AGRICULTURAL IMPACT ASSESSMENT FOR TULLAMORE NORTHWEST EMPLOYMENT SECONDARY PLAN

PREPARED FOR:

BROCCOLINI AIRPORT ROAD LIMITED PARTNERSHIP

2680 Skymark Avenue, Suite 800 Mississauga, Ontario L4W 5L6

PREPARED BY:



432 NIAGARA STREET, UNIT 2 ST. CATHARINES, ONTARIO L2M 4W3

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1. INTRODUCTION

1.1 Retainer

Colville Consulting Inc. was retained by the Broccolini Airport Road Limited Partnership to complete an Agricultural Impact Assessment (AIA) for the Tullamore Northwest Employment Secondary Plan Area. These lands, herein referred to as the Subject Lands, are generally located south of Old School Road, east of Torbram Road, west of Airport Road, and north of Mayfield Road, in the Town of Caledon. The Subject Lands are approximately 165.73 ha (409.53 acres) in size and are designated Employment Area in the Region of Peel Official Plan, and Prime Agricultural Area and Environmental Policy Area in the current Town of Caledon Official Plan.

At the March 26, 2024, Council Meeting for the Town of Caledon, Council adopted the Future Caledon Official Plan. The Future Caledon Official Plan has not yet received approval from the Province, however, the adopted Future Caledon Official Plan aligns with the Region of Peel Official Plan and shows the Subject Lands designated New Urban Area 2051 Area and Natural Features and Areas. The Subject Lands are no longer within a provincially recognized *prime agricultural area* following the provincial approval of the Region of Peel 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 Defined Terms and Meanings

Italicized terms throughout this AIA are often consistent with terms and definitions contained in the *Provincial Planning Statement* and provincial guidance documents. The definitions of these italicized terms are provided in the Glossary of Terms section of this report.

1.2.3 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 *Provincial Planning Statement*. 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.

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."

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 *settlement area* boundary expansion applications across the province of Ontario.

This study was led by Sean Colville, B.Sc., P.Ag., has over 35 years of experience preparing Agricultural Impact Assessments in Ontario, and assisted with the preparation of the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) draft Agricultural Impact Assessment Guidance Document (2018).

John Liotta, B.Sc., P.Ag., was responsible for completing the field investigations and preparation of the AIA. John has over seven combined years of formal education in Environmental and Agricultural Planning and work experience preparing Agricultural Impact Assessments with Colville Consulting Inc.

Colville Consulting Inc. staff meet the guidance documents qualifications for QPs. The curriculum vitae (CV) of Sean Colville and John Liotta can be found in Appendix A.

1.4 Description of Proposed Development

The updated Official Plan (Future Caledon Official Plan) was adopted by Town Council on March 26, 2024, however, it has not yet been approved by the Province. Until the Future Caledon Official Plan has been approved by the Province, the Town of Caledon Official Plan (2018) policies shall apply. However, the Future Caledon Official Plan indicates that the Subject Lands will be included within the Town of Caledon's Urban Area. Following the approval of the Future Caledon Official Plan, the *development* of a Secondary Plan will be required in order to facilitate the proposed *development*.

The Land Use Plan has been prepared by Glenn Schnar & Associates Inc. indicates that the Subject Lands will be developed for Prestige Industrial and General Industrial uses (Appendix B). The plan also indicates an Open Space Policy Area, Headwater Drainage Feature, and a potential right-of-way connection from Torbram Road. The Subject Lands are approximately 165.73 ha in size and contain areas of natural heritage features. No *development* will be proposed within the Natural Heritage System, however, these features are in the process of being refined, which will determine the net developable area of the Subject Lands.

1.5 Purpose of Study

The Subject Lands are currently located within the Town of Caledon's Prime Agricultural Area. Section 5.1.1.17.1 of the Town of Caledon Official Plan states that "Proposals in the Prime Agricultural Area that have the potential to negatively impact agricultural uses will require an Agricultural Impact Assessment." The proposed Secondary Plan and associated non-agricultural *development* within the *prime agricultural area* has the potential to negatively impact *agricultural uses*, therefore an AIA is required for the proposed *development*.

1.6 Study Area

The *Study Area* is located within the Town of Caledon's Prime Agricultural Area. To be consistent with the draft Agricultural Impact Assessment Guidance Document (2018), the *Study Area* should include both a *Primary* and *Secondary Study Area*. For this AIA, the *Primary Study Area* (*PSA*) encompasses the Subject Lands, while all lands within approximately 1.5 kilometers (1,500 m) of the Subject Lands' boundaries comprise the *Secondary Study Area*. Figures 1A and 1B show the location of both the *Primary* and *Secondary Study Area*, along with the land use designations contained with both the Future Caledon Official Plan and Region of Peel Official Plan, respectively.

1.6.1 Primary Study Area – Subject Lands

The Subject Lands are generally located south of Old School Road, east of Torbram Road, west of Airport Road, and north of Mayfield Road, in the Town of Caledon. The Subject Lands are made up of multiple parcels and, combined, are approximately 165.73 ha (409.53 acres) in size. They are primarily in agricultural production for common field crops and also contain natural heritage areas, and a number of *non-farm residences*.





