMENT OF AGRICULTURAL PRIORITY

The *PPS* directs proposed new non-agricultural *developments* to avoid locating in *prime agricultural areas* whenever possible. In many circumstances, it may not be possible or practical to avoid *prime agricultural areas*. In such cases, proposed *development* should be directed to lands with lower agricultural priority. When choosing between two or more locations with the same or similar agricultural capability, the *PPS* directs *development* to "lower priority agricultural lands." Although neither the *PPS* nor other provincial policies define "lower priority agricultural lands", there are a number of considerations used by OMAFRA to determine the 'agricultural priority' of an area. These considerations include the ability of the site to comply with the requirements of *MDS I*, current land use, amount of capital investment in agricultural infrastructure, amount of land under active cultivation, existing degree of lot fragmentation to the surrounding agricultural land base, and proximity to incompatible land uses such as urban and rural *settlement areas*.

This analysis involves an assessment of whether the lands are considered to be part of a *specialty crop area*, the soil capability relative to other lands within the *Study Area*, the level of investment in agricultural infrastructure and land improvements, the parcel size, presence of existing non-agricultural land uses, ability to minimize potential conflict (e.g., meeting the *MDS I* setback requirements), and the zoning of the parcels.

We have concluded that the Subject Lands are lower priority agricultural lands for the following reasons:

1. They are not located within a *specialty crop area* and no specialty crops are grown in the vicinity;
2. They contain no current or future investments in agricultural infrastructure and land improvements;
3. They are located in a moderately fragmented agricultural area in which there is a mix of agricultural and non-agricultural land uses. The presence and prevalence of the non-agricultural land uses increases the potential for conflict arising between agricultural and non-agricultural land uses, which in turn reduces the agricultural priority of the area;
4. The Subject Lands are located in immediately abutting the Town of Halton Hills settlement boundary and eventual future phases of the Premier Gateway Employment Area. The close proximity and high concentration of non-agricultural land uses within the urban area significantly increases the potential for conflicts with agriculture and make these lands less desirable to farm than other lands further removed from these non-agricultural influences;
5. *MDS I* setbacks can be met for the proposed *development* on the Subject Lands; and
6. The close proximity of the Town of Halton Hills Premier Gateway Employment Area and non-agricultural land uses creates potential *MDS II* setback constraints that would limit the opportunity for new or expanding *livestock* operations within the Subject Lands.

7. ASSESSMENT OF IMPACTS & RECOMMENDATIONS

Farm operations can be adversely impacted by new non-agricultural *development* on adjacent lands. Non-agricultural *development* adjacent to agricultural lands can cause disruptions to existing farm practices as a result of construction activity, an increase in non-farm traffic, incidence of trespass and vandalism, and increased levels of noise, dust, and lighting. Farmers may also experience an increase in nuisance complaints from residents and/or patrons of non-agricultural facilities. These complaints are often related to issues such as odour, light, dust, and noise generated through *normal farm practices*.

The proposed *settlement area* boundary expansion will have both direct and indirect impacts. It is unlikely that the proposed *development* will have significant, long-term negative effects on the surrounding agricultural lands and community.

7.1 Direct Impacts

7.1.1 Prime Agricultural Lands

The Subject Lands are approximately 41.12 hectares in size, all of which are *prime agricultural lands*. The *development* of the Subject Lands will result in the eventual loss of 41.12 hectares of *prime agricultural lands*. To mitigate this loss in the short-term, the Subject Lands should remain in agricultural production until the lands are to be developed.

7.1.2 Agricultural Infrastructure

There are no current agricultural operations within the Subject Lands which contain any agricultural infrastructure. These lands are currently *idle* and as a result, no agricultural infrastructure will be lost as a result of the proposed *development*.

7.1.3 Agricultural Land Improvements

No agricultural land improvements such as tile drainage have been installed on the Subject Lands. Therefore, there will be no impact to agricultural land improvements.

7.1.4 Loss of Cropland

The Subject Lands are primarily *cultivated* for the production of *common field crops*. Of the Subject Lands' 41.12 hectares, approximately 38.18 hectares of land are *cultivated*. The *development* of the Subject Lands will result in the eventual loss of these cultivatable lands. To mitigate this loss, the lands should be left in agricultural production until they are to be developed.

7.2 Indirect Impacts

Potential impacts to adjacent farm operations and farm practices are considered to be indirect impacts. These would include changes to the surface drainage that could impact adjacent lands, disruption to farm traffic and access to adjacent agricultural fields, instances of trespass and vandalism, and conflicts arising from farm odour and other nuisance complaints often received by farmers in close proximity to non-*agricultural uses*.

7.2.1 Disruption to Surficial Drainage

The *development* of the Subject Lands has the potential to cause changes in surface runoff, which can have a potential negative impact on adjacent agricultural lands. To ensure potential impacts are mitigated, a Grading Plan and Stormwater Management Plan should be prepared. Implementation of the recommendations provided in these studies will minimize or eliminate the potential impacts, which are expected to be negligible.

7.2.2 Disruption to Farm Operations

Most active agricultural operations in the *Study Area* are well removed from the Subject Lands. These farms are unlikely to experience any form of disruption to their operations. *Development* of the Subject Lands and subsequent removal of farmland may have an impact on the flexibility on some of the surrounding farm operations if they relied on the Subject Lands as an additional source of farmland to supplement their home operation. However, the adjacent lands will not be directly affected, and current farm operations will still be able to cultivate *common field crops* and other agricultural products without limitation.

New non-agricultural *development* may have an impact on the existing farm wells, irrigation ponds, and ponds or other waterbodies used to provide *livestock* with sources of water in the surrounding area. It is recommended that a Hydrogeological Study be prepared and submitted as part of a future land use approval application, which will provide recommendations to mitigate any impacts associated with these water sources.

Noise, dust, and light can have a negative impact on some farm operations. Construction may temporarily generate greater levels of noise, dust, and lighting. No sensitive farm operations were identified that would be impacted by noise, dust, and lighting. However, it is recommended that these elements be controlled and be in compliance with Ministry of Environment, Conservation and Parks (MECP) guidelines. No negative indirect impacts are anticipated from construction activity.

7.2.3 Trespass and Vandalism

Some farm operations within the *Study Area* may already have to deal with the potential for trespass and vandalism due to the close proximity of the Town of Halton Hills and Town of Milton *settlement areas,* and the abundance of *non-agricultural uses* in the surrounding area. People walking their pets in farmer's fields, crossing and damaging fences, and rutting fields with dirt bikes and all-terrain vehicles are all examples of trespass and vandalism that may occur. As a result of the potential increase in urban population and construction activities, there is also a chance that debris (litter) can end up in farmers' fields. Establishing temporary buffers, fencing, and other short-term edge planning techniques should be considered to minimize impacts.

The proposed *development* should consider the use of permanent edge-planning techniques along the new agricultural-urban interface to reduce the potential of these impacts. Edge planning techniques are discussed in further detail in Section 7.3 of this report.

7.2.4 Minimum Distance Separation

The *MDS I* setback requirements have been calculated for all *livestock facilities* capable of housing *livestock* in the *Study Area*. There are no *MDS I* constraints to the proposed *development* within the Subject Lands. The proposed *settlement area* boundary expansion will comply with the *MDS formulae*.

7.2.5 Transportation Impacts

Alongside the new urban lands to the immediate south, it is anticipated that the proposed *development* will add more non-farm traffic to roads surrounding the Subject Lands. Given the close proximity of the Town Halton Hills and Town of Milton *settlement areas* and the existing *non-agricultural uses* within the *Study Area*, it is likely that the agricultural operations in the *Study Area* have already become accustomed to non-farm traffic and modified their practices accordingly. It is unlikely that increased traffic levels from the proposed *development* will significantly impact farm operations. Increased traffic levels will have no long-term impact on these farm operations. To ensure potential impacts are mitigated, a high-level Transportation Impact Assessment has been prepared. Implementation of the recommendations provided in this study will minimize or eliminate the potential impacts, which are expected to be negligible.

7.2.6 Economic and Community Impacts

Local and regional economies and agricultural communities can be adversely impacted by the introduction of new *development* on agricultural lands as a result of the loss of farmland, fragmentation, removal of agricultural investments, commodities, services, and impacts to other farming operations.

The proposed *development* is anticipated to be beneficial to the local and regional economies through job creation. The loss of input to the agricultural economy is likely to be offset by the additional inputs to the economies associated with the proposed development.

7.2.7 Land Use Compatibility

Future *development* of the Subject Lands will result in *non-agricultural uses* in close proximity to *agricultural uses*. This in turn can create compatibility issues which can result in an increase in nuisance complaints received by farmers in close proximity to the *non-agricultural uses*. To ensure compatibility, edge planning techniques should be implemented, as further discussed below. Edge planning techniques should be focused along the northeastern edges of the Subject Lands, where *agricultural uses* predominate. No land use compatibility impacts are anticipated as a result of the proposed *development*.

7.3 Implementation of Edge Planning Techniques

The agricultural-urban interface (AUI) is typically the area where farm operations are negatively impacted the most. When *settlement area* boundary expansions are proposed, some consideration should be given to minimizing the length of the AUI. The proposed *development* creates a new agricultural-urban interface that should be given special consideration during the Secondary Plan process. However, the majority of the new AUI will not immediately abut agricultural operations or *cultivated* fields.

The Guide to Edge Planning: Promoting Compatibility Along Agriculture-Urban Edges (2015) developed by the British Columbia Ministry of Agriculture and Lands provides a basis for achieving compatibility where agricultural and urban uses interface. Edge Planning: Strategies for Rural and Urban Interface (2015) developed by MHBC for the Peel Agricultural Advisory Working Group provides a review of case study

examples and provides methods and recommendation for addressing the mitigation of conflict where *settlement areas* and *prime agricultural areas* interface. These guides recognize and address the potential negative impacts that agricultural and *non-agricultural uses* can have on one another and presents options to prevent such impacts. Edge planning techniques to reduce potential impacts on farmers and non-farmers are discussed below.

7.3.1 Subdivision design: density, road, and lot patterns

The proposed *development* layout should be designed to maximize, to the extent possible, a setback distance from the *non-agricultural uses* and farm operations. Creating a vegetated buffer between farming operations and the *non-agricultural uses* will further enhance the effectiveness of the setback. In addition to this, the consideration of lot dimensions and density, along with road and service design can help reduce impacts to adjacent farming activities and help to reduce impacts to urban land uses. Overall, the design of the proposed *development* should be directing vehicular and pedestrian traffic away from the AUI as much as possible.

7.3.2 Building design and layout

Building setbacks from the AUI can help create separation between agricultural and urban land uses. The urban-side of the AUI should consider a setback distance, rear-yard for housing, and green spaces to provide physical separation from the farmlands. Setbacks could include space for a wide, vegetated buffer. There is a range of recommended building setback distances from the AUI depending on the type of land use. The recommended setback distance from the AUI is 15 metres for commercial or industrial land uses, 30 metres for residential land uses, and 90 metres for institutional land uses.

7.3.3 Open space and landscape design

Any open space and landscape design should retain existing tree cover (where possible) in natural state in designated buffer areas. When selecting plant species for open space areas and landscape design, species which will not negatively affect adjacent farmland and provide greater benefit to residents should be given priority (i.e., use native, non-invasive species, low maintenance/drought tolerant plants, tree/shrub species that will filter dust and spray drift from agricultural area (e.g., conifers), tree/shrub species that will not carry insects/disease, etc.).

7.3.4 Urban-side buffer design

As part of the building setback, the urban-side buffer design should include a continuous vegetative buffer within the building setback. Buffers can provide a visual screen of farmlands and activities, provide a deterrent to trespass onto farms, as well as capture dust, spray drift, and litter. A buffer design with a minimum separation distance of 30 metres (including vegetative buffer) between housing and the AUI is recommended and found to be effective in reducing nuisance complaints.

The Guide to Edge Planning: Promoting Compatibility Along Agriculture-Urban Edges recommends a minimum vegetative buffer width of 15 metres for residential or institutional land uses, and 8 metres for commercial or industrial land uses. Crown density of the buffer should be 50-75% to provide optimal screening and air circulation. Furthermore, the vegetative buffer should include both deciduous and coniferous plantings to ensure four-season screening is provided. If there is excess soil generated as a result

of *development*, the construction of topsoil berms can also be considered to provide some visual screening and potentially increase the height of the vegetative screen.

The height of the vegetative buffer should exceed 6 metres at plant maturity to create an effective vegetative screen and capture more dust and spray drift between agricultural and urban land uses. A good vegetative buffer will also reduce the intensity of winds, which will minimize the extent of obnoxious odours originating from *livestock* operations. It can also minimize sound and lighting generated by farm operations.

7.3.5 Trail System

The creation of a trail system through the Subject Lands may provide opportunities to improve vegetated buffers, separating agricultural areas from urban land uses. The trail system should be situated along the urban edge of the vegetative buffer and must not reduce the effectiveness of the vegetative buffer. Where possible, the trail width should be limited to a maximum of one-third of the total landscape buffer width. Special attention should be given to trail areas to prevent trespass onto agricultural lands (e.g., fencing).

7.4 Summary of Impacts

The potential direct and indirect impacts identified are summarized in Table 7 along with the potential degree of impact, mitigation measures to avoid or minimize the potential impact and the resulting anticipated impact.

Table 7. Summary of Impacts

Potential Impact	Potential Degree of Impact	Mitigation Measure	Anticipated Net Impact
Direct Impacts			
Loss of prime agricultural lands	High	• Allow for continued cultivation until lands are required for development	Eventual loss of approximately 41.12 ha of prime agricultural lands.
Loss of agricultural infrastructure	None	• None	No impact
Loss of agricultural land improvements	None	• None	No impact
Loss of cropland	High	• Continue farming lands until needed for development	Eventual loss of approximately 38.18 ha of cropland.
Indirect Impacts			
Surficial Drainage	Low	• Prepare a Grading Plan and Stormwater Management Plan • Implement recommendations of Grading Plan and Stormwater Management Plan if impact identified	No impact anticipated
Disruption to Farm Operations	Low	• Ensure that access to farm operations and farm fields is maintained at all times throughout construction • Implement edge planning techniques to minimize conflicts along agricultural-urban interface	No impact anticipated
Trespass, Vandalism, and Stray Pets	Low	• Consider the use of edge planning techniques along the agricultural-urban interface	No significant impacts anticipated
Conflict with MDS formula	None	• None required, complies with MDS formulae	No Impact
Non-farm traffic	Low	• Prepare a Traffic Impact Study • Implement recommendations of Traffic Impact Study if identified	No impact anticipated

Table 7. Summary of Impacts

Potential Impact	Potential Degree of Impact	Mitigation Measure	Anticipated Net Impact
Economic	Low	• None required	No significant negative impact
Wells, Irrigation, water bodies	Low	• Prepare a Hydrogeological Study for the Subject Lands • Implement recommendations of Hydrogeological Study if impact anticipated	No impact anticipated
Fragmentation	Low	• None required	No impact anticipated
Changes to Microclimatic Conditions	Low	• None required, no changes to microclimatic condition	No impact anticipated
Noise, Dust, Vibration & Light	Low	• Ensure that Ministry of Environment, Conservation and Park (MECP) guidelines are adhered to.	No impact

8. ALTERNATIVE SITE ASSESSMENT

The *PPS* requires applications for *settlement area* boundary expansion in *prime agricultural areas* to assess alternative locations.

The alternative site assessment included the lands along the perimeter of the urban boundary as expanded through ROPA 49. The lands evaluated are generally half lot in size, similar to the size of the Subject Lands. Ten parcels were identified as candidate areas for expansion. We then selected the following criteria for the evaluation.