1.6.2 Secondary Study Area – Study Area

The *Secondary Study Area*, herein referred to as the *Study Area*, includes all lands within 1.5 km of the Subject Lands' boundaries and is generally bounded by Centreville Creek Road to the east, Mayfield Road to the south, Dixie Road to the west, and King Street to the north. The majority of the lands in the *Study Area* are in agricultural production and also contain natural heritage features.

2. SCOPE OF STUDY

To be consistent with the Draft Agricultural Impact Assessment Guidance Document (2018), the study scope includes:

- a review of applicable agricultural policies and other background information and land use information for lands within the surrounding area (e.g., aerial photography);
- a review of data sources such as AgMaps and 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 *development* using the 2017 *MDS I formula;*
- the identification of agricultural resources and investments in agricultural land improvements;
- the identification of *agricultural uses, agriculture-related uses, on-farm diversified uses,* and *non-agricultural uses;*
- an assessment of the relative agricultural priority of the lands;
- an assessment of the level of fragmentation of agricultural lands in the *Study Area*;
- an assessment of the potential impacts of the *development* 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;
- as assessment of net impacts following the implementation of recommended mitigation measures;
- an assessment of the proposed *development's* consistency with agricultural policies in the *Provincial Planning Statement,* the Region of Peel Official Plan, the Town of Caledon Official Plan, and the Future Caledon Official Plan; and
- the preparation of a report summarizing our findings.

3. METHODOLOGY

The study methodology for the AIA was prepared in accordance with the OMAFRA draft Agricultural Impact Assessment Guidance Document (2018). It includes a review of relevant provincial, regional, and local agricultural policies, other agricultural-related sources of information, and the completion of field inventories. Following the collection 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 *development's* consistency with the provincial, regional, and local agricultural policies.

3.1 Background Data Collection

Information sources reviewed for this study included:

- Provincial Planning Statement (2024);
- Region of Peel Official Plan and Land Use Schedules (2022);
- Town of Caledon Official Plan and Land Use Schedules (2018);
- Future Caledon Official Plan and Land Use Schedules (Adopted March 26, 2024)
- Soil Survey of Peel County Report No. 18 of the Ontario Soil Survey (1953);
- OMAFA'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);
- OMAFA's Artificial Drainage Systems mapping;
- OMAFA's AgriSuite, AgMaps, and Agri-Systems databases;
- 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 uses, agricultural uses, agriculture-related uses, on-farm diversified uses,* and the level of fragmentation based on the lot fabric. The review of aerial photographic imagery provides a general impression of the agricultural activity and level of agricultural investments on the Subject Lands and surrounding *Study Area*.

3.2 Field Inventories

3.2.1 Land Use Survey

A reconnaissance level land use survey was completed on December 18, 2024, which identified the number and type of agricultural operations (both active and *retired*), *agriculture-related uses*, *on-farm diversified uses*, and the extent and type of *non-agricultural uses* in the area. Field crops were also identified and mapped. Visual evidence of agricultural land improvements was recorded where identified.

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3.2.2 MDS Calculations

The *MDS* is a land use planning tool developed by OMAFA 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: the *MDS I formula* and the *MDS II formula*. 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 to complete an *MDS I* calculation was obtained through a combination of sources. As per the MDS Guidelines, we 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.

To determine the *MDS* 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 active *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 of *livestock* housed in the facility;
- the maximum capacity of the barn housing *livestock*;
- the type of *manure storage* facility; and
- the size of the property upon which the *livestock facility* is located.

This information was collected for all *livestock facilities* (active and *unoccupied*). 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 storage* system used. These observations were supplemented with aerial photography and web mapping tools such as AgMaps and Google Earth[™]. Barn capacity and lot size were determined using these online mapping tools.

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. The evaluation of the *Agricultural System* was completed through a reconnaissance level land use survey on December 18, 2024, a review of the information presented in OMAFA's Agricultural Systems Portal, and through interpretation of aerial photographic imagery. Components of the agri-food network, including regional infrastructure and transportation networks, on-farm buildings and infrastructure, agricultural services, as well as small towns and hamlets that provide support and service the agricultural industry, were identified and mapped. 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 Region.

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. The AIA must demonstrate that there are no reasonable alternative locations which avoid *prime agricultural areas* and there are no reasonable alternative locations in *prime agricultural areas* with lower priority agricultural lands.

The Subject Lands have been included in the Region of Peel Official Plan's 2051 New Urban Area within the Urban System, which was approved by the Province. The Region of Peel was required to assess alternative locations for *settlement area* boundary expansion, which indicates there are no reasonable alternative locations which avoid *prime agricultural areas* or locations of lower priority agricultural lands. Therefore, an assessment of alternative locations has not been completed as part of this AIA.

3.5 Evaluation of Agricultural Priority

When determining agricultural capability, the *PPS* directs *development* to "lower priority agricultural lands". The *PPS*, or other provincial planning documents, does not specifically define in policy "lower priority agricultural lands", there are a number of considerations used by OMAFA to determine the 'agricultural priority' of an area. These considerations include the 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 land uses such as urban and rural *settlement areas*. The 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;

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- b) Minimum Distance Separation changes (where applicable) that will constrain future farm operations;
- c) Changes to surface drainage features which could have an effect on 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 comply with applicable provincial land use policies. Municipalities also have their own agricultural policies that are to be consistent with the *PPS* and to which the proposed *development* must adhere to. A background review of all applicable provincial and municipal policies relating to agriculture was undertaken. Policies applicable to the proposed non-agricultural *development* were identified and assessed for consistency as part of this AIA.

4. AGRICULTURAL POLICIES

4.1 Provincial Planning Statement

Land Use Policy and *development* in Ontario are directed by 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 Land 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 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 development are planned or available."

The adopted Future Caledon Official Plan indicates that the Subject Lands will be included within the Town of Caledon's Urban Area and designated New Community Area and New Employment Area. However, the Future Caledon Official Plan has not yet received Provincial approval. The Subject Lands are no longer

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provincially recognized as being part of a *prime agricultural area* following the provincial approval of the updated Region of Peel Official Plan. As such, the proposed *development* is not required to be consistent with the agricultural policies of the *PPS*.

4.2 Region of Peel Official Plan

Section 3.3 of the Region of Peel Official Plan recognizes the *Agricultural System*, which includes lands designated as Prime Agricultural Area and Rural Lands. The portion of the Subject Lands on which *development* is proposed is no longer located within the Region of Peel's Prime Agricultural Area or Rural Lands land use designations. As previously stated, the proposed Tullamore Northwest Employment Secondary Plan Area has recently been included in the Region of Peel's 2051 New Urban Area within the Urban System following the Region's *settlement area* boundary expansion (SABE). The proposed *development* is not required to be consistent with the agricultural policies of the Region of Peel Official Plan.

4.3 Town of Caledon Official Plan

Schedule A of the Town of Caledon Official Plan (2018) designates the Subject Lands as Prime Agricultural Areas Area. Section 4.1.3 of the Official Plan identifies Prime Agricultural Areas and General Agricultural Areas as lands that "generally coincide with a relatively large area of high capability agricultural lands recognized as Class 1, 2, and 3 agricultural lands according to the Canada Land Inventory and the Soil Capability for Agriculture through the Region of Peel Official Plan."

Section 4.2.3.3.1 outlines the requirements for *settlement area* boundary expansion and states that "Expansions to settlements will require an amendment to this Plan and shall be undertaken through a municipal comprehensive review". Section 4.2.3.3.1 states in part that the municipal comprehensive review "will address the following:

- h) An examination of reasonable alternative locations which avoid Prime Agricultural Areas, and reasonable alternative locations on lands with lower priority in the Prime Agricultural Area;
- j) Compliance with minimum distance separation formulae;
- o) Mitigation of impacts of settlement area expansions on agricultural operations which are adjacent to or close to the settlement area to the greatest extent feasible;".

As stated in section 5.1.1.1, the objective of the land use policies for lands designated as Prime Agricultural Area is "To protect Prime Agricultural Areas by encouraging the business of agriculture, by providing for innovation and diversification within agriculture, by providing additional economic opportunities through On-farm Diversified Uses, and by limiting non-agricultural uses and non-agricultural severances."

The requirement to complete an Agricultural Impact Assessment is outlined in Section 5.1.1.17.1 that states that "Proposals in the Prime Agricultural Area that have the potential to negatively impact agricultural uses will require an Agricultural Impact Assessment".

The AIA addresses section 4.1.3, 4.2.3, and 5.1.1.1 of the Town of Caledon Official Plan.

4.4 Future Caledon Official Plan

The Future Caledon Official Plan (2024) was adopted by Town Council on March 26, 2024, which will guide *development* to the year 2051. The Future Caledon Official Plan has not yet been approved by the Province;

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however, the proposed *development* has been assessed for consistency with the policies of the Future Caledon Official Plan in the event that the Future Caledon Official Plan is approved by the Province prior to submission of the application.

Schedule B4 of the Future Caledon Official Plan shows that the portion of the Subject Lands on which *development* is being proposed is designated New Urban 2051 within the Town's Urban Area. No portion of the developable area of the Subject Lands are located within the Town's Rural Lands, nor *prime agricultural area* land use designation. Therefore, the agricultural policies of the Future Caledon Official Plan do not apply to the proposed *development*, following provincial approval of the Future Caledon Official Plan. If the Province modifies the Future Caledon Official Plan so that any portion of the Subject Lands are excluded from the Urban Area, the AIA will be updated through an addendum to evaluate the proposed *development's* consistency with the approved Future Caledon Official Plan.

5. STUDY FINDINGS

5.1 Physiography

The Subject Lands are located within the South Slope Physiographic Region (Chapman and Putnam, 1984). This physiographic region lies between the Oak Ridges Moraine to the north, the Peel Plain to the south, and the Niagara Escarpment to the west. The lands gently slope towards Lake Ontario. The South Slope consists of a faintly drumlinized till plain with smooth slopes that are often deeply scoured by tributaries to the Humber River system.