- CLI Capability Class;
- Investment in Agriculture Infrastructure;
- Investment in Land Improvements (Tile Drainage);
- Potential for MDS Constraints;
- Potential Constraints by Natural Heritage Features;
- Agricultural Priority Relative to the Subject Lands; and
- Planned and/or Currently Expanding Servicing or Road Improvement.

The analysis is contained in Appendix I. Table I-1 summarizes the comparison of the candidate parcels. The analysis shows that the Subject Lands are the preferred option for *settlement area* boundary expansion.

9. CONSISTENCY WITH AGRICULTURAL POLICIES

9.1 Provincial Planning Statement, 2024

Policy 2.3.2 of the *PPS* deals specifically with *settlement area* boundary expansion. Policy 2.3.2.1 states that "in identifying a new settlement area or allowing a settlement area boundary expansion, planning authorities shall consider the following:

a) the need to designate and plan for additional land to accommodate an appropriate range and mix of land uses;

b) if there is sufficient capacity in existing or planned infrastructure and public service facilities;

c) whether the applicable lands comprise specialty crop areas;

d) the evaluation of alternative locations which avoid prime agricultural areas and, where avoidance is not possible, consider reasonable alternatives on lower priority agricultural lands in prime agricultural areas;

e) whether the new or expanded settlement area complies with the minimum distance separation formulae;

f) whether impacts on the agricultural system are avoided, or where avoidance is not possible, minimized and mitigated to the extent feasible as determined through an agricultural impact assessment or equivalent analysis, based on provincial guidance; and

g) the new or expanded settlement area provides for the phased progression of urban development."

Policy 2.3.2.2 states that "Notwithstanding policy 2.3.2.1.b), planning authorities may identify a new settlement area only where it has been demonstrated that the infrastructure and public service facilities to support the development are planned or available."

Daryl Keleher (KPEC) has completed a Land Needs Assessment Report for the proposed SABE. Crozier Engineering has prepared a Scope Service Study separate which demonstrates sufficient capacity of existing or planned infrastructure and public service facilities for the proposed *development*.

The Subject Lands form part of a *prime agricultural area,* but are not part of a *specialty crop area*. Based on our Alternative Site Assessment, the Subject Lands are considered lower priority agricultural lands, and represent a reasonable location for SABE, from an agricultural perspective.

MDS I setback requirements have been calculated for all *livestock facilities* within 1.5 km of the proposed SABE. There are no *MDS I* setbacks which encroach into the Subject Lands. Therefore, the proposed *development* complies with the *MDS formulae*. The AIA assessed potential impacts on the *Agricultural System* associated with the proposed SABE and provided recommendations to avoid or minimize potential impacts, to the extent feasible. Therefore, the proposed SABE is consistent with the agricultural policies of the *PPS*.

9.2 Region of Halton Official Plan

Section 139.9 of the Region of Halton Official Plan outlines policy regarding *prime agricultural areas*. "The purpose of the Prime Agricultural Areas, as shown on Map 1E, is to assist in interpreting policies of this Plan and to assist the City of Burlington and the Towns of Milton and Halton Hills in developing detailed implementation policies for their respective Official Plans."

Section 139.9.2 states in part that "it is the policy of the Region to:

2. Within the Greenbelt Plan Area, prohibit the redesignation of land within the Prime Agricultural Areas to permit non-agricultural uses, except where permitted by the Greenbelt Plan.
3. Outside the Greenbelt Plan Area, permit the removal of land from Prime Agricultural Areas only where the following have been demonstrated through appropriate studies to the satisfaction of the Region:
    a) necessity for such use within the planning horizon for additional land to be designated to accommodate the proposed uses;
    b) amount of land area needed for such uses;
    c) reasons for the choice of location;
    d) justification that there are no reasonable alternate locations of lower capability agricultural lands;
    e) no negative impact to adjacent agricultural operations and the natural environment;
    f) there are no reasonable alternatives that avoid Prime Agricultural Areas as shown on Map 1E, and
    g) the land does not comprise a specialty crop area."

Section 77 of the Official Plan states in part that it is the policy of the Region to "Require the Local Municipalities to prepare Area-Specific Plans or policies for major growth areas, including the development or redevelopment of communities. The area may contain solely employment lands without residential uses or solely an Intensification Area. Such plans or policies shall be incorporated by amendment into the Local Official Plan and shall demonstrate how the goals and objectives of this Plan are being attained and shall include, among other things:

q) an Agricultural Impact Assessment on potential impact of urban development on existing agricultural operations, including the requirement for compliance with the Minimum Distance Separation formulae where an agricultural operation is outside the Urban Area."

MDS I setback requirements have been calculated for all *livestock facilities* within 1.5km of the proposed SABE. There are no *MDS I* setbacks which encroach into the Subject Lands. Therefore, the proposed *development* complies with the *MDS formulae*. The AIA assessed the potential impacts on existing agricultural operations associated with the proposed *settlement area* boundary expansion, and provided recommendations to avoid or minimize potential impacts, to the extent feasible.

It is understood that a Land Needs Assessment Report and a Planning Justification Report have been completed, which identify the amount of land needed for the proposed *development*, and the need for the proposed *development* on the planning horizon. The Subject Lands do not comprise a *specialty crop area*, and no other reasonable alternative locations for the proposed SABE were identified relative to the Subject

Lands. Therefore, the proposed *development* is consistent with the policies of the Region of Halton Official Plan.

9.3 Town of Halton Hills Official Plan

Section G2.3 of the Town of Halton Hills Official Plan outlines the requirements for expansion of the *settlement area* boundary, and states that "In addition to the requirements of the Regional Official Plan, the expansion of any urban boundary may only be considered provided that:

a) the expansion area serves as a logical extension to the existing built up area;
b) the expansion area can be easily integrated with the fabric of the existing built up area;
c) the expansion area can be appropriately services;
d) an appropriate housing mix, as determined by the Municipal Housing Statement, is provided for on the lands;
e) new employment lands are an integral component of the expansion;
f) the lands can be easily accessed by existing arterial roads and will not contribute to traffic congestion within the existing community;
g) prime agricultural lands shall only be included if no reasonable alternatives exist;
h) the expansion area shall conform with the 'environment-first' objectives of this Plan;
i) the lands are not located within the Protected Countryside Area designation; and,
j) the scale of the expansion is in keeping with the Community Vision, Goals, and Strategic Objectives of this Plan."

The AIA has addressed Section G2.3g) of the Town of Halton Hills Official Plan. No reasonable alternatives outside of *prime agricultural lands* were identified for the proposed *development*. Therefore, the proposed SABE is consistent with the Town of Halton Hills Official Plan.

10. CONCLUSIONS

The AIA has been prepared in accordance with the ToR submitted to the Town of Halton Hills for 0 & 8673 Eighth Line, Halton Hills. The methodology is generally consistent with OMAFRA's draft Agricultural Impact Assessment Guidance Document.

The AIA evaluated the agricultural resources and investments that are part of the *Agricultural System* in both the Subject Lands and *Study Area*. Potential impacts of the proposed *developments* on existing agricultural operations and resources were assessed and mitigation measures are provided. These mitigation measures minimize the potential impact of the proposed *developments*. It is expected that the proposed SABE will comply and be consistent with the *Minimum Distance Separation formulae*.

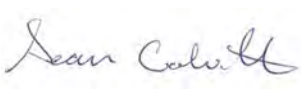
The main impact is related to the removal of approximately 41.12 ha land from the *prime agricultural area*. The Subject Lands and are immediately adjacent to the existing *settlement area* boundary. Impacts of the removal of the lands are expected to be negligible. No agricultural infrastructure or investments in land improvements will be impacted or lost as a result of the proposed *developments*.

Several potential indirect impacts were identified, and recommendations are provided to avoid or minimize the negative effects to the greatest extent possible. Implementing the recommendations described in Section 7 and summarized in Table 7 will limit the potential negative impacts even further. The recommendations will assist in the promotion of compatibility along the agricultural-urban interface and the reduction of complaints from both farmers and the non-farming community. These recommendations will also mitigate the negative effects of construction activities.

The proposed *development* will not conflict with the intent of Provincial, Regional and Town policies established to permit, protect, and promote *agricultural uses* in *prime agricultural areas*.

This AIA was prepared by Nash Colville and reviewed by Sean Colville. Their CVs are included in Appendix A.

Respectfully submitted by:



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11. GLOSSARY OF TERMS

Agricultural uses:* - the growing of crops, including nursery, biomass, and horticultural crops; raising of *livestock*; raising of other animals for food, fur or fibre, including poultry and fish; aquaculture; apiaries; agro-forestry; maple syrup production; and associated on-farm buildings and structures, including, but not limited to livestock facilities, manure storages, value-retaining facilities, and housing for farm workers, when the size and nature of the operation requires additional employment.

Agriculture-related uses:* - those farm-related commercial and farm-related industrial uses that are directly related to farm operations in the area, support agriculture, benefit from being in close proximity to farm operations, and provide direct products and/or services to farm operations as a primary activity.

Agricultural system: - means a system comprised of a group of inter-connected elements that collectively create a viable, thriving agri-food sector. It has two components:

- An agricultural land base comprised of *prime agricultural areas*, including *specialty crop* areas. It may also include *rural lands* that help to create a continuous productive land base for agriculture.
- An *agri-food network* which includes agricultural operations, *infrastructure*, services, and assets important to the viability of the agri-food sector.

Agri-food network:* - a network within the *agricultural system* that includes elements important to the viability of the agri-food sector such as regional *infrastructure* and transportation networks; agricultural operations including on-farm buildings and primary processing; infrastructure; agricultural services, farm markets, and distributors; and vibrant, agriculture-supportive communities.

Agri-tourism uses:* - means those farm-related tourism uses, including limited accommodation such as a bed and breakfast, that promote the enjoyment, education or activities related to the farm operation.

Anaerobic digester:* - A permanent structure designed for the decomposition of organic matter by bacteria in an oxygen-limiting environment.

Beef operation: a farm operation whose predominant livestock is beef cattle, including cow-calf operations.

Cash crop: - means a crop being produced for income purposes and not to supplement a livestock operation by contributing to feed requirements.

Catena: - the group of soils that have developed on the same parent material but as a result of being located on a different position in the landform the group differs by drainage class (i.e., well drained, imperfectly drained, and poorly drained).

Common Field Crops: - Common field crops in Ontario include corn; soybeans; small grains and perennial forages (e.g., hay & pasture).

Cultivated: - means lands that have recently been under active agricultural production, however, depending on the season or growth stage of the crop during the land use survey or through aerial photographic interpretation the crop type could not be determined.

Development: - means the creation of a new lot, a change in land use, or the construction of buildings and structures, requiring approval under the Planning Act; but does not include activities that create or maintain infrastructure authorized under an environmental assessment process; or works subject to the Drainage Act.

Forage/Pasture: - means a crop that consists of either pastureland, including rough grazing, or hay crops including silage and haylage.

Hobby farm: - A residential dwelling, with or without accessory buildings, which may include some crop production for personal consumption or limited sale; and/or small numbers of livestock raised for personal consumption, pleasure, or limited sale. A hobby farm normally will generate little or no income and as such may not have a Farm Business Registration Number.

Idle agricultural lands: - means lands that have not been used for agricultural production for at least five years (estimated).

Inclusion: - a small soil polygon that occurs within a larger soil polygon and which is comprised of a different soil type or is located on a different slope class, however it is too small to map as a single unit given the scale of map.

Livestock:* - includes dairy, beef, swine, poultry, horses, goats, sheep, ratites, fur-bearing animals, deer & elk, game animals, birds, and other animals.

Livestock facility:* - means one or more barns or permanent structures with livestock-occupied portions, intended for keeping or housing livestock. A livestock facility also includes all manure or material storages and anaerobic digesters.

Manure Storage*: - A permanent storage which is structurally sound and reasonable capable of storing manure and which typically contains liquid manure (<18% dry matter) or solid manure ((≥18% dry matter), and may exist in a variety of:

- Locations (under, within, nearby, or remote from barn);
- Materials (concrete, earthen, steel, wood);
- Coverings (open top, roof, tarp, or other materials);
- Configurations (rectangle, circular); and,
- Elevations (above, below, or partially above grade).

Minimum Distance Separation (MDS) formulae: - formulae and guidelines developed by the province, as amended rom time to time, to separate uses so as to reduce incompatibility concerns about odour from livestock facilities.

Minimum Distance Separation (MDS) I formulae: - used to determine the minimum distance separation for new development from any existing and some former livestock facilities.

Minimum Distance Separation (MDS) II formulae: - used to determine the minimum distance separation for new or expanding livestock facilities from existing non-farm land uses.

Morainal till: - generally a compact, poorly sorted, and poorly stratified material deposited by glacial action.

Non-agricultural uses:* - Buildings designed or intended for a purpose other than an *agricultural use*; as well as land, vacant or otherwise not yet fully developed, which is zoned or designated such that the principal or long-term use is not intended to be an *agricultural use*, including, but not limited to: commercial, future urban development, industrial, institutional, *open space uses*, *recreational uses*, *settlement area*, *urban reserve*, etc.

Non-farm residential (NFR): - means residential buildings and lots not associated with a farm operation such as farm retirement lots/severances and/or other residences in the Agricultural and Rural Area. Second farm residences for farm help would be considered a farm residence if it is on an existing farm operation.

Normal farm practices:* - means a practice, as defined in the *Farming and Food Production Protection Act, 1998*, that is conducted in a manner consistent with proper and acceptable customs and standards as established and followed by similar agricultural operations under similar circumstances; or makes use of innovative technology in a manner consistent with proper advanced farm management practices. *Normal farm practices* shall be consistent with the *Nutrient Management Act, 2002* and regulations made under that Act.

Prime agricultural area:* - means an area where *prime agricultural land* predominates. Prime agricultural areas may also be identified through an alternative agricultural land evaluation system approved by the Province.

Prime agricultural land:* - means land that includes *specialty crop lands* and/or Canada Land Inventory Class 1, 2 and 3 soils, in this order of priority for protection.

Provincial Planning Statement, 2024: - the Provincial Planning Statement (PPS), 2024 is a streamlined province-wide land use planning policy framework that replaces both the *Provincial Policy Statement, 2020* and *A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019* while building upon housing-supportive policies from both documents. The PPS 2024 provides municipalities with the tools and flexibility they need to build more homes. It enables municipalities to:

- plan for support development, and increase the housing supply across the province;
- align development with infrastructure to build a strong and competitive economy that is investment-ready;
- foster the long-term viability of rural areas; and
- protect agricultural lands, the environment, public health and safety.

Redevelopment:* - means the creation of new units, uses or lots on previously developed land in existing communities, including *brownfield sites*.

Remnant: - means a location where one or more farm buildings once stood. All or some of the buildings have fallen, are severely structurally unsound and/or been removed. No MDS would be applied to a remnant farm operation.

Retired farm operation: - means a former farm operation whose buildings or farm related structures remain; however, it has either been converted to a non-agricultural use; would require significant upgrades and investment to modernize; or it is in poor condition and not suitable for agricultural uses. The MDS may still apply if it is a former livestock facility.

Rural areas:* - means a system of lands within municipalities that ma include *rural settlement areas*, *rural lands*, *prime agricultural areas*, natural heritage features and areas, and resource areas.

Rural lands:* - means lands which are located outside *settlement areas,* and which are outside *prime agricultural areas*.

Settlement areas:* - means urban areas and rural settlement areas within municipalities (such as cities, towns, villages, and hamlets). Ontario's *settlement areas* vary significantly in terms of size, density, population, economic activity, diversity and intensity of land uses, service levels, and types of infrastructure available. Settlement areas are:

a) built up areas where development is concentrated, and which have a mix of land uses; and

b) lands which have been designated in an official plan for development over the long term.