The bedrock geology of the South Slope includes the limestones of the Verulam and Lindsay Formations, the grey shales of the Georgian Bay Formations, and the reddish shales of the Queenston Formation. The South Slope contains a variety of soils that have developed upon tills which are sandier in the east of the South Slope and more clayey and steeper sloped in the west. Bondhead Loam and Darlington Loam soils are the more desirable agricultural soils in the area, whereas the Chinguacousy Clay Loam, Oneida Clay Loam and Jeddo Clay Loam soils have drainage and clayey textures that make it harder to work.

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 the Toronto Pearson (Airport) station (1991-2020) were obtained from the online database (Appendix C).

Environment Canada's Toronto Pearson (Airport) station is located approximately 18.93 km from the Subject Lands. Records show that this area receives an average of 806.8 mm of precipitation annually; 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. Areas within the Region of Peel begin to experience average temperatures greater than 10°C starting May 7th before reaching temperatures greater than 12.8°C for 3 consecutive days around May 19th. During this time and up until the season's average ending date, September 30th, the area accumulates an average of 3200 crop heat units (CHU).

On average, the last spring frost in the Caledon area occurs on April 27th and the first fall frost is expected on October 20th. This provides the surrounding area with a growing period of approximately 174 days. The climate in the Caledon 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 OMAFA and Statistics Canada's Agriculture and Food Statistics Census of Agriculture. The Subject Lands are located within the Census Western Ontario Region, Peel 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 Peel includes data from the 2011, 2016, and 2021 census periods. The total number of farms in Caledon decreased from 345 in 2016 to 308 in 2021, while total cropland increased from 63,239 acres in 2016 to 73,460 acres in 2021.

Field crops include winter wheat, oats for grain, barley for grain, mixed grains, corn for grain, corn for silage, hay, soybeans, and potatoes. According to census data, field crop production between 2016-2021 decreased for potatoes, whereas all other major field crop production in Caledon increased in production. Census data from 2016 shows that there was no production of winter wheat, oats for grain, barley for grain, corn for grain, or corn for silage. This is highly unlikely to be reflective of the true crop production in Caledon in 2016.

Fruit crops grown in Caledon include apples, grapes, strawberries, and raspberries. Fruit crop acreage increased from 149 acres in 2016 to 196 acres in 2021. Vegetable crops grown in Caledon include sweet corn, tomatoes, green peas, and green or wax beans. Vegetable crop acreage doubled from 240 acres in 2016 to 479 acres in 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 in the Greenbelt Plan area: the Niagara Peninsula Tender Fruit and Grape Area and the Holland Marsh. Neither the Subject Lands, nor any portion of the *Study Area*, are located within either of these *specialty crop areas*. Additionally, the Subject Lands do not exhibit any of the characteristics of a *specialty crop area*, and no specialty crops were observed within the *Study Area*.

5.5 Regional Soils

5.5.1 Soil Series

The *Soil Survey of Peel County - No. 18* of the Ontario Soil Survey (Hoffman, D.W., Richards, N.R., 1953) includes a soil map that shows the distribution of the various soil series in the Region of Peel. The digital Provincial Soil Resource database is compiled and administered by OMAFA and includes most of the soil surveys completed in Ontario. Much of this information is accessible from the Province's Agricultural Information Atlas. The database was accessed in December 2024.

The *Soil Survey of Peel County* mapping shows that the soils within the Subject Lands are comprised primarily of Peel Clay (48.10%) soils and Chinguacousy Clay Loam (37.94%) soils, with smaller areas mapped as Bottom Land (13.97%) soils. Regional scale soil mapping is shown in Figure 2.

Peel Clay

Peel Clay soils are the imperfectly drained member of the Cashel *catena*. The Cashel *catena* has developed from glacio-lacustrine, clayey material deposited as a thin veneer that is underlain by fine textured clay till. Peel Clay soils are generally stone-free at the surface. Prominent and distinct mottles in the solum provide evidence of the slow internal drainage due to the very firm consistency and heavy clay textures in the upper portion of the profile. The fine textured morainal till is encountered at depths less than one metre. While the upper portion of the soil profile is mildly acidic to neutral, the underlying till can range from mildly to strongly calcareous.

In the South Slope Physiographic Region, Peel Clay soils occur mainly on in smooth, gentle slopes. The topography is nearly level to very gentle, and the potential for erosion is slight. Surface runoff increases with slope but due to the slow internal drainage, ephemeral ponding in small depressional areas may occur. The surface (Ap horizon) is relatively high in organic matter content and plant nutrients, making them well suited for the production of common field crops such as corn, soybeans, cereal grains, and perennial crops such as hay and *pasture*. These soils respond well to the installation of tile drainage, but installation may be difficult in areas of depression between the swells of the topography.