Soil horizon: - a layer of soil, approximately parallel to the land surface, which differs from adjacent layers in properties such as texture, colour, structure, etc. As an example, the surface horizon of a mineral soil is recorded as the "A" horizon. If the surface is ploughed then the suffix p is used (i.e., Ap) if the surface has not been ploughed, as in a forest soil, a humic layer generally develops and an eluviated light coloured soil horizon often forms immediately below. These horizons are identified with the suffix h is used (i.e., Ah) and e (i.e., Ae), respectively. The weathered portion of the profile below the A horizons is identified as the "B" horizon and the unweathered, parent material is the "C" horizon.

Soil profile: - a vertical section of the soil through all its

s and extending into the soil parent material.

Specialty crop area:* - means areas within the agricultural land base designated based on provincial guidance. In these areas, specialty crops are predominantly grown such as tender fruits (peaches, cherries, plums), grapes, other fruit crops, vegetable crops, greenhouse crops and crops from agriculturally developed organic soil., usually resulting from:

a) soils that have suitability to produce specialty crops, or lands that are subject to special climatic conditions, or a combination of both;

b) farmers skilled in the production of specialty crops; and

c) a long-term investment of capital in areas such as crops, drainage, infrastructure and related facilities and services to produce, store, or process specialty crops.

Tender fruit: - a term applied to tree fruits such as peaches, apricots, and nectarines which are particularly sensitive to low winter and/or spring temperatures.

Unoccupied livestock facility: - A livestock facility that does not currently house any livestock, but that housed livestock in the past and continues to be structurally sound and reasonably capable of housing livestock. The MDS formulae are applied to these facilities.

* *Indicates that the definition is essentially derived from OMAFRA publications.*

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Appendix A:

Curriculum Vitae

NASH COLVILLE, B.A.

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EDUCATION

B.A. Geography, University of Guelph, 2018
Ecosystem Restoration, Niagara College, 2019

PROFESSIONAL AFFILIATIONS

2018 - Present – Canadian Certified Inspector of Sediment & Erosion Control
2019 - Present – Ontario Invasive Plant Council Member

POSITIONS HELD

2009 - Present – Colville Consulting Inc., St. Catharines, Environmental Consultant

EXPERIENCE

Nash Colville has over 15 years of environmental and agricultural work experience. He has assisted in completing natural resource inventories, environmental impact assessments, agricultural impact assessments, and constraint analyses for various developments. Nash has assisted with projects ranging from small, routine projects to assessments of highly complex development proposals with potential impacts on wetland, aquatic, and terrestrial ecosystems. Nash has prepared restoration plans for both aquatic and terrestrial environments for a wide variety of development proposals. In addition, he has worked on studies that required environmental impact assessments under Ontario's Planning Act and Aggregate Resources Act.

Nash Colville has assisted with many environmental impact assessments, agricultural impact assessments and natural resource inventories for new development. Some examples of this experience are:

- Independent Construction Monitor for Enbridge's 2021-2022 Storage Enhancement Project
- Independent Construction Monitor for Enbridge's Kingsville Reinforcement Project in Leamington Ontario.
- Design and preparation of a Conceptual Wetland Restoration Plan for Baden-Powell Park, Niagara Falls (2020)
- Bird and bat mortality surveying for multiple Stantec Inc. Windmill Post-Construction Monitoring Programs throughout Ontario (2013 – 2016)
- Monitoring bird and bat mortality for Rankin Construction Post-Construction Monitoring Programs in West Lincoln & Wainfleet, Ontario (2014 – 2016)
- Post Construction Remediation Team for multiple pipelines for TC Energy Inc. in Ontario (2018-present)
- Preparation of Vegetation Screening and Naturalization reports for Walker Brother's Quarry – Niagara Falls (2018-present)
- Assistance in soil sourcing for the Portlands, Waterfront Toronto development project (2018-present)
- AIA for Silverdale Gun Club, Saint Anns, Ontario.
- LEAR (Land Evaluation & Area Review) Studies for several addresses in the Ottawa and Mississippi Mills, Ontario area (2020-present)
- Preparation of EIS's for multiple addresses located in the City of Niagara Falls. (2020-present)

ADDITIONAL TRAINING AND WORKSHOPS

Windmill Safety Training – Stantec Inc (2013)
Ontario Amphibian & Reptile Field Research Techniques Workshop – Toronto Zoo (2017)
Natural Gas Pipeline Safety Training – TC Energy (2019)
Excavation Safety Training – TC Energy (2019)
Canadian Certified Inspector of Sediment & Erosion Control (2019)
Standard First Aid Training CPR + AED (2020)
Enbridge Contractor Safety and Environmental Orientation (2022)
Buildforce Pipeline Construction Safety Training (2022)

SEAN M. COLVILLE, B.Sc., P.Ag.

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EDUCATION

B.Sc.Geology, Acadia University, 1986
Soil Science, University of Guelph, 1984

PROFESSIONAL AFFILIATIONS

Ontario Institute of Agrology
Agricultural Institute of Canada

POSITIONS HELD

2003 – Present	**President** - Colville Consulting Inc., St. Catharines, Ontario
2001 – 2003	**Senior Project Manager** - ESG International Inc., St. Catharines, Ontario
1998 – 2001	**Senior Project Manager** - ESG International Inc., Guelph, Ontario
1988 – 1998	**Project Manager** - ESG International Inc., Guelph, Ontario
1984 – 1988	**Soil Scientist –** MacLaren Plansearch Ltd., Halifax, Nova Scotia
1982 – 1983	**Assistant Soil Scientist** – Nova Scotia Department of Agriculture and Marketing

EXPERIENCE

Colville Consulting Inc. (CCI) was established in June of 2003 by Sean Colville. CCI offers agricultural and environmental consulting services to clients across Ontario, catering to both public and private sectors. Sean has over 35 years of agricultural consulting experience, which includes agricultural resource evaluation studies, soil surveys, interpretations of agricultural capability, agricultural impact assessments, alternative site assessments, and soil and microclimatic rehabilitation/restoration projects. Sean has extensive experience interpreting agricultural land use policies for a wide variety of development applications.

Sean is a Professional Agrologist (P.Ag.), and a member of both the Ontario Institute of Agrology and the Agricultural Institute of Canada. Sean has been recognized by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) as an expert in the identification of Prime Agricultural Areas and in the interpretation of the Minimum Distance Separation requirements for livestock operations.

Sean has presented expert testimony before the Ontario Land Tribunal (formerly OMB, LPAT), Consolidated Joint Board, Assessment Review Board, Ontario Superior Court, and the Normal Farm Practices Protection Board. Sean's testimonies have involved land use planning matters as they relate to agriculture, impact assessments, resource evaluations, soil science, and normal farm practices.

Agricultural Impact Assessments and Alternative Site Studies

Colville Consulting Inc. specializes in agricultural impact assessment and alternative site studies for development applications in Prime Agricultural Areas. Sean has prepared over 200 agricultural impact assessments for a wide variety of development projects, including settlement area boundary expansions, linear facilities (Class EAs), new and expanding aggregate operations, and residential, commercial, recreational, industrial, and institutional developments. The majority of these projects required the interpretation of agricultural land use policies, an inventory and assessment of the agricultural resources,

land use, land tenure, an assessment of conflict potential including determination of minimum distance separation requirements, interpretation of the agricultural priority, and development of mitigation measures to avoid or minimize potential impacts. Justification of the location for development proposals in agricultural areas is required by the Provincial Policy Statement and can often be addressed by an alternative site study.

Recent examples of Sean Colville's agricultural work include:

- Agricultural Impact Assessment for Stubbes New Durham Precast Plant (2021)
- Agricultural Impact Assessment for New Tecumseth Community Builders Inc., County of Simcoe (2021)
- Agricultural Impact Assessment for Caledon Costco (2021)
- Agricultural Impact Assessment for Walker Industries' Redford Pit Expansion, West Grey (2022)
- Agricultural Impact Assessment for Milton Business Park (2022)
- Minimum Distance Separation for Mono Hills Corporation (2022)
- Land Evaluation and Area Review for Norfolk County (2022)

Publications

Rees, H.W.; Duff, J.P.; Colville, S.; Soley, T and Chow T.L. 1995. Soils of selected agricultural areas of Moncton Parish, Westmoreland County, New Brunswick. New Brunswick. Soil Survey Report No. 15. CLBRR Contribution No. 95-13, Research Branch, Agriculture AND Agri-Food Canada, Ottawa, Ontario

Rees, H.W.; Duff, J.P.; Colville, S.; Soley, T and Chow T.L. 1996. Soils of selected agricultural areas of Shediac and Botsford Parishes, Westmoreland County, New Brunswick. New Brunswick. Soil Survey Report No. 16. CLBRR Contribution No. 95-13, Research Branch, Agriculture and Agri-Food Canada, Ottawa, Ontario. 127 pp. with maps.

Appendix B:

0 & 8673 Eighth Line Halton Hills – AIA Terms of Reference

MEMORANDUM

To: Greg Macdonald, MCIP, RPP
Senior Planner – Planning and Development Department,
Town of Halton Hills
1 Halton Hills Drive, Halton Hills, ON
L7G 5G2
From: Nash Colville
Date: October 28th, 2024
Re: Terms of Reference – AIA for 0 & 8673 Eighth Line, Halton Hills

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Hello Mr Macdonald,

Colville Consulting Inc. has been retained by Maple Mist Development Corp. to prepare a Terms of Reference (ToR) to outline the proposed works to be completed as part of an Agricultural Impact Assessment (AIA) for an Official Plan Amendment application to expand the settlement area boundary at 0 & 8673 Eighth Line, Halton Hills and designate the site as Employment Area. This ToR outlines field works and assessments to be completed as part of the preparation of an AIA for the property to assess potential impacts employment land use development would have on the Subject Lands and surrounding area. The lands immediately to the south of the Subject Lands are within the existing settlement area boundary and within the Premier Gateway Employment Area. It is Maple Mist Development Corp.'s intention to have the settlement area boundary expanded to include the Subject Lands and to develop them for employment uses. The Subject Lands are designated as Prime Agricultural Area and their removal from this designation to accommodate growth will require the completion of an Agricultural Impact Assessment. It is our understanding that the Town has requested that an AIA be prepared to support the inclusion of the Subject Lands within the Settlement Area and be provided with the Official Plan Amendment application.

The Subject Lands are located along Eighth Line, generally in between 5 Side Road to the north and Steeles Ave to the south, south of Georgetown, and west of Mississauga. The Subject Lands are rectangular in shape, with a combined parcel size of approximately 41.32 hectares (102.1 acres). The Subject Lands are approximately 6.09ha in size. The Subject Lands are designated as Prime Agricultural Area in Map 1E of the Region of Halton's Official Plan. Based on our review of available mapping, the Subject Lands are primarily under agricultural production (cash crop), with what appears to have a small laydown yard with some agricultural equipment on it next to Eighth Line. The surrounding area is primarily a mix of rural single dwellings, lands under agricultural production, and natural heritage features.

This AIA will address the agricultural policies in the Provincial Planning Statement (2024) regarding permitted uses in prime agricultural areas, and the applicable regional and local agricultural policies. To be consistent with the Province's draft Agricultural Impact Assessment Guidelines, the Study Area will include the Subject Lands and all agricultural and rural lands (i.e., non-urban) within 1.5 kilometres of the Subject Lands (See Figure 1).

FIGURE 1
Location Map

Agricultural Impact Assessment for 0 & 8673 Eighth Line, Halton Hills

Prepared for:

Maple Mist Development Corp.

Prepared by:

COLVILLE CONSULTING INC.

DATE: October 2024

FILE: C24046

SCOPE OF WORK

The general scope of work will include:

- The collection and review of background information for the site and surrounding area;
- A reconnaissance level land use survey;
- The completion of Minimum Distance Separation I calculations;
- An assessment of the potential impacts of the development on agricultural resources, farm operations and the broader agri-food network; and
- The preparation of a report summarizing our findings.

BACKGROUND INFORMATION

One of the first tasks undertaken will be to collect and review all relevant information required to meet the study objectives. At a minimum, the background review will include:

- the soils information for the Subject Lands and the surrounding area (e.g., *Soil Survey of Halton County: Report No.43 of the Ontario Soil Survey*, and the provincial digital soil resource database);
- the Provincial Planning Statement (October 20, 2024);
- Halton Region Official Plan (November 4, 2022);
- Town of Halton Hills Official Plan, Consolidated April 30, 2024:
- OMAFRA's draft Agricultural Impact Assessment Guidance Document;
- OMAFRA's Agricultural Systems Portal and AgMaps for a wide range of agricultural resource information;
- information sources that provide site physiography, local climate, agricultural statistics, and other relevant information; and
- recent and historical aerial photography to identify the types and extent of land use on and adjacent to the Subject Lands.

FIELD WORK

Field studies to be completed will include:

- a reconnaissance-level land use survey within a minimum of 1.5 km of the Subject Lands' boundaries to identify the mix of agricultural and non-agricultural land uses, cropping patterns, land improvements and investment in agricultural infrastructure, and other components that comprise the Agricultural System within the Study Area; and
- obtaining specific information regarding livestock operations within the Subject Lands and Study Area to enable the calculation of MDS I setback requirements.

ALTERNATIVE SITE ASSESSMENT

The alternate site assessment will be to address this requirement as per the PPS. The site assessment will need to demonstrate that alternative locations have been evaluated, and that:

i. there are no reasonable alternative locations which avoid prime agricultural areas; and
ii. there are no reasonable alternative locations in prime agricultural areas with lower priority agricultural lands.

This analysis will involve a desktop analysis assessing the CLI Capability of alternative sites and other relevant agricultural characteristics consistent for each alternative site (up to a maximum of three sites).

ANALYSIS OF DATA

Assessment of Impacts

- To be consistent with the AIA guidelines (draft), potential negative effects of the proposed development will be assessed through an evaluation of:
- The interim or permanent loss of agricultural land, including the quality and quantity of farmland lost;
- The potential for fragmentation of agricultural lands and operations;
- The type of agricultural, agriculture-related or on-farm diversified uses being lost and the significance this has for supporting other agricultural production in the surrounding area;
- The loss of existing and future farming opportunities;
- The loss of infrastructure, services or assets important to the surrounding agricultural community and agri-food sector;
- The loss of agricultural investments in structures and land improvements (e.g. artificial drainage);
- The disruption or loss of function to artificial drainage and irrigation installations;
- Disruption to surrounding farm operations, activities and management (e.g. temporary loss of productive agricultural lands, cultivation, seeding, spraying, harvesting, field access, use of road network); and
- Potential compatibility concerns such as normal farm practices facing challenges with e.g. nuisance complaints, vandalism and trespassing that may occur with the new development being established.

Once the potential impacts have been assessed, mitigation measures will be developed to avoid or minimize potential impacts.

Assessment of Agricultural Priority

The agricultural priority of the Subject Lands will be determined through an assessment of:

- The agricultural capability and relative productivity of the Subject Lands;
- The potential for direct and indirect impacts on agricultural operations within the Study Area; and
- The ability to comply with MDS I formula.

The information obtained from the land use survey will provide information regarding the existing land use and whether there are conflicting land uses potentially affecting agriculture in the Study Area. Parcel size will be calculated from aerial photography or provided by the client.

MINIMUM DISTANCE SEPARATION

The Minimum Distance Separation (MDS) Formulae is a land use planning tool used to minimize land use conflicts and nuisance complaints arising from odours associated with livestock operations. The MDS requirements are set out in "Minimum Distance Separation (MDS) Document", Publication 853 OMAFRA, (2016) which came into effect on March 1, 2017. The MDS formulae calculates recommended separation distances between a livestock or manure storage facility and other non-farm land use and will be applied

within the study area where it is determined that he MDS I formulae is required. Information for completing the MDS will be obtained from a mix of the aerial photography review and site visits to verify observations and gather specific information regarding the farm operations.