Chinguacousy Clay Loam

Chinguacousy Clay Loam soils occur on smooth, very gently sloping topography. These soils are the imperfectly drained member of the Oneida *catena* and have developed from a fine textured, morainal till parent material. The till parent material is derived mainly from limestone/dolostone and shale bedrock. Surface stoniness is slight to non-stony, and erosion is slight due to the nearly level to very gentle slopes on which these soils are commonly found. The surface of the till may include a veneer of glaciolacustrine material that does not exceed depths of 40 cm. The surface drainage is slow to moderate and internal drainage is slow. Mottles are present and gley colours at depth may be present.

Chinguacousy Clay Loam soils are generally low in organic matter, phosphorus, and calcium, and moderately supplied with potassium. Additions of lime, manure, and mineral fertilizers can be used to maintain the quality of these soils. The installation of tile drainage may also permit the production of a wider range of crops and earlier spring cultivation. These soils are good agricultural soils that can product good to fair yields of common field crops.

Bottom Land

Bottom Land soils are low lying soils which occur along stream courses and are often subject to flooding. These soils are immature and show little horizon differentiation. They are derived from the accumulation of alluvium along rivers and creeks and may also include the associated valley slopes. The *soil profile* usually consists of variable textures and the drainage also often varies from poor along the valley floor, to rapid along the valley slopes.



Bottom Land soils are typically considered to be poor agricultural soils and, where they are farmed, they are typically used for *pasture*. In areas where the flood plain is broad, other field crops can be grown, but these areas are often subject to flooding and potentially the loss of the crop.

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 have no significant 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.

According to the provincial database, the majority of the Subject Lands are mapped as CLI Class 1 (86.03%) and CLI Class 5 (13.97%), as shown in Figure 2. CLI Class 1 soils have no or very minor limitations for common field crop production. CLI Class 5I soils have very severe limitations for common field crop production due to inundation (flooding) by streams or lakes. The composition of soils mapped within the Subject Lands and their associated CLI Class are summarized in Table 1 below.

Table 1.Regional Soil Series for Subject Lands					
Soil Series	CLI Class	Area (Ha)	% of Subject Lands		
Peel Clay	1	79.57	48.10		
Chinguacousy Clay Loam	1	62.76	37.94		
Bottom Land	51	23.10	13.97		
Totals		165.43	100.00%		

5.6 Land Use

A reconnaissance level land use survey was completed on December 18, 2024. The land use survey identified the number and type of agricultural operations (both existing and *retired*), *agriculture-related uses*, *on-farm diversified uses*, and the extent and type of *non-agricultural uses* within the *Study Area*. The crop types observed within the *Study Area* were recorded and mapped.

The purpose of the land use survey is to document the mix of *agricultural* and *non-agricultural uses* in the Subject Lands and *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. Figure 3 shows the land uses and crop types observed. Photographs from the land use survey can be found in Appendix F. All observed land uses are numbered, and short descriptions of these operations are included in the land use survey notes in Appendix G.

Eighteen *agricultural uses* were identified during the land use survey. The *agricultural uses* include one *cash crop* operation, one equestrian operation, two *beef operations*, one *hobby farm*, ten *remnant* farms, and three *unoccupied livestock facilities*. *Remnant* farms have no infrastructure that is capable of housing *livestock*,



although the lands may be uses for common field crop production. Whereas *unoccupied livestock facilities* are not currently housing *livestock* but have infrastructure that is capable of housing *livestock* with minimal investment.

One *agriculture-related use* was identified during the land use survey. This was a grain elevator. No *on-farm diversified uses* were identified during the land use survey and desktop review.

In addition to the approximately 104 *non-farm residences* observed, eleven *non-agricultural uses* were identified within the Subject Lands and *Study Area*. These uses include two recreation uses and nine industrial uses.

5.6.1 Agricultural Uses

The *PPS* defines *agricultural uses* as: "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 farm operations* (e.g., *unoccupied livestock facilities*), *livestock* operations, *cash crop* operations, or *hobby farms*. *Retired farm operations* were evaluated to determine whether they should be considered 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.

Subject Lands

Two *agricultural uses* were identified within the Subject Lands. These uses include one *beef operation* (#11) and one *remnant* farm (#20). The majority of the Subject Lands are *cultivated* and with common field crops such as corn and hay. Where crop types could not be readily identified, the lands were mapped as *cultivated*. Large areas of *idle agricultural lands* and *scrub land* were also observed during the land use survey.

Study Area

Within the *Study Area*, excluding the Subject Lands, sixteen *agricultural uses* were identified. These include one *cash crop* operation (#5), one equestrian operation (#6), one *beef operation* (#8), two *hobby farms* (#18 and #21), nine *remnant farms* (#7, #9, #12, #14, #15, #22, #23, #26, #27), and two *unoccupied livestock facilities* (#3 and #30). The two *unoccupied livestock facilities* observed were determined to have barns which are capable of housing *livestock*. The relatively high number of remnant and unoccupied livestock facilities in comparison to active agricultural operations demonstrates that investment in agriculture is in decline within the Study Area.

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 uses such as:

- 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.

One *agriculture-related use* was identified within the *Study Area*. This was identified as a grain elevator (#24), serving surrounding agricultural operations.

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, uses that produce value-added agricultural products, and electricity generation facilities and transmission systems, and energy storage systems."

No on-farm diversified uses were identified within the Subject Lands nor Study Area.

5.6.4 Non-Agricultural Uses

Non-agricultural uses include *non-farm residences*, residential clusters, hamlets and *settlement areas*, municipal utilities, commercial and industrial operations, recreational uses, and institutional uses. Approximately 104 *non-farm residences* were observed throughout the Subject Lands and *Study Area*.

Excluding the *non-farm residences*, eleven *non-agricultural uses* were identified within the *Study Area*. These uses include two recreational uses (#19 and #25), and nine industrial uses (#1, #2, #4, #10, #13, #16, #17, #28, and #29). No *non-agricultural uses* were identified within the Subject Lands.

5.6.5 Land Use Summary

Table 2 below summarizes the types of land uses observed within the Subject Lands and Study Area.

Table 2. Summary of Observed Land Uses					
	Total Number	Active	Unoccupied or Remnant		
		Cash Crop Operation – 1 Equestrian Operation – 1	Unoccupied Livestock Facility –		
Agricultural	18	Livestock Operation – 2 Hobby Farm – 2	2 Remnant Farm – 10		
Agriculture-Related	1	Grain Elevator – 1	0		
On-farm Diversified	0	0	0		
Total Number Type			Туре		
		Reci	reational – 2		
Non-Agricultural	115	Industrial – 9			
		Non-Farm Residence – 104			

5.6.6 Cropping Pattern

The land use survey completed on December 18, 2024, identified crops based on observations of crop stubble and other identifying features. As shown in Figure 3, the crops grown in the *Study Area* are predominantly a mix of corn, winter wheat, and cover crops or *cultivated* lands where land is being used for agricultural crops, but specific crops being grown were not observed. There are also areas of *idle* agricultural lands, *scrub lands*, and disturbed lands.

5.7 Land Improvements

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

5.7.1 Drainage Improvements in Subject Lands

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

5.7.2 Drainage Improvements in Study Area

Areas of both random and systematic tile drainage are present within the *Study Area*. Both the systemic and random tile drainage installations are primarily located west of the Subject Lands, with a smaller area of both random and systemic tile drainage to the east. Installation dates for most of the areas of tile drainage were not available through the AgMaps Portal, with the exception of a small installation in the southwest that is mapped as having been installed in 2011.

According to this information source, there are no constructed drains present within the Study Area.

5.7.3 Other Land Improvements

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



Study Area Tile Drainage - Random

Tile Drainage - Systematic

Land Improvements

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Contains information licensed under the Open Government Licence – Ontario. Base map data from Ontario Ministry of Natural Resources, Ontario GeoHub Land Information Ontario (LIO) Warehouse Open Data Products. https://geohub.lio.gov.on.ca/ Air photo: Region of Peel 2019. Coordinate system : NAD 1983, UTM Zone 17T.

5.8 Fragmentation of Agricultural Lands

Fragmentation of agricultural lands can have a negative impact on its viability and long-term preservation for agricultural purposes. Fragmentation of farmlands can diminish the economic viability of the agricultural area by reducing farming efficiency and increasing operating costs for farmers who must manage multiple small, separated parcels. Larger farm parcels can accommodate a wider range of agricultural activities and ensure long-term viability of the property. In contrast, smaller farm parcels do not offer the same flexibility and may not be viable as standalone parcels. Generally, smaller farm parcels alone cannot sustain a family farm without a secondary source of income (off farm) to maintain the agricultural operation.

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

The agricultural policies of the *PPS* 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 residential purposes. New permitted *development* in *prime agricultural areas* should avoid further fragmentation of the agricultural land base whenever possible.

The review of the lot fabric in the *Study Area* using AgMaps, shows that there is a mix of parcel sizes ranging from single residential (< 1 ha) to large agricultural sized parcels (>40 ha). A small number of the parcels within the agricultural land base are not suitably sized for a variety of *agricultural uses*. However, the Subject Lands are located within the current Urban System of the Region of Peel Official Plan, suggesting that further *development* and fragmentation is likely to occur in within the *Study Area*. The lands within the *Study Area* are not highly fragmented, but do have a moderately high occurrence of *non-agricultural uses*. Fragmentation of the *Study Area* is shown in Figure 5 below.

5.9 Minimum Distance Separation

5.9.1 Application of MDS

As previously mentioned, the *MDS formulae* only apply to lands outside of *settlement areas*. The Region of Peel has included the Subject Lands as part of the 2051 New Urban Area within the Urban System. However, in the Town of Caledon, the Subject Lands are still recognized as part of the Town's *prime agricultural area* and are designated "Prime Agricultural Area" in the approved official plan. Therefore, we have applied the *MDS I formula* to the *livestock facilities* identified in the *Study Area*.



Study Area Lot Fabric

Fragmentation

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Contains information licensed under the Open Government Licence – Ontario. Base map data from Ontario Ministry of Natural Resources, Ontario GeoHub Land Information Ontario (LIO) Warehouse Open Data Products. https://geohub.lio.gov.on.ca/ Fragmentation: AgMaps. Air photo: Region of Peel 2019. Coordinate system : NAD 1983, UTM Zone 17T.