TABLE OF CONTENTS

A sample Table of Contents is provided below as a general outline of the anticipated contents of the AIA report that has been developed following the Draft Agricultural Impact Assessment Guidance Document (2018), however modifications to order or layout may be made as necessary based on the results of the AIA.

Please let me know if you have any questions or comments regarding the contents of this Terms of Reference.

Yours sincerely,

Nash Colville B.A., CISEC-IT, CERPIT
Colville Consulting Inc.

Appendix C:

Climate Data

Climate Normals 1981-2010 Station Data

Metadata including Station Name, Province or Territory, Latitude, Longitude, Elevation, Climate ID, WMO ID, TC ID							
STATION_NAME	PROVINCE	LATITUDE	LONGITUDE	ELEVATION	CLIMATE_ID	WMO_ID	TC_ID
BURLINGTON TS	ON	43°20'00.000" N	79°50'00.000" W	99.1 m	6151064		

Legend
A = WMO "3 and 5 rule" (i.e. no more than 3 consecutive and no more than 5 total missing for either temperature or precipitation)
B = At least 25 years
C = At least 20 years
D = At least 15 years

1981 to 2010 Canadian Climate Normals station data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Code
Temperature														
Daily Average (°C)	-4.4	-3.2	1	7.5	13.9	19.4	22.5	21.4	16.9	10.4	4.4	-1	9.1	D
Standard Deviation	2.8	2.4	1.7	1.4	2	1.4	1.3	1.3	1.1	1.4	1.4	2.6	0.9	D
Daily Maximum (°C)	-0.6	0.8	5.2	12.4	19.4	25	28	26.7	21.8	15.1	8	2.4	13.7	D
Daily Minimum (°C)	-8.1	-7.1	-3.3	2.6	8.3	13.8	16.9	16.1	11.9	5.7	0.7	-4.3	4.4	D
Extreme Maximum (°C)	15	18	27	32	35	37.2	39	37.2	36.1	31.1	26.7	22		
Date (yyyy/dd)	1967/23	1997/21	1998/31	1990/25	1962/18	1952/25	Jul-88	Jan-55	Aug-59	Jul-63	Mar-61	Mar-82		
Extreme Minimum (°C)	-29.4	-27	-23.9	-13.9	-2.8	1.1	5.6	3	-1.1	-7.8	-16.1	-27		
Date (yyyy/dd)	1976/23	1979/17	1967/18	Jul-72	Jul-66	May-64	1968/30	1982/28	1959/17	1965/29	1958/30	1980/25		
Precipitation														
Rainfall (mm)	31.8	33	44.7	68.2	81	69.1	75.3	82	83.1	71.9	79.7	43.5	763.3	D
Snowfall (cm)	34.2	21.5	16.9	2.4	0	0	0	0	0	0	5.3	19.5	99.9	D
Precipitation (mm)	66	54.5	61.6	70.6	81	69.1	75.3	82	83.1	71.9	84.9	63	863.1	D
Average Snow Depth (cm)				0	0	0	0	0	0	0	0	0		
Median Snow Depth (cm)				0	0	0	0	0	0	0	0	0		
Extreme Daily Rainfall (mm)	48.3	47.8	50.8	51.1	65	58.4	60.5	76.2	87	90	63.5	42.6		
Date (yyyy/dd)	1954/20	1990/22	Jan-72	May-57	1953/25	1960/23	Dec-64	1992/27	Mar-81	May-95	Sep-62	1979/24		
Extreme Daily Snowfall (cm)	42	22.9	19.8	25	0	0	0	0	0	8.9	20.3	24		
Date (yyyy/dd)	1999/14	1965/24	1998/21	Aug-79	Jan-51	Jan-51	Jan-51	Jan-51	Jan-51	1962/25	1958/28	1985/16		
Extreme Daily Precipitation (mm)	48.3	48.3	50.8	51.1	65	58.4	60.5	76.2	87	90	63.5	42.6		
Date (yyyy/dd)	1954/20	1972/13	Jan-72	May-57	1953/25	1960/23	Dec-64	1992/27	Mar-81	May-95	Sep-62	1979/24		
Extreme Snow Depth (cm)	40	41	14	3	0	0	0	0	0	0	3	15		
Date (yyyy/dd)	Jul-94	Sep-94	Dec-94	Apr-96	Jan-83	Jan-83	Jan-83	Jan-80	Jan-83	Jan-83	1994/24	Nov-92		
Days with Rainfall														
>= 0.2 mm	4.9	4.5	8	11.7	11.8	10.9	10.1	10.2	10.9	10.7	12.7	7.7	113.9	D
>= 5 mm	2	2	2.8	4.6	5.2	4.7	4.8	5.1	4.8	4.6	5.2	2.8	48.7	D
>= 10 mm	1.1	1.1	1.5	2.3	2.8	2.3	2.7	2.9	2.5	2.6	2.6	1.5	25.8	D
>= 25 mm	0.26	0.33	0.33	0.26	0.44	0.37	0.63	0.74	0.58	0.22	0.39	0.17	4.7	D
Days With Snowfall														
>= 0.2 cm	8.1	6	3.6	0.84	0	0	0	0	0	0	1.6	5.4	25.5	D
>= 5 cm	2.6	1.4	1.3	0.11	0	0	0	0	0	0	0.44	1.6	7.5	D
>= 10 cm	0.89	0.58	0.37	0.05	0	0	0	0	0	0	0.06	0.44	2.4	D
>= 25 cm	0.11	0	0	0	0	0	0	0	0	0	0	0	0.11	D
Days with Precipitation														
>= 0.2 mm	12.4	9.6	11	12.5	11.8	10.9	10.1	10.2	10.9	10.7	13.9	11.9	135.8	D
>= 5 mm	4.6	3.4	4.1	4.7	5.2	4.7	4.8	5.1	4.8	4.6	5.7	4.3	56.1	D
>= 10 mm	2	1.7	2.1	2.3	2.8	2.3	2.7	2.9	2.5	2.6	2.7	2	28.6	D
>= 25 mm	0.37	0.33	0.33	0.26	0.44	0.37	0.63	0.74	0.58	0.22	0.39	0.17	4.8	D
Days with Snow Depth														
>= 1 cm				0	0	0	0	0	0	0	0			
>= 5 cm				0	0	0	0	0	0	0	0			
>= 10 cm				0	0	0	0	0	0	0	0			
>= 20 cm				0	0	0	0	0	0	0	0			

Appendix D:

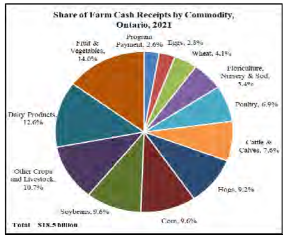
Crop Statistics Data

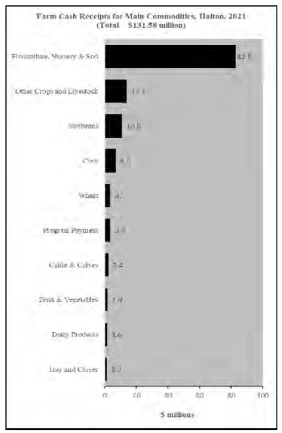
County & Township Ag Profile - Halton Regional Municipality; Townships: Oakville, Burlington, Milton, Halton Hills

Halton Regional Municipality at a Glance - 2021

Item	Halton	Province	Percent of province	Percent from 2016
Farms, 2021 Census (number)				
Total	431	48,346	0.89%	-4.43%
Under 10 acres	64	3,217	1.99%	1.59%
10 to 69 acres	165	12,686	1.30%	-17.50%
70 to 129 acres	86	10,924	0.79%	11.69%
130 to 179 acres	27	4,422	0.61%	-6.90%
180 to 239 acres	27	3,981	0.68%	8.00%
240 to 399 acres	22	5,396	0.41%	-8.33%
400 to 559 acres	14	2,865	0.49%	27.27%
560 to 759 acres	7	1,698	0.41%	-30.00%
760 to 1,119 acres	12	1,600	0.75%	71.43%
1,120 to 1,599 acres	4	720	0.56%	100.00%
1,600 to 2,239 acres	1	451	0.22%	0.00%
2,240 to 2,879 acres	1	173	0.58%	0.00%
2,880 to 3,519 acres	0	95	0.00%	-
3,520 acres and over	1	118	0.85%	0.00%
Land Use, 2021 Census (acres)				
Land in crops	57,116	9,051,011	0.63%	8.58%
Summerfallow land	203	13,964	1.45%	-16.48%
Tame or seeded pasture	2,186	400,480	0.55%	18.16%
Natural land for pasture	2,751	626,366	0.44%	-19.42%
Christmas trees, woodland & wetland	6,080	1,269,535	0.48%	5.03%
All other land	4,585	404,714	1.13%	-4.04%
Total area of farms	72,920	11,766,071	0.62%	6.18%
Greenhouse Area, 2021 Census (square feet)				
Total area in use	3,300,725	201,055,888	1.64%	58.16%
Farm Capital Value, 2021 Census (farms reporting)				
Under $200,000	8	1,212	0.66%	-50.00%
$200,000 to $499,999	10	3,223	0.31%	-56.52%
$500,000 to $999,999	57	8,699	0.66%	-42.42%
$1,000,000 and over	356	35,212	1.01%	13.74%
Total Gross Farm Receipts, 2021 Census (farms reporting)				
Under $10,000	92	7,277	1.26%	-26.40%
$10,000 to $24,999	61	7,429	0.82%	-15.28%
$25,000 to $49,999	47	6,263	0.75%	-26.56%
$50,000 to $99,999	49	6,093	0.80%	2.08%
$100,000 to $249,999	57	6,817	0.84%	-21.92%
$250,000 to $499,999	29	4,448	0.65%	31.82%
$500,000 to $999,999	33	3,954	0.83%	26.92%
$1,000,000 to $1,999,999	11	2,452	0.45%	10.00%
$2,000,000 and over	10	1,696	0.59%	-9.09%
Farms by Industry Group, 2021 Census (number of farms)				
Beef cattle ranching and farming	38	7,986	0.48%	35.71%
Dairy cattle and milk production	5	3,188	0.16%	0.00%
Hog and pig farming	1	1,189	0.08%	-
Poultry and egg production	14	2,061	0.68%	16.67%
Sheep and goat farming	8	1,309	0.61%	-27.27%
Other animal production	88	4,556	1.93%	-31.78%
Oilseed and grain farming	113	18,194	0.62%	16.49%
Vegetable and melon farming	27	1,562	1.73%	3.85%
Fruit and tree nut farming	19	1,211	1.57%	-17.39%
Greenhouse, nursery and floriculture	52	1,672	3.11%	-8.77%
Other crop farming	66	5,418	1.22%	4.76%

Item	Halton	Province	Percent of province	Percent from 2016
Major Field Crops, 2021 Census (acres)				
Winter wheat	7,518	1,144,406	0.66%	-1.64%
Oats for grain	252	84,320	0.30%	30.57%
Barley for grain	85	68,756	0.12%	-62.88%
Mixed grains	50	59,961	0.08%	-79.42%
Corn for grain	12,560	2,202,465	0.57%	2.35%
Corn for silage	292	286,678	0.10%	-53.28%
Hay	12,549	1,704,017	0.74%	17.92%
Soybeans	19,379	2,806,255	0.69%	11.32%
Potatoes	29	39,193	0.07%	190.00%
Major Fruit Crops, 2021 Census (acres)				
Total fruit crops	412	48,661	0.85%	-2.83%
Apples	119	16,008	0.74%	-6.30%
Sour Cherries	1	1,383	0.07%	-
Peaches	59	4,608	1.28%	353.85%
Grapes	7	18,432	0.04%	-90.91%
Strawberries	45	2,633	1.71%	-28.57%
Raspberries	9	438	2.05%	-67.86%
Major Vegetable Crops, 2021 Census (acres)				
Total vegetables	642	127,893	0.50%	0.00%
Sweet corn	37	20,518	0.18%	-55.42%
Tomatoes	33	14,614	0.23%	-25.00%
Green peas	4	14,044	0.03%	-
Green or wax beans	4	8,709	0.05%	-
Livestock Inventories, 2021 Census (number)				
Total cattle and calves	3,068	1,604,810	0.19%	-4.39%
Steers	216	299,540	0.07%	-43.90%
Beef cows	913	224,194	0.41%	10.53%
Dairy cows	322	327,272	0.10%	-15.04%
Total pigs	484	4,071,902	0.01%	248.20%
Total sheep and lambs	1,328	322,508	0.41%	-16.11%
Poultry Inventories, 2021 Census (number)				
Total hens and chickens	42,410	53,802,772	0.08%	-73.89%
Total turkeys	28	2,453,126	0.00%	-





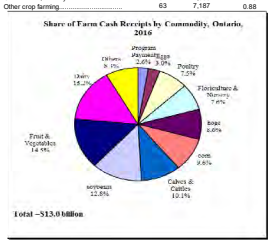
F - too unreliable to be published
Sources: 2021 & 2016 Census of Agriculture, OMAFRA
2022-08-21

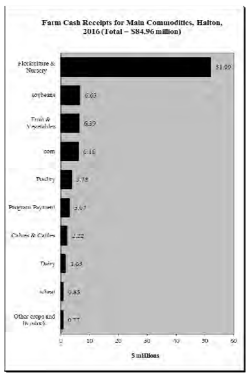
County & Township Ag Profile - Halton Regional Municipality; Townships: Oakville, Burlington, Milton, Halton Hills

Halton Regional Municipality at a Glance - 2016

Item	Halton	Province	Percent of province	Percent from 2011
Farms, 2016 Census (number)				
Total	451	49,600	0.91	-3.84
Under 10 acres	63	3,051	2.06	40.00
10 to 69 acres	200	12,625	1.58	-0.99
70 to 129 acres	77	10,742	0.72	-22.22
130 to 179 acres	29	4,592	0.63	-3.33
180 to 239 acres	25	4,282	0.58	-10.71
240 to 399 acres	24	6,008	0.40	-25.00
400 to 559 acres	11	3,093	0.36	37.50
560 to 759 acres	10	1,990	0.50	42.86
760 to 1,119 acres	7	1,593	0.44	-30.00
1,120 to 1,599 acres	2	801	0.25	-33.33
1,600 to 2,239 acres	1	457	0.22	-66.67
2,240 to 2,879 acres	1	168	0.60	-
2,880 to 3,519 acres	0	88	0.00	-100.00
3,520 acres and over	1	110	0.91	0.00
Land Use, 2016 Census (acres)				
Land in crops	52,602	9,021,298	0.58	-14.71
Summerfallow land	243	15,885	1.53	-46.11
Tame or seeded pasture	1,850	514,168	0.36	-21.84
Natural land for pasture	3,414	783,566	0.44	-11.67
Christmas trees, woodland & wetland	5,799	1,542,637	0.38	-24.78
All other land	4,778	470,909	1.01	47.06
Total area of farms	68,676	12,348,463	0.56	-13.69
Greenhouse Area, 2016 Census (square feet)				
Total area in use	2,086,958	158,511,328	1.32	12.67
Farm Capital Value, 2016 Census (farms reporting)				
Under $200,000	16	2,142	0.75	33.33
$200,000 to $499,999	23	7,433	0.31	-62.30
$500,000 to $999,999	99	12,500	0.79	-23.26
$1,000,000 and over	313	27,525	1.14	17.23
Total Gross Farm Receipts, 2016 Census (farms reporting)				
Under $10,000	125	9,536	1.31	-16.67
$10,000 to $24,999	72	8,376	0.86	-19.10
$25,000 to $49,999	64	6,755	0.95	68.42
$50,000 to $99,999	48	6,263	0.77	-15.79
$100,000 to $249,999	73	7,022	1.04	23.73
$250,000 to $499,999	22	4,707	0.47	-29.03
$500,000 to $999,999	26	3,689	0.70	0.00
$1,000,000 to $1,999,999	10	2,019	0.50	0.00
$2,000,000 and over	11	1,233	0.89	22.22
Farms by Industry Group, 2016 Census (number of farms)				
Beef cattle ranching and farming	28	6,786	0.41	3.70
Dairy cattle and milk production	5	3,439	0.15	-58.33
Hog and pig farming	0	1,229	0.00	-
Poultry and egg production	12	1,816	0.66	9.09
Sheep and goat farming	11	1,097	1.00	22.22
Other animal production	129	5,902	2.19	8.40
Oilseed and grain farming	97	16,876	0.57	-9.35
Vegetable and melon farming	26	1,856	1.40	44.44
Fruit and tree nut farming	23	1,362	1.69	4.55
Greenhouse, nursery and floriculture	57	2,050	2.78	-10.94
Other crop farming	63	7,187	0.88	-21.25