The *MDS I formula* was applied to all *livestock facilities* (active and empty) observed within 1,500 m of the Subject Lands. 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*; the type of *manure storage* system; and the type of land use (Type A and Type B). The proposed *development* is considered to be a Type B (more sensitive) land use. The remaining factors required to calculate the *MDS* setbacks were determined through field observations recorded during the land use survey, aerial photographic interpretation, and site-specific information provided by landowners, where possible. When a landowner could not be contacted, self-addressed envelopes and forms were left requesting information which would enable us to calculate the *MDS* setback requirements at *livestock* operations that had the potential to create *MDS* constraints for the Subject Lands.

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.

OMAFRA's The Minimum Distance Separation Implementation Document: Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks, Publication 8533 (2016) document contains a set of guidelines which outline how the *MDS I formula* is to be applied. The following are the relevant *MDS* guidelines for *settlement area* boundary expansion.

#1. Referencing MDS in Municipal Planning Documents

In accordance with the Provincial Policy Statement, 2014, this MDS Document shall apply in prime agricultural areas and on rural lands. Consequently, the appropriate parts of this MDS Document shall be referenced in municipal official plans, and detailed provisions included in municipal comprehensive zoning by-laws such that, at the very least, MDS setbacks are required in all designations and zones where livestock facilities and anaerobic digesters are permitted.

The Town of Caledon recognizes the Subject Lands as being part of a *prime agricultural area* through the approved official plan. As such, the *MDS formulae* must be applied for the Town of Caledon *settlement area* boundary expansion. Section 4.2.3.3.1 j) of the Town of Caledon Official Plan states that the Caledon municipal comprehensive review will address "Compliance with minimum distance separation formulae."

#2. For What, and When is an MDS Setback Required?

The MDS I setback distances shall be met prior to the approval of: proposed lot creation in accordance with Implementation Guidelines #8 and #9; rezonings or re-designations in accordance with Implementation Guideline #10; building permits on a lot which exists prior to March 1, 2017 in accordance with Implementation Guideline #7; and as directed by municipalities for local approvals for agriculture-related uses or on-farm diversified uses in accordance with Implementation Guideline #35.

The information used to carry out an MDS I calculation must reflect the circumstances at the time that the municipality deems the planning or building permit application to be complete.

The proposed *development* will require the Subject Lands to be redesignated for *non-agricultural land uses*. Therefore, the calculation of *MDS I* setback distances is required.

#6. Required Investigation Distances for MDS

A separate MDS I setback shall be required to be measured from all existing livestock facilities and anaerobic digesters on lots in the surrounding area that are reasonably expected by an approval authority to be impacted by the proposed application.

As part of municipal consideration of planning or building permit applications, all existing livestock facilities or anaerobic digesters within a 750 m distance of a proposed Type A land use and within a 1,500 m distance of a proposed Type B land use shall be investigated and MDS I setback calculations undertaken where warranted.

In circumstances where large livestock facilities (e.g., >1,200 Nutrient Units) exist beyond the 750 m or 1,500 m study area, MDS I setbacks from these facilities should also be calculated.

As discussed further below, the proposed *development* is considered to be a Type B land use. Therefore, all existing *livestock facilities* or *anaerobic digesters* with 1,500 m of the Subject Lands shall be investigated and *MDS I* setback calculations completed, where warranted.

#10. MDS I Setbacks for Zoning By-Law Amendments and Official Plan Amendments

An MDS I setback is required for all proposed amendments to rezone or redesignate land to permit development in prime agricultural areas and rural lands presently zoned or designated for agricultural use. This shall include amendments to allow site-specific exceptions which add non-agricultural uses or residential uses to the list of agricultural uses already permitted on a lot, but shall exclude applications to rezone a lot for a residence surplus to a farming operation (e.g., to a rural residential zone) in accordance with Implementation Guideline #9 above.

Amendments to rezone or redesignate land already zoned or designated for a non-agricultural use, shall only need to meet the MDS I setbacks if the amendment(s) will permit a more sensitive land use than existed before. In other words, if the proposal is to change an existing Type A land use (e.g., industrial use outside of a settlement area) to a Type B land use (e.g., commercial) in accordance with Implementation Guidelines #33 and #34, then an MDS I setback shall be required.

The Subject Lands must be redesignated in the Town of Caledon Official Plan to permit the proposed *development*. Guideline #10 of the MDS Document requires the application of the MDS formulae to redesignate land in a *prime agricultural area* for *development*.

#14. Uses Located on the Same Lot

An MDS I setback is <u>NOT</u> required to be met for proposed *development*, *dwelling*, *agriculture-related use*, or *on-farm diversified* use from an *existing livestock facility* or *anaerobic digester* located on the same *lot* as the proposal.