Item	Halton	Province	Percent of province	Percent from 2011
Major Field Crops, 2016 Census (acres)				
Winter wheat	7,643	1,080,378	0.71	-16.00
Oats for grain	193	82,206	0.23	12.21
Barley for grain	229	103,717	0.22	-56.38
Mixed grains	243	92,837	0.26	-35.03
Corn for grain	12,272	2,162,004	0.57	-5.09
Corn for silage	625	295,680	0.21	16.17
Hay	10,642	1,721,214	0.62	-27.81
Soybeans	17,409	2,783,443	0.63	-11.15
Potatoes	10	34,685	0.03	-
Major Fruit Crops, 2016 Census (acres)				
Total fruit crops	424	51,192	0.83	-18.93
Apples	127	15,893	0.80	-32.09
Sour Cherries	x	2,121	-	-
Peaches	13	5,232	0.25	-
Grapes	77	18,718	0.41	4.05
Strawberries	63	2,915	2.16	-33.68
Raspberries	28	680	4.12	12.00
Major Vegetable Crops, 2016 Census (acres)				
Total vegetables	642	135,420	0.47	-6.82
Sweet corn	83	22,910	0.36	-14.43
Tomatoes	44	15,744	0.28	120.00
Green peas	x	16,268	-	-
Green or wax beans	x	9,732	-	-
Livestock Inventories, 2016 Census (number)				
Total cattle and calves	3,209	1,623,710	0.20	-34.60
Steers	385	305,514	0.13	-41.93
Beef cows	826	236,253	0.35	-30.65
Dairy cows	379	311,960	0.12	-32.80
Total pigs	139	3,534,104	-	-
Total sheep and lambs	1,583	321,495	0.49	24.94
Poultry Inventories, 2016 Census (number)				
Total hens and chickens	162,456	50,759,994	0.32	16.11
Total turkeys	x	3,772,146	-	-



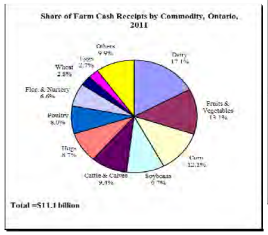


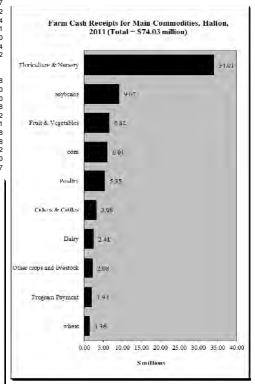
x Suppressed data
Sources: 2016 & 2011 Census of Agriculture and Strategic Policy Branch, OMAFRA
2017-06-02

Halton Regional Municipality at a Glance - 2011

Item	Halton	Province	Percent of province
Farms, 2011 Census (number)			
Total	469	51,950	0.90
Under 10 acres	45	2,741	1.64
10 to 69 acres	202	12,681	1.59
70 to 129 acres	99	11,779	0.84
130 to 179 acres	30	4,969	0.60
180 to 239 acres	28	4,801	0.58
240 to 399 acres	32	6,460	0.50
400 to 559 acres	8	3,359	0.24
560 to 759 acres	7	2,026	0.35
760 to 1,119 acres	10	1,587	0.63
1,120 to 1,599 acres	3	788	0.38
1,600 to 2,239 acres	3	436	0.69
2,240 to 2,879 acres	0	152	0.00
2,880 to 3,519 acres	1	79	1.27
3,520 acres and over	1	92	1.09
Land Use, 2011 Census (acres)			
Land in crops	61,673	8,929,947	0.69
Summerfallow land	717	23,460	3.06
Tame or seeded pasture	2,367	648,758	0.36
Natural land for pasture	3,865	984,809	0.39
Christmas trees, woodland & wetland	7,696	1,612,444	0.48
All other land	3,249	468,828	0.69
Total area of farms	79,567	12,668,236	0.63
Greenhouse Area, 2011 Census (square feet)			
Total area in use	1,852,311	133,520,541	1.39
Farm Capital Value, 2011 Census (farms reporting)			
Under $200,000	12	2,562	0.47
$200,000 to $499,999	61	12,994	0.47
$500,000 to $999,999	129	15,276	0.84
$1,000,000 and over	267	21,118	1.26
Total Gross Farm Receipts, 2011 Census (farms reporting)			
Under $10,000	150	12,263	1.22
$10,000 to $24,999	89	9,098	0.98
$25,000 to $49,999	38	6,720	0.57
$50,000 to $99,999	57	6,189	0.92
$100,000 to $249,999	59	6,985	0.84
$250,000 to $499,999	31	5,086	0.61
$500,000 to $999,999	26	3,248	0.80
$1,000,000 to $1,999,999	10	1,558	0.64
$2,000,000 and over	9	803	1.12
Farms by Industry Group, 2016 Census (number of farms)			
Beef cattle ranching and farming	27	7,105	0.38
Dairy cattle and milk production	12	4,036	0.30
Hog and pig farming	0	1,235	0.00
Poultry and egg production	11	1,619	0.68
Sheep and goat farming	9	1,446	0.62
Other animal production	119	6,966	1.71
Oilseed and grain farming	107	15,818	0.68
Vegetable and melon farming	18	1,531	1.18
Fruit and tree nut farming	22	1,548	1.42
Greenhouse, nursery and floriculture	64	2,372	2.70
Other crop farming	80	8,274	0.97

Item	Halton	Province	Percent of province
Major Field Crops, 2011 Census (acres)			
Winter wheat	9,099	1,100,003	0.83
Oats for grain	172	71,040	0.24
Barley for grain	525	126,881	0.41
Mixed grains	374	106,162	0.35
Corn for grain	12,930	2,032,356	0.64
Corn for silage	538	271,701	0.20
Hay	14,742	2,077,911	0.71
Soybeans	19,594	2,464,870	0.79
Potatoes	0	37,384	0.00
Major Fruit Crops, 2011 Census (acres)			
Total fruit crops	523	52,740	0.99
Apples	187	15,830	1.18
Sour Cherries	0	2,342	0.00
Peaches	x	6,455	-
Grapes	74	18,383	0.40
Strawberries	95	3,283	2.89
Raspberries	25	902	2.77
Major Vegetable Crops, 2011 Census (acres)			
Total vegetables	689	129,595	0.53
Sweet corn	97	25,540	0.38
Tomatoes	20	16,558	0.12
Green peas	x	15,121	-
Green or wax beans	x	9,186	-
Livestock Inventories, 2011 Census (number)			
Total cattle and calves	4,907	1,741,381	0.28
Steers	663	291,263	0.23
Beef cows	1,191	282,062	0.42
Dairy cows	564	318,158	0.18
Total pigs	x	3,088,646	-
Total sheep and lambs	1,267	352,807	0.36
Poultry Inventories, 2011 Census (number)			
Total hens and chickens	139,913	46,902,316	0.30
Total turkeys	x	3,483,828	-





Halton Hills Township at a Glance - 2021

Item	Halton Hills	Province	Percent of province	Percent from 2016
Farms, 2021 Census (number)				
Total	147	48,346	0.30%	-18.33%
Under 10 acres	19	3,217	0.59%	-13.64%
10 to 69 acres	45	12,686	0.35%	-37.50%
70 to 129 acres	38	10,924	0.35%	26.67%
130 to 179 acres	9	4,422	0.20%	-40.00%
180 to 239 acres	11	3,981	0.28%	-8.33%
240 to 399 acres	7	5,396	0.13%	-53.33%
400 to 559 acres	4	2,865	0.14%	0.00%
560 to 759 acres	2	1,698	0.12%	-60.00%
760 to 1,119 acres	6	1,600	0.38%	100.00%
1,120 to 1,599 acres	4	720	0.56%	-
1,600 to 2,239 acres	1	451	0.22%	0.00%
2,240 to 2,879 acres	0	173	0.00%	-
2,880 to 3,519 acres	0	95	0.00%	-
3,520 acres and over	1	118	0.85%	0.00%
Land Use, 2021 Census (acres)				
Land in crops	31,830	9,051,011	0.35%	3.97%
Summerfallow land	135	13,964	0.97%	-6.25%
Tame or seeded pasture	850	400,480	0.21%	16.28%
Natural land for pasture	954	626,366	0.15%	-23.25%
Christmas trees, woodland & wetland	1,933	1,269,535	0.15%	-22.53%
All other land	1,472	404,714	0.36%	-23.61%
Total area of farms	37,175	11,766,071	0.32%	0.06%
Greenhouse Area, 2021 Census (square feet)				
Total area in use	686,887	201,055,888	0.34%	-28.83%
Farm Capital Value, 2021 Census (farms reporting)				
Under $200,000	4	1,212	0.33%	-33.33%
$200,000 to $499,999	2	3,223	0.06%	-80.00%
$500,000 to $999,999	16	8,699	0.18%	-55.56%
$1,000,000 and over	125	35,212	0.35%	-2.34%
Total Gross Farm Receipts, 2021 Census (farms reporting)				
Under $10,000	35	7,277	0.48%	-25.53%
$10,000 to $24,999	19	7,429	0.26%	-24.00%
$25,000 to $49,999	19	6,263	0.30%	-24.00%
$50,000 to $99,999	22	6,093	0.36%	-8.33%
$100,000 to $249,999	18	6,817	0.26%	-41.94%
$250,000 to $499,999	8	4,448	0.18%	-27.27%
$500,000 to $999,999	15	3,954	0.38%	66.67%
$1,000,000 to $1,999,999	3	2,452	0.12%	-25.00%
$2,000,000 and over	3	1,696	0.18%	-25.00%
Farms by Industry Group, 2021 Census (number of farms)				
Beef cattle ranching and farming	18	7,986	0.23%	0.00%
Dairy cattle and milk production	2	3,188	0.06%	-50.00%
Hog and pig farming	0	1,189	0.00%	-
Poultry and egg production	4	2,061	0.19%	0.00%
Sheep and goat farming	5	1,309	0.38%	25.00%
Other animal production	30	4,556	0.66%	30.23%
Oilseed and grain farming	47	18,194	0.26%	9.30%
Vegetable and melon farming	13	1,562	0.83%	18.18%
Fruit and tree nut farming	4	1,211	0.33%	-20.00%
Greenhouse, nursery and floriculture	11	1,672	0.66%	-52.17%
Other crop farming	13	5,418	0.24%	-48.00%

Item	Halton Hills	Province	Percent of province	Percent from 2016
Major Field Crops, 2021 Census (acres)				
Winter wheat	5,692	1,144,406	0.50%	-
Oats for grain	23	84,320	0.03%	-
Barley for grain	59	68,756	0.09%	-60.14%
Mixed grains	20	59,961	0.03%	-
Corn for grain	7,537	2,202,465	0.34%	-11.37%
Corn for silage	200	289,678	0.07%	-47.51%
Hay	4,511	1,704,017	0.26%	-4.97%
Soybeans	11,680	2,806,255	0.42%	23.76%
Potatoes	27	39,193	0.07%	575.00%
Major Fruit Crops, 2021 Census (acres)				
Total fruit crops	72	48,661	0.15%	-40.50%
Apples	64	16,008	0.40%	-8.57%
Sour Cherries	0	1,383	0.00%	-
Peaches	1	4,608	0.02%	-
Grapes	0	18,432	0.00%	-
Strawberries	5	2,633	0.19%	-
Raspberries	0	438	0.00%	-
Major Vegetable Crops, 2021 Census (acres)				
Total vegetables	458	127,893	0.36%	3.62%
Sweet corn	1	20,518	0.00%	-
Tomatoes	21	14,614	0.14%	90.91%
Green peas	1	14,044	0.01%	0.00%
Green or wax beans	2	8,709	0.02%	-60.00%
Livestock Inventories, 2021 Census (number)				
Total cattle and calves	1,319	1,604,810	0.08%	-12.36%
Steers	121	299,540	0.04%	-42.65%
Beef cows	503	224,194	0.22%	20.62%
Dairy cows	85	327,272	0.03%	-59.13%
Total pigs	21	4,071,902	0.00%	-70.00%
Total sheep and lambs	668	322,508	0.21%	21.90%
Poultry Inventories, 2021 Census (number)				
Total hens and chickens	8,074	53,802,772	0.02%	455.30%
Total turkeys	5	2,453,126	0.00%	-64.29%

Halton Hills Township at a Glance - 2016

Item	Halton Hills	Province	Percent of province	Percent from 2011
Farms, 2016 Census (number)				
Total	180	49,600	0.36	6.51
Under 10 acres	22	3,051	0.72	46.67
10 to 69 acres	72	12,625	0.57	24.14
70 to 129 acres	30	10,742	0.28	-26.83
130 to 179 acres	15	4,592	0.33	7.14
180 to 239 acres	12	4,282	0.28	20.00
240 to 399 acres	15	6,008	0.25	-6.25
400 to 559 acres	4	3,093	0.13	33.33
560 to 759 acres	5	1,990	0.25	25.00
760 to 1,119 acres	3	1,593	0.19	-50.00
1,120 to 1,599 acres	0	801	0.00	-100.00
1,600 to 2,239 acres	1	457	0.22	-
2,240 to 2,879 acres	0	168	0.00	-
2,880 to 3,519 acres	0	88	0.00	-
3,520 acres and over	1	110	0.91	0.00
Land Use, 2016 Census (acres)				
Land in crops	30,614	9,021,298	0.34	-0.94
Summerfallow land	144	15,885	0.91	-74.60
Tame or seeded pasture	731	514,168	0.14	-27.41
Natural land for pasture	1,243	783,566	0.16	-33.28
Christmas trees, woodland & wetland	2,495	1,542,637	0.16	-9.40
All other land	1,927	470,909	0.41	84.40
Total area of farms	37,154	12,348,463	0.30	-2.59
Greenhouse Area, 2016 Census (square feet)				
Total area in use	965,180	158,511,328	0.61	55.88
Farm Capital Value, 2016 Census (farms reporting)				
Under $200,000	6	2,142	0.28	-14.29
$200,000 to $499,999	10	7,433	0.13	-58.33
$500,000 to $999,999	36	12,500	0.29	-16.28
$1,000,000 and over	128	27,525	0.47	34.74
Total Gross Farm Receipts, 2016 Census (farms reporting)				
Under $10,000	47	9,536	0.49	-14.55
$10,000 to $24,999	25	8,376	0.30	-21.88
$25,000 to $49,999	25	6,755	0.37	78.57
$50,000 to $99,999	24	6,263	0.38	9.09
$100,000 to $249,999	31	7,022	0.44	40.91
$250,000 to $499,999	11	4,707	0.23	-8.33
$500,000 to $999,999	9	3,689	0.24	50.00
$1,000,000 to $1,999,999	4	2,019	0.20	33.33
$2,000,000 and over	4	1,233	0.32	33.33
Farms by Industry Group, 2016 Census (number of farms)				
Beef cattle ranching and farming	18	6,786	0.27	28.57
Dairy cattle and milk production	4	3,439	0.12	-60.00
Hog and pig farming	0	1,229	0.00	-
Poultry and egg production	4	1,816	0.22	100.00
Sheep and goat farming	4	1,097	0.36	0.00
Other animal production	43	5,902	0.73	26.47
Oilseed and grain farming	43	16,876	0.25	-2.27
Vegetable and melon farming	11	1,856	0.59	175.00
Fruit and tree nut farming	5	1,362	0.37	-37.50
Greenhouse, nursery and floriculture	23	2,050	1.12	76.92
Other crop farming	25	7,187	0.35	-30.56

Item	Halton Hills	Province	Percent of province	Percent from 2011
Major Field Crops, 2016 Census (acres)				
Total	0	1,080,378	0.00	-
Winter wheat	0	82,206	0.00	-100.00
Oats for grain	0	92,837	0.00	-100.00
Barley for grain	148	103,717	0.14	-
Mixed grains	0	92,837	0.00	-100.00
Corn for grain	8,504	2,162,004	0.39	12.31
Corn for silage	381	295,660	0.13	50.00
Hay	4,747	1,721,214	0.28	-22.78
Soybeans	9,438	2,783,443	0.34	4.74
Potatoes	4	34,685	0.01	-
Major Fruit Crops, 2016 Census (acres)				
Total fruit crops	121	51,192	0.24	-34.24
Apples	70	15,893	0.44	-27.08
Sour Cherries	0	2,121	0.00	-
Peaches	x	5,232	-	-
Grapes	x	18,718	-	-
Strawberries	x	2,915	-	-
Raspberries	x	680	-	-
Major Vegetable Crops, 2016 Census (acres)				
Total vegetables	442	135,420	0.33	110.48
Sweet corn	x	22,910	-	-
Tomatoes	11	15,744	0.07	0.00
Green peas	1	16,268	0.01	-
Green or wax beans	5	9,732	0.05	-
Livestock Inventories, 2016 Census (number)				
Total cattle and calves	1,505	1,623,710	0.09	-43.68
Steers	211	305,514	0.07	-51.61
Beef cows	417	236,253	0.18	-35.15
Dairy cows	208	311,960	0.07	-44.39
Total pigs	70	3,534,104	-	-
Total sheep and lambs	548	321,495	0.17	-12.32
Poultry Inventories, 2016 Census (number)				
Total hens and chickens	1,454	50,759,994	-	300.55
Total turkeys	14	3,772,146	-	-

Halton Hills Township at a Glance - 2011

Item	Halton Hills	Province	Percent of province
Farms, 2011 Census (number)			
Total	169	51,950	0.33
Under 10 acres	15	2,741	0.55
10 to 69 acres	58	12,681	0.46
70 to 129 acres	41	11,779	0.35
130 to 179 acres	14	4,969	0.28
180 to 239 acres	10	4,801	0.21
240 to 399 acres	16	6,460	0.25
400 to 559 acres	3	3,359	0.09
560 to 759 acres	4	2,026	0.20
760 to 1,119 acres	6	1,587	0.38
1,120 to 1,599 acres	1	788	0.13
1,600 to 2,239 acres	0	436	0.00
2,240 to 2,879 acres	0	152	0.00
2,880 to 3,519 acres	0	79	0.00
3,520 acres and over	1	92	1.09
Land Use, 2011 Census (acres)			
Land in crops	30,906	8,929,947	0.35
Summerfallow land	567	23,450	2.42
Tame or seeded pasture	1,007	648,758	0.16
Natural land for pasture	1,863	984,809	0.19
Christmas trees, woodland & wetland	2,754	1,612,444	0.17
All other land	1,045	468,828	0.22
Total area of farms	38,142	12,668,236	0.30
Greenhouse Area, 2011 Census (square feet)			
Total area in use	619,200	133,520,541	0.46
Farm Capital Value, 2011 Census (farms reporting)			
Under $200,000	7	2,562	0.27
$200,000 to $499,999	24	12,994	0.18
$500,000 to $999,999	43	15,276	0.28
$1,000,000 and over	95	21,118	0.45
Total Gross Farm Receipts, 2011 Census (farms reporting)			
Under $10,000	55	12,263	0.45
$10,000 to $24,999	32	9,098	0.35
$25,000 to $49,999	14	6,720	0.21
$50,000 to $99,999	22	6,189	0.36
$100,000 to $249,999	22	6,985	0.31
$250,000 to $499,999	12	5,086	0.24
$500,000 to $999,999	6	3,248	0.18
$1,000,000 to $1,999,999	3	1,558	0.19
$2,000,000 and over	3	803	0.37
Farms by Industry Group, 2011 Census (number of farms)			
Beef cattle ranching and farming	14	7,105	0.20
Dairy cattle and milk production	10	4,036	0.25
Hog and pig farming	0	1,235	0.00
Poultry and egg production	2	1,619	0.12
Sheep and goat farming	4	1,446	0.28
Other animal production	34	6,966	0.49
Oilseed and grain farming	44	15,818	0.28
Vegetable and melon farming	4	1,531	0.26
Fruit and tree nut farming	8	1,548	0.52
Greenhouse, nursery and floriculture	13	2,372	0.55
Other crop farming	36	8,274	0.44

Item	Halton Hills	Province	Percent of province
Major Field Crops, 2011 Census (acres)			
Winter wheat	0	1,100,003	0.00
Oats for grain	105	71,040	0.15
Barley for grain	0	126,881	0.00
Mixed grains	280	106,162	0.26
Corn for grain	7,572	2,032,356	0.37
Corn for silage	254	271,701	0.09
Hay	6,147	2,077,911	0.30
Soybeans	9,011	2,464,870	0.37
Potatoes	0	37,384	0.00
Major Fruit Crops, 2011 Census (acres)			
Total fruit crops	184	52,740	0.35
Apples	96	15,830	0.61
Sour Cherries	0	2,342	0.00
Peaches	0	6,455	0.00
Grapes	10	18,383	0.05
Strawberries	x	3,283	-
Raspberries	x	902	-
Major Vegetable Crops, 2011 Census (acres)			
Total vegetables	210	129,595	0.16
Sweet corn	62	25,540	0.24
Tomatoes	11	16,558	0.07
Green peas	x	15,121	-
Green or wax beans	x	9,186	-
Livestock Inventories, 2011 Census (number)			
Total cattle and calves	2,672	1,741,381	0.15
Steers	436	291,263	0.15
Beef cows	643	282,062	0.23
Dairy cows	374	318,158	0.12
Total pigs	x	3,088,646	-
Total sheep and lambs	625	352,807	0.18
Poultry Inventories, 2011 Census (number)			
Total hens and chickens	363	46,902,316	-
Total turkeys	0	3,483,828	0.00

Appendix E:

Canada Land Inventory

Canada Land Inventory Soil Capability Classification for Agriculture

The Canada Land Inventory (CLI) classification system was developed to classifying soil capability for agricultural use for use across Canada. CLI is an interpretative system which assesses the effects of climate and soil characteristics on the limitations of land for growing common field crops. It classifies soils into one of seven capability classes based on the severity of their inherent limitations to field crop production. Soils descend in quality from Class 1, which is highest, to Class 7 soils which have no agricultural capability for the common field crops. Class 1 soils have no significant limitations. Class 2 through 7 soils have one or more significant limitations, and each of these are denoted by a capability subclass.

In Ontario the document, "Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario" (OMAFRA, 2008) provides a Provincial interpretation of the CLI classification system. These guidelines are based on the "Canada Land Inventory, Soil Capability Classification for Agriculture" (ARDA Report No. 2, 1965) and have been modified for use in Ontario. In Ontario, CLI Classes 1 to 4 lands are generally considered to be arable lands and Classes 1 to 3 soils and specialty crop lands are considered to be prime agricultural lands.

The following definitions were taken from Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario (2008).

Definitions of the Capability Classes

Class 1 - Soils in this class have no significant limitations in use for crops. Soils in Class 1 are level to nearly level, deep, well to imperfectly drained and have good nutrient and water holding capacity. They can be managed and cropped without difficulty. Under good management they are moderately high to high in productivity for the full range of common field crops

Class 2 - Soils in this class have moderate limitations that reduce the choice of crops, or require moderate conservation practices. These soils are deep and may not hold moisture and nutrients as well as Class 1 soils. The limitations are moderate and the soils can be managed and cropped with little difficulty. Under good management they are moderately-high to high in productivity for a wide range of common field crops.

Class 3 - Soils in this class have moderately severe limitations that reduce the choice of crops or require special conservation practices. The limitations are more severe than for Class 2 soils. They affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. Under good management these soils are fair to moderately high in productivity for a wide range of common field crops.

Class 4 - Soils in this class have severe limitations that restrict the choice of crops, or require special conservation practices and very careful management, or both. The severe limitations seriously affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. These soils are low to medium in productivity for a narrow to wide range of common field crops, but may have higher productivity for a specially adapted crop.

Class 5 - Soils in this class have very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible. The limitations are so severe that the soils are not capable of use for sustained production of annual field crops. The soils are capable of producing native or tame species of perennial forage plants and may be improved through the use of farm machinery. Feasible improvement practices may include clearing of bush, cultivation, seeding, fertilizing or water control.

Class 6 - Soils in this class are unsuited for cultivation, but are capable of use for unimproved permanent pasture. These soils may provide some sustained grazing for farm animals, but the limitations are so severe that improvement through the use of farm machinery is impractical. The terrain may be unsuitable for the use of farm machinery, or the soils may not respond to improvement, or the grazing season may be very short.

Class 7 - Soils in this class have no capability for arable culture or permanent pasture. This class includes marsh, rockland and soil on very steep slopes.

Definitions of the Prime and Non-prime Agricultural Lands

In Ontario, CLI Classes 1, 2 and 3 and specialty crop lands are considered prime agricultural lands. Non-prime agricultural lands are comprised of CLI Class 4-7 lands.

Organic soils (Muck) are not classified under the CLI system but are mapped and identified as O in the provincial mapping.

Definitions of the Capability Subclasses

Capability Subclasses indicate the kinds of limitations present for agricultural use. Thirteen Subclasses were described in CLI Report No. 2. Eleven of these Subclasses have been adapted to Ontario soils.

Subclass Definitions:

Subclass C - Adverse climate: This subclass denotes a significant adverse climate for crop production as compared to the "median" climate which is defined as one with sufficiently high growing-season temperatures to bring common field crops to maturity, and with sufficient precipitation to permit crops to be grown each year on the same land without a serious risk of partial or total crop failures. In Ontario this subclass is applied to land averaging less than 2300 Crop Heat Units.

Class	Crop Heat Units
1	>2300
2C	1900-2300
3C	1700-1900
4C	<1700

Subclass D - Undesirable soil structure and/or low permeability: This subclass is used for soils which are difficult to till, or which absorb or release water very slowly, or in which the depth of rooting zone is restricted by conditions other than a high water table or consolidated bedrock. In Ontario this subclass is based on the existence of critical clay contents in the upper soil profile.

Class	Soil Characteristics
2D	The top of a clayey horizon >15 cm thick occurs within 40 cm of the soil surface. Clayey materials in this case must have >35% clay content.
3D	The top of a very fine clayey (clay content >60%) horizon >15 cm thick occurs within 40 cm of the soil surface

Subclass E - Erosion: Loss of topsoil and subsoil by erosion has reduced productivity and may in some cases cause difficulties in farming the land e.g. land with gullies.

Class	Soil Characteristics
2E	Loss of the original plough layer, incorporation of original B horizon material into the present plough layer, and general organic matter losses have resulted in moderate losses to soil productivity.
3E	Loss of original solum (A and B horizons) has resulted in a plough layer consisting mostly of

	Loamy or Clayey parent material. Organic matter content of the cultivated surface is less than 2%.
4E	Loss of original solum (A and B horizons) has resulted in a cultivated layer consisting mainly of Sandy parent material with an organic matter content of less than 2%; shallow gullies and occasionally deep gullies which cannot be crossed by machinery may also be present.
5E	The original solum (A and B horizons) has been removed exposing very gravelly material and/or frequent deep gullies are present which cannot be crossed by machinery.

Subclass F - Low natural fertility*:* This subclass is made up of soils having low fertility that is either correctable with careful management in the use of fertilizers and soil amendments or is difficult to correct in a feasible way. The limitation may be due to a lack of available plant nutrients, high acidity, low exchange capacity, or presence of toxic compounds.

Class	Upper Texture Group (>40 and <100 cm from surface)	Lower Texture Group (remaining materials to 100 cm depth)	Drainage Class	Additional Soil Characteristics[1]
2F	Sandy	Sandy or very gravelly	Rapid to imperfect	Neutral or alkaline parent material with a Bt horizon within 100 cm of the surface
3F	Sandy	Sandy or very gravelly	Any drainage class	Neutral or alkaline parent material with no Bt horizon present within 100 cm of surface
3F	Sandy	Loamy or Clayey	Any drainage class	Acid parent material
3F	Loamy or clayey	Any Texture Group	Any drainage class	Acid parent material
4F	Sandy	Sandy or very gravelly	Any drainage class	Acid parent material
4F	Very gravelly	Any texture	Rapid to imperfect	Neutral to alkaline parent material
5F	Very Gravelly	Any texture	All drainage classes	Acid parent material

[1] "Acid" means pH<5.5; "Neutral" pH 5.5 to 7.4; "Alkaline" pH>7.4 as measured in 0.01 M CaCl2 (CSSC, 1998). PH 's measured in distilled water tend to be slightly higher (up to 0.5 units).

Bt horizon should be fairly continuous and average more than 10cm thickness

Subclass I - Inundation by streams or lakes: Flooding by streams and lakes causes crop damage or restricts agricultural use.

Class	Soil Characteristics
3I	Frequent inundation with some crop damage; estimated frequency of flooding is less than once every 5 years (Floodplain); includes higher floodplain-terraces on which cultivated field crops can be grown.
5I	Very frequent inundation with some crop damage; estimated frequency of flooding is at least once every 5 years (Floodplain); includes active floodplain areas on which forage crops can be grown primarily for pasture.
7I	Land is inundated for most of the growing season; often permanently flooded (Marsh)

Subclass M – Moisture deficiency: Soils in this subclass have lower moisture holding capacities and are more prone to droughtiness.

Class	Soil Texture Groups		Drainage	Additional Soil Characteristics
	Upper materials1	Lower materials2		
2M	15 to 40 cm of loamy or finer materials	Sandy to Very Gravelly	Well	
2M	40 to < 100 cm of sandy to very gravelly material.	Loamy to Very Fine Clayey	Well	
2M	Sandy		Rapid to well	Well developed Bt3 horizon occurs within 100 cm of surface
3M	Sandy material to > 100cm		Rapid	Bt horizon absent within 100 cm of surface
4M	Very Gravelly to > 100 cm		Rapid	Bt horizon present within 100 cm of surface
5M	Very gravelly to > 100cm		Very rapid	Bt horizon absent within 100cm

Subclass P - Stoniness: This subclass indicates soils sufficiently stony to hinder tillage, planting, and harvesting operations.

Class	Soil Characteristics
2P	Surface stones cause some interference with tillage, planting and harvesting; stones are 15-60 cm in diameter, and occur in a range of 1-20 m apart, and occupy <3% of the surface area. Some stone removal is required to bring the land into production.
3P	Surface stones are a serious handicap to tillage, planting, and harvesting; stones are 15-60 cm in diameter, occur 0.5-1m apart (20-75 stones/100 m^2), and occupy 3-15% of the surface area. The occasional boulder >60 cm in diameter may also occur. Considerable stone removal is required to bring the land into production. Some annual removal is also required.
4P	Surface stones and many boulders occupy 3-15% of the surface. Considerable stone and boulder removal is needed to bring the land into tillable production. Considerable annual removal is also required for tillage and planting to take place.
5P	Surface stones 15-60 cm in diameter and/or boulders >60 cm in diameter occupy 15-50% of the surface area (>75 stones and/or boulders/100 m2).
6P	Surface stones 15-60 cm in diameter and/or boulders >60 cm in diameter occupy >50% of the surface area.

Subclass R - Shallowness to Consolidated Bedrock: This subclass is applied to soils where the depth of the rooting zone is restricted by consolidated bedrock. Consolidated bedrock, if it occurs within 100 cm of the surface, reduces available water holding capacity and rooting depth. Where physical soil data were available, the water retention model of McBride and Mackintosh was used to assist in developing the subclass criteria.

Class	Soil Characteristics
3R	Consolidated bedrock occurs at a depth of 50-100 cm from the surface causing moderately severe restriction of moisture holding capacity and/or rooting depth.
4R	Consolidated bedrock occurs at a depth of 20-50 cm from the surface causing severe restriction of moisture holding capacity and/or rooting depth.
5R	Consolidated bedrock occurs at a depth of 10 to 20 cm from the surface causing very severe restrictions for tillage, rooting depth and moisture holding capacity. Improvements such as tree removal, shallow tillage, and the seeding down and fertilizing of perennial forages for hay and grazing may be feasible.

6R	Consolidated bedrock occurs at a depth of 10-20 cm from the surface but improvements as in 5R are unfeasible. Open meadows may support grazing.
7R	Consolidated bedrock occurs at < 10cm from the surface.

Subclass S - Adverse soil characteristics: This subclass denotes a combination of limitations of equal severity. In Ontario it has often been used to denote a combination of F and M when these are present with a third limitation such as T, E or P.

Subclass T - Topography

The steepness of the surface slope and the pattern or frequency of slopes in different directions are considered topographic limitations if they: 1) increase the cost of farming the land over that of level or less sloping land; 2) decrease the uniformity of growth and maturity of crops; and 3) increase the potential of water and tillage erosion.

Determination of Subclass T for Very Gravelly and Sandy Soils

Slope %	<2		2-5		5-9		9-15		15-30		30-60		>60	
Slope type	S	C	S	C	S	C	S	C	S	C	S	C	S	C
Class				2T	2T	3T	3T	4T	5T	5T	6T	6T	7T	7T

Slope %	<2		2-5		5-9		9-15		15-30		30-60		>60	
Slope type	S	C	S	C	S	C	S	C	S	C	S	C	S	C
Class				2T	3T	3T	4T	4T	5T	5T	6T	6T	7T	7T

S = Simple Slopes >50 m in length

C =Complex Slopes <50 m in length

Subclass W - Excess water:

The presence of excess soil moisture, other than that brought about by inundation, is a limitation to field crop agriculture. Excess water may result from inadequate soil drainage, a high water table, seepage or runoff from surrounding areas.

Soil Textures and Depths	**Depth to Bedrock** (cm)	**Soil Class** (Drainage in place or feasible)	**Soil Class** (Drainage not feasible)
Very gravelly, sandy, or loamy extending >40 cm from the surface, or, <40 cm of any other textures overlying very gravelly, sandy or loamy textures	>100	2W	4W, 5W
>40 cm depth of clayey or very fine clayey textures, or, <40 cm of any other texture overlying clayey or very fine clayey textures	>100	3W	5W
<40 cm of peaty material overlying any texture	>100	3W	5W
All textures	50-100	4W	5W
All textures	0-50	NA	5W

Appendix F:

Site Photographs

Photo 1: Farm 6

Photo 2: Farm 9

Photo 3: Farm 10

Photo 4: Farm 16

Photo 5: Farm 17

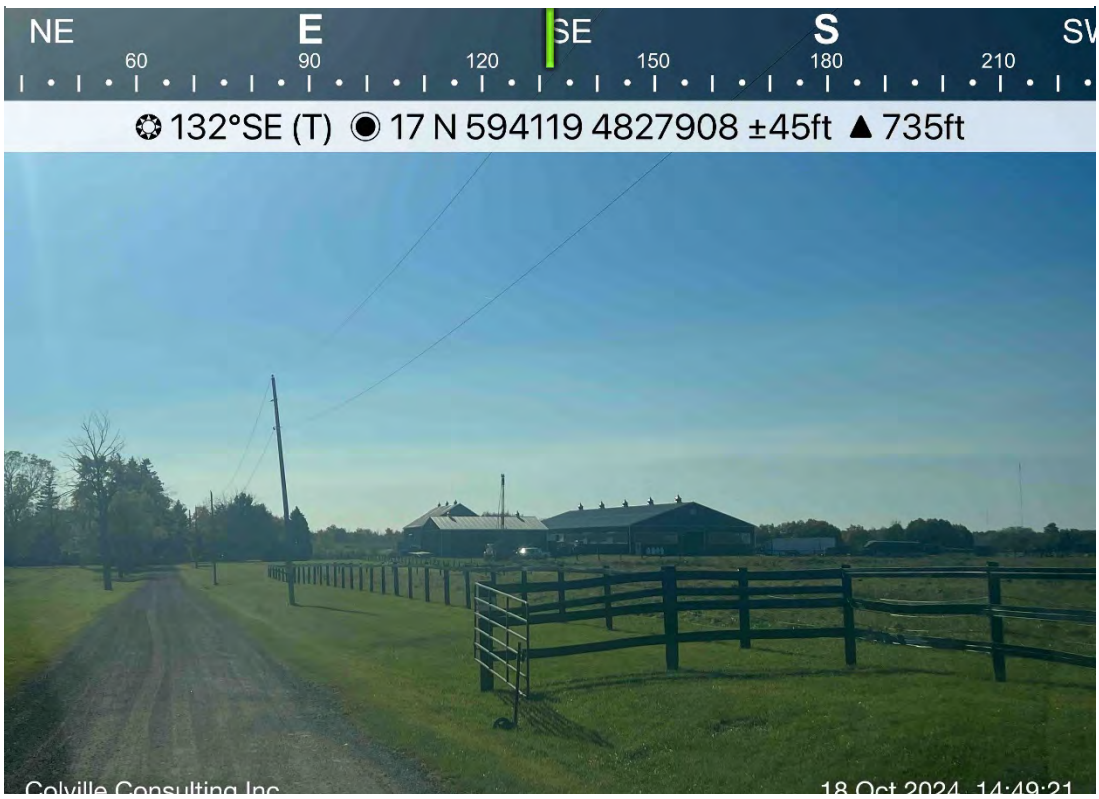


Photo 6: Farm 18

Appendix G:

Land Use Notes

Land Use Survey Notes – AIA for 0 & 8673 Eighth Line, Halton Hills			
Weather	Sunny	**Date (s)**	October 18, 2024
Temperature	17°C	**File**	C24046

Site No.	Type of Use	Type of Operation	MDS Calculation Required?	Description of Operation
1	Agricultural	Cash Crop (Field)	No	Subject Lands – Agricultural field with no structures on the property.
2	Non-Agricultural	Commercial	No	Appears to be large commercial/industrial facility under construction.
3	Non-Agricultural	Interim Light Industrial	No	Earth Boring Co construction laydown yard, appears to be for Municipal Drainage upgrades
4	Non-Agricultural	Interim Light Industrial	No	Earth Boring Co construction laydown yard, appears to be for Municipal Drainage upgrades
5	Non-Agricultural	Interim Light Industrial	No	Earth Boring Co construction laydown yard, appears to be for Municipal Drainage upgrades
6	Agricultural	Retired Farm	No	Fenced entry, no trespassing sign. Gate in poor condition, appears to be derelict metal barn in poor condition, missing slats. Tall corn limiting visibility. Likely former livestock operation. No signs of livestock. Likely no longer capable of housing livestock.
7	Non-Agricultural	Interim Light Industrial	No	Earth Boring Co construction laydown yard, appears to be for Municipal Drainage upgrades
8	Agricultural	Agricultural Commercial	No	DG's Greenhouses, garden centre. OFA member.
9	Agricultural	Retired Livestock Operation	Yes	3 silos, 2 concrete, 1 capped. Barns appear to be in fair condition. No trespassing signs. Blocked by construction.

10	Agricultural	Livestock Operation (Beef + Lamb, Goat)	Yes	Agram Farms. 2 large barns, 1 implement shed, good condition. 2 donkeys, 2 goats, observed in front paddock. Access limited by construction. Based on web search, producing lamb, goat, and beef, with abattoir on site (link). Manure storage in back based on aerial photos.
11	Non-Agricultural	Institutional	No	Pineview Public School.
12	Non-Agricultural	Interim Light Industrial	No	Trafalgar Road. Major road widening project in progress.
13	Agricultural	Retired Farm	No	Property appears to be abandoned. Barn in extremely poor condition. Unable to house livestock.
14	Non-Agricultural	Interim Light Industrial	No	Earth Boring Co construction laydown yard, appears to be for Municipal Drainage upgrades
15	Agricultural	Retired Farm	Yes	No access, check air photos. Based on air photos, appears to be former sheep operation. What appears to be sheep can be seen in 2009 air photos, but since then no signs of livestock visible on the property. Paddocks appear to be overgrown with fallow and inactive.
16	Agricultural	Cash Crop Operation	No	2 concrete silos, capped. Remnant Quonset hut, covering no longer intact. Utility shed in good condition. No signs of livestock. Check air photos.
17	Agricultural	Retired Farm	No	Old wooden bank barn, poor condition with multiple openings in siding. Unlikely to be capable of housing livestock. Paddock fencing observed with multiple openings.
18	Agricultural	Livestock Operation (Equestrian)	Yes	Halton Equine and Canine. No trespassing/beware of camera signs. Large paddocked areas. Horse jumping/training areas. 5 paddocks with shelters/kennels. Riding ring. No manure storage visible from road or air photos. OFA member.

19	Agricultural	Active Farm (Orchard)	No	Small barn associated with orchard operation.
20	Agricultural	Livestock Operation (Equestrian)	Yes	No trespassing signs. Check Air Photos Based on air photos, appears to be active equestrian operation. However, no horses are visible in any years air photos. Multiple Paddocks and one large barn. Riding ring/race track area looks no longer in use, but maintained for grazing area.
21	Non-Agricultural	Commercial	No	Turf Rain Irrigation. Lawn sprinkler system contractor. Appears to be operating inside of NFR.
22	Non-Agricultural	Commercial	No	Destiny Builders. Construction Company according to Google Maps. Likely home office space inside of NFR.
23	Non-Agricultural	Commercial	No	Transform Signs. Sign Shop.
24	Non-Agricultural	Commercial	No	Majortech. Audio visual equipment supplier.
25	Non-Agricultural	Commercial	No	Andgio Gas Services. Mechanical Contractor.
26	Non-Agricultural	Commercial	No	Goodlife Moving. Transportation Service.
27	Non-Agricultural	Commercial	No	Airbagged SVT – Special Vehicle Transport "Exotic Car Transport & Towing". Transportation service.

	Total Number	Active	Retired or Remnant
Agricultural	11	2 – Equestrian Operation 1 – Beef Operation 2 – Active Farms (Orchard & Cash Crop) 1 – Agricultural Commercial (Garden Centre)	4 – Retired Farm 1 – Retired Livestock Operation
Agriculture-related	0	0	0
On-farm Diversified	0	0	0
	Total Number	**Type**	
Non-Agricultural	132	6 – Interim Light Industrial 1 – Institutional 8 – Commercial 117 – Non-Farm Residences	

Appendix H:

MDS I Reports

C24046 - Eighth Line Halton

General information

Application date
Nov 22, 2024

Municipal file number

Proposed application
New or expanding settlement area boundary

Applicant contact information

ON

Location of subject lands
Regional Municipality of Halton
Town of Halton Hills
ESQUESING
Concession 9 , Lot 4
Roll number: 2415070001171100000

Calculations

Farm 10

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor

Regional Municipality of Halton
Town of Halton Hills
ESQUESING
Concession 8 , Lot 5
Roll number: 2415070001257000000

Total lot size

28.53 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Beef, Backgrounders (7 - 12.5 months), Confinement	387	129 NU	1798 m²

Confirm Livestock/Manure Information (Farm 10)

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**V3. Solid, outside, no cover, >= 30% DM**
Design capacity	**129 NU**
Potential design capacity	**129 NU**

Factor A (odour potential) **0.8**
Factor D (manure type) **0.7**
Factor B (design capacity) **345.18**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**426 m (1398 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**426 m (1398 ft)**
Actual distance from manure storage	**NA**

Farm 15

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Halton
Town of Halton Hills
ESQUESING
Concession 8 , Lot 7
Roll number: 2415070001226000000

Total lot size
81.63 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Sheep, Ewes & rams (dairy operation; includes unweaned offspring & replacements)	351	58.5 NU	750 m²

Confirm Livestock/Manure Information (Farm 15)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**No storage required (manure is stored for less than 14 days)**
Design capacity	**58.5 NU**
Potential design capacity	**58.5 NU**

Factor A (odour potential) **0.7**
Factor D (manure type) **0.7**
Factor B (design capacity) **277**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**299 m (981 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**No existing manure storage**
Actual distance from manure storage	**NA**

Preparer signoff & disclaimer

Preparer contact information
Nash Colville
Colville Consulting Inc
404 Queenston Street
st. catharines, ON
L2P 2Y2
905-980-4396
nash@colvilleconsultinginc.ca

Signature of preparer

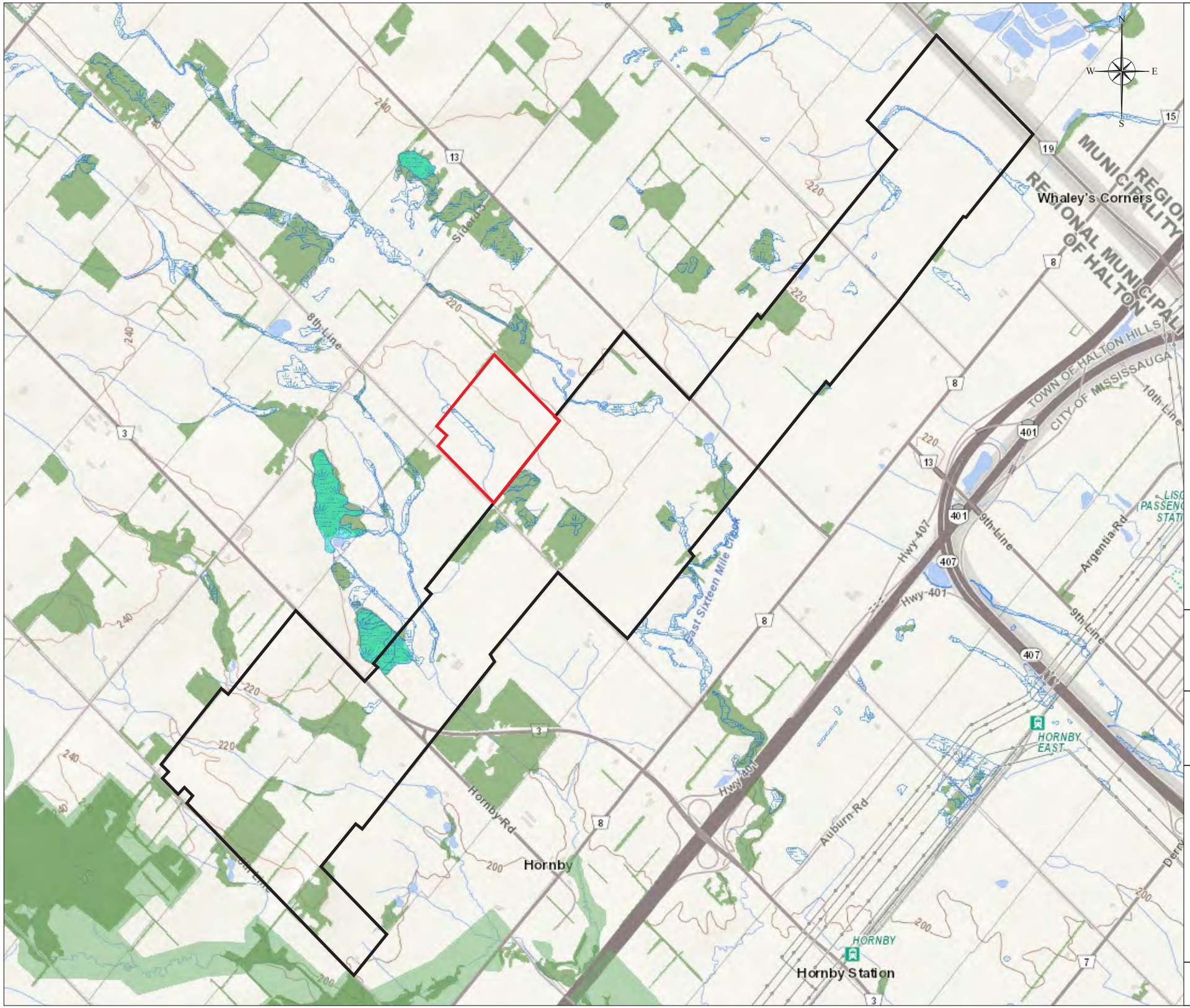
Nash Colville	Date (mmm-dd-yyyy)

Note to the user

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.

Appendix I:

Alternative Site Assessment



Legend

- Approved Employment Area (ROPA 49)
- Subject Lands
- Watercourses
- Natural Heritage System Designation
- Woodland
- Non-Provincially Significant Wetland
- Provincially Significant Wetland

Figure A
Natural Heritage Constraints Mapping

AIA for 0 & 8673 Eighth Line

Prepared for:

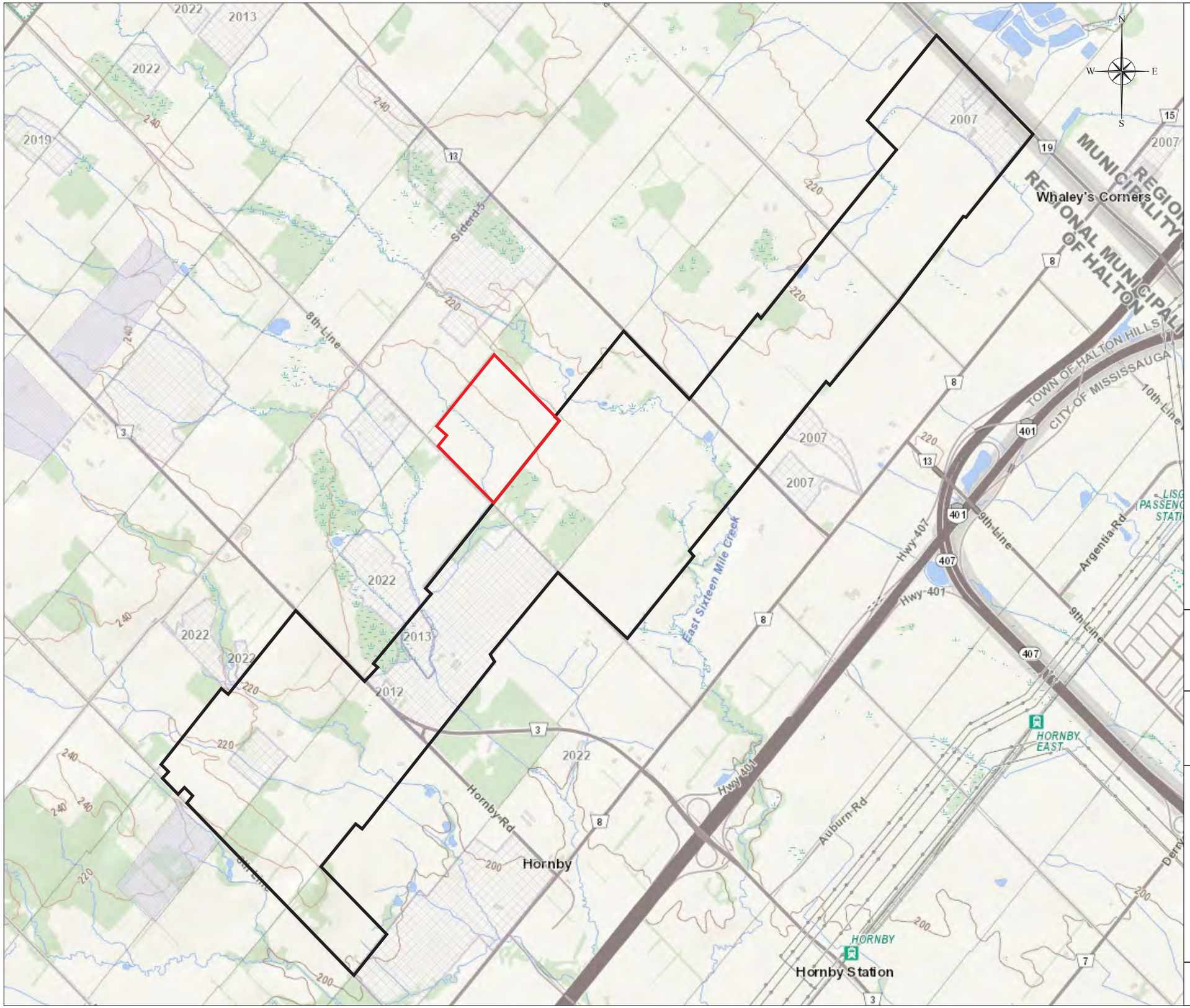
Maple Mist Development Corp.

Prepared by:

COLVILLE CONSULTING INC.

DATE: December 2024

FILE: C24046



Legend

- Approved Employment Area (ROPA 49)
- Subject Lands

Agricultural Tile Drainage

- Random
- Systematic

Figure B
Employment Lands Tile Drainage Mapping

AIA for 0 & 8673 Eighth Line

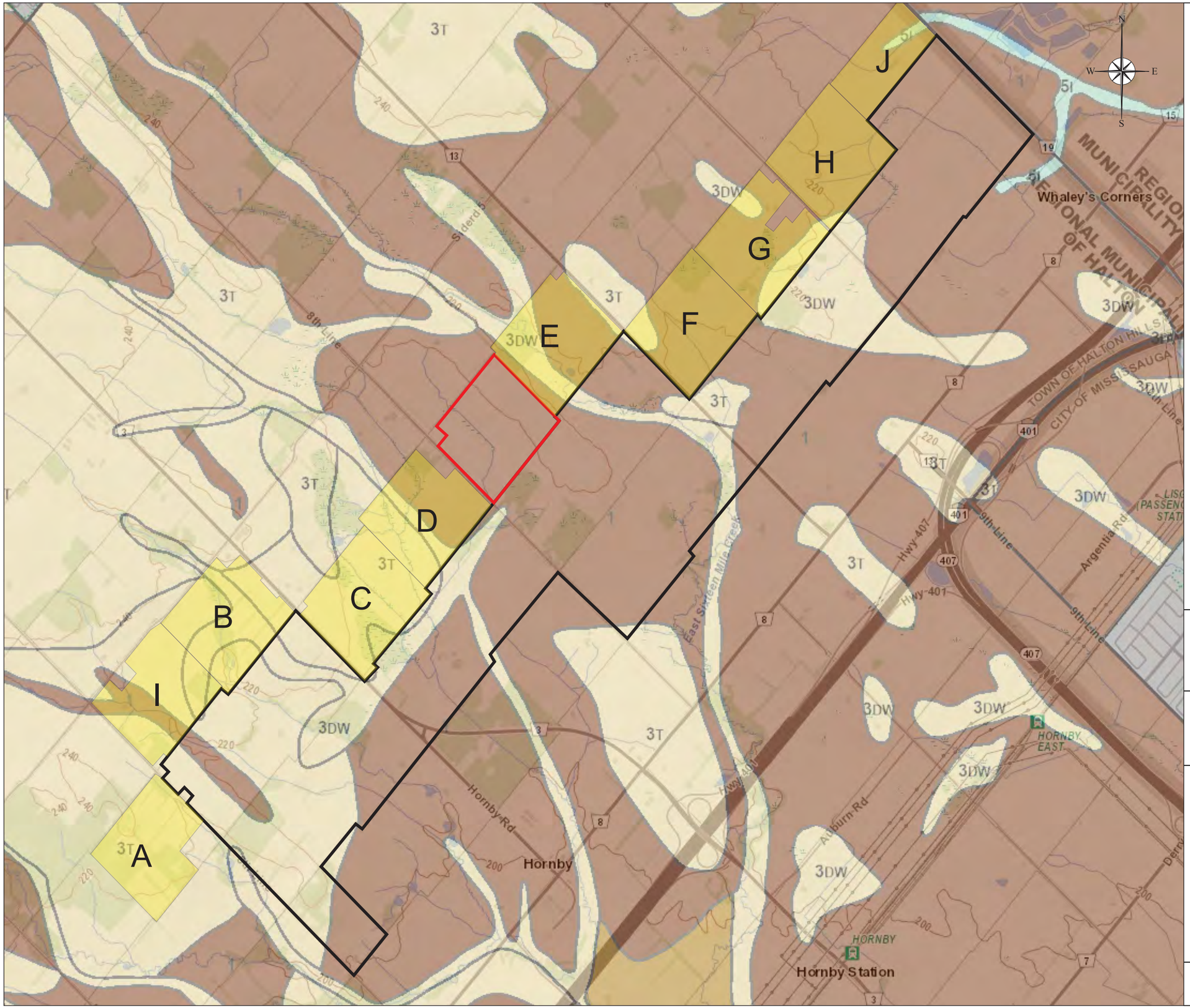
Prepared for:

Maple Mist Development Corp.

Prepared by:

COLVILLE CONSULTING INC.

DATE: December 2024	FILE: C24046



Legend

- Approved Employment Area (ROPA 49)
- Subject Lands
- Alternative Parcel ID

CLI Class

- Class 5
- Class 3
- Class 2
- Class 1

CLI Subclass

D - Undesirable soil structure/low permeability
F - Low fertility
M - Moisture limitations
T - Topography
W - Excess water

Figure C
Employment Lands CLI Class Mapping

AIA for 0 & 8673 Eighth Line

Prepared for:

Maple Mist Development Corp.

Prepared by:

COLVILLE CONSULTING INC.

DATE: December 2024

FILE: C24046

Appendix I-1. Summary of Alternative Locations

Parcel ID	Collective Parcel Size (ha)	Property Description	Criteria Evaluated							Conclusion
			CLI	Investment in Agricultural Infrastructure	Investment in Land Improvements (Tile Drainage and Root Stocks)	Potential MDS Constraints	Property Potentially Constrained by NHS	Proximity to Servicing & Road Improvements	Relative Agricultural Priority	Preferred Location
A	29.92	Agricultural uses present. Lands in common field crop production and within the natural heritage system overlay. Two adjacent parcels appear directly associated with each other.		**Yes** - farm structures present	TD - 18.20 ha	**Yes** - livestock operations on adjacent property.	**Yes** – constrained by natural heritage features	**No** - no known planned improvements.	**Higher** - relative to Subject Lands	**No**
B	39.30	A mixture of active crop production with a watercourse meandering between the property that is bordered by a mix of mapped woodland and wetland. Appears to be a small residential property that has been severed off the main parcel.		**No** - none present	TD - 9.46 ha	**Yes** - livestock operations on adjacent properties	**Yes** – constrained by natural heritage features	**Yes** - widening Trafalgar Road from 2 to 4 lanes between Steeles Avenue and 10 Side Road	**Lower** - relative to the Subject Lands. However, NHS and MDS limit potential.	**No**
C	39.53	A mixture of active crop production, woodland and wetland. A barn structure and residence on the property.		**Yes** - farm structures present	TD - 17.24 ha	**Yes** - livestock operations on adjacent properties	**Yes** – constrained by natural heritage features	**Yes** - widening Trafalgar Road from 2 to 4 lanes between Steeles Avenue and 10 Side Road	**Higher** - relative to Subject Lands	**No**
D	39.28	A farm structure in poor condition (Remnant) on the property. Surrounding lands are cultivated.		**No** - none present	0	**No** – no MDS constraints identified	**Yes** – constrained by natural heritage features	**Yes** - Halton Region is constructing 1200 mm watershed sewer along Eighth Line. Widening Eighth Line between Steeles Avenue 10 Side Road from 2 to 3 lanes	**Lower** - relative to the Subject Lands. However, significant NHS constraints	**No**
Subject Lands	41.32	Cultivated for Common Field Crops, no farm infrastructure		**No** - none present	0	**No** – no MDS constraints identified	**Yes** – marginally constrained by watercourse & unevaluated wetland	**Yes** - Halton Region is constructing 1200 mm watershed sewer along Eighth Line. Widening Eighth Line between Steeles Avenue 10 Side Road from 2 to 3 lanes	N/A	**Preferred**

Appendix I-1. Summary of Alternative Locations (Cont.)

Parcel ID	Collective Parcel Size (ha)	Property Description	Criteria Evaluated							Conclusion
			CLI	Investment in Agricultural Infrastructure	Investment in Land Improvements (Tile Drainage and Root Stocks)	Potential MDS Constraints	Property Potentially Constrained by NHS	Proximity to Servicing & Road Improvements	Relative Agricultural Priority	Preferred Location
E	41.75	Common field crops, orchard lands and natural heritage features. A small commercial building (#23 in the Study Area) present.		**Yes** - farm structures present. Related to specialty crop production (orchard)	RS – 1.3 ha	**No** – no MDS constraints identified	**Yes** – constrained by natural heritage features	**Yes** - widening Ninth Line from 2 to 4 lanes from Steeles Avenue to 10 Side Road	**Higher** - relative to Subject Lands	**No**
F	40.20	Primarily in common field crop production with some NH features.		**Yes** - farm structures present	0	**No** – no MDS constraints identified	**Yes** – constrained by natural heritage features	**Yes** - widening Ninth Line from 2 to 4 lanes from Steeles Avenue to 10 Side Road	**Higher** - relative to Subject Lands	**No**
G	41.82	Primarily in common field crop production with some NH features. Block includes some non-farm residences		**Yes** - farm structures present	0	**No** – no MDS constraints identified	**Yes** – constrained by natural heritage features	**No** - no known planned improvements	**Higher** - relative to Subject Lands	**No**
H	41.36	Primarily in common field crop operation. Cash crop operation.		**Yes** - farm structures present	0	**No** – no MDS constraints identified	**Yes** – marginally constrained by watercourse	**No** - no known planned improvements	**Higher** - relative to Subject Lands	**No**
I	39.34	A mixture of agricultural and non-agricultural uses. NH features present. Block includes two farm operations structures		**Yes** - farm structures present	0	**Yes** - livestock operations on adjacent properties	**Yes** – constrained by natural heritage features	**No** - no known planned improvements	**Higher** - relative to Subject Lands	**No**
J	20.02	Former beef operation converted to non-agricultural use		**Yes** - farm structures present but converted to other uses	0	**Yes** - livestock operations on adjacent properties	**Yes** – constrained by natural heritage features	**No** - no known planned improvements	L**ower** - relative to the Subject Lands. However, NHS & MDS constraints	**No**