One active *livestock facility* was identified within the Subject Lands. Guideline #14 of the MDS Document states that *MDS I* setbacks are not required to be met for proposed *development* located on the same lot as an existing *livestock facility*. *MDS I* setbacks were calculated for the operation but were not mapped as the MDS setback is not a constraint for development.

#34. Type B Land Uses (More Sensitive)

For the purposes of MDS I, proposed Type B land uses are characterized by a higher density of human occupancy, habitation or activity including, but not limited to:

- new or expanded settlement area boundaries;
- an official plan amendment to permit development, excluding industrial uses, on land outside a settlement area;
- a zoning by-law amendment to permit development, excluding industrial uses or dwellings, on land outside a settlement area; and
- the creation of one or more lots for development on land outside a settlement area, that results in four or more lots for development, which are in immediate proximity to one another (e.g., sharing a common contiguous boundary, across the road from one another, etc.), regardless of whether any of the lots are vacant.

Because of the increased sensitivity of these uses, a new or expanding Type B land use will generate an MDS I setback that is twice the distance as the MDS I setback for a Type A land use. This is reflected in the value of Factor E which is 2.2 for Type B versus 1.1 for Type A.

Settlement area boundary expansion is a Type B land use. Therefore, *MDS I* setbacks have been calculated for a Type B land use, which generates an *MDS I* setback that is twice that of a Type A land use.

#36. Non-Application of MDS Within Settlement Areas

MDS I setbacks are NOT required for proposed land use changes (e.g., consents, rezonings, redesignations, etc.) within approved settlement areas, as it is generally understood that the long-term use of the land is intended to be for non-agricultural purposes.

The Subject Lands are located within the Region of Peel's approved *settlement area* and are likely to be included in the Town of Caledon's *settlement area* following provincial approval of the Future Caledon Official Plan. Therefore, the *MDS formulae* are not required to be applied to proposed *development* within the Subject Lands. However, *MDS I* setbacks have been calculated to show compliance with the *MDS formulae* and to identify areas that may be more sensitive to the introduction of non-agricultural land uses.

#40. Measurement of MDS Setbacks for Development and Dwellings

For proposed development, MDS I setbacks are measured as the shortest distance between the area proposed to be rezoned or redesignated to permit development and either: the surrounding livestock occupied portions of livestock barns, manure storages or anaerobic digesters. Refer to Figure 7 in Section 7 of this MDS Document. This shall include areas proposed to be rezoned or redesignated with site-specific exceptions that add non-agricultural uses or residential uses to the list of agricultural uses already permitted on a lot.

For building permit applications for proposed dwellings, where required in accordance with Implementation Guideline #7, MDS I setbacks are measured as the shortest distance between the proposed dwelling and either the surrounding manure storages, anaerobic digesters or the livestock occupied portions of the livestock barns.

MDS I setback distances shall be applied to the shortest distance between the Subject Lands and the *manure storages* or *livestock* occupied portions of the *livestock facility*.

5.9.2 MDS Results

The *MDS I formula* was applied to six *livestock facilities* within 1.5 km of the Subject Lands. The *MDS I formula* was not applied to farm operations with barns that did not appear to be structurally sound and capable housing *livestock*, nor *livestock* operations located outside of the 1.5 km Study Area, or within the Subject

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Lands. The *MDS I* setbacks for Operations #3, #6, #8, #18, and #30, can be reduced due to the presence of four or more non-agricultural land uses within the intervening area. However, the *MDS I* setbacks were not reduced, as the full setback distances do not encroach into the Subject Lands.

Figure 6 shows the *MDS I* setback requirements for each of the identified *livestock operations*. As shown in Figure 6, no *MDS I* setbacks encroach into the Subject Lands. Therefore, the proposed *development* complies with the *MDS formulae*. The *MDS I* reports generated by OMAFA's AgriSuite software are found in Appendix H. Table 3 summarizes the results of the calculations and the level of compliance with the *MDS* setback achievable.

Table 3.MDS Setback Requirements for Proposed Development					
Site Number	MDS I Setback Requirement – Livestock Facility	MDS I Setback Requirement – Manure Storage	Nearest Distance to Subject Lands	Complies with MDS I Setback?	
3	338 m	N/A	1,228 m	Yes	
6	216 m	216 m	1,443 m	Yes	
8	202 m	202 m	799 m	Yes	
18	221 m	221 m	916 m	Yes	
21	281 m	281 m	750 m	Yes	
30	296 m	N/A	1,999 m	Yes	

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 agriculture and agri-food sector is one of the largest primary goods producing sectors and at one time played a larger role in the Town of Caledon and Region of Peel economies. However, according to Census of Agriculture data, the total number of farms in the Region of Peel decreased from 440 in 2011, to 408 in 2016, to 377 farms in 2021. The Town of Caledon observed a similar trend of decreasing farm numbers, with data showing 365 farms in 2011, 345 farms in 2016, and 308 farms in 2021. These farms employ residents from the Region of Peel and the Town of Caledon, contributing economically to the area and supporting the *agri-food network*.

As of 2021, the agriculture, forestry, fishing and hunting industry employed approximately 1,465 individuals within the Region of Peel, which is a decrease from the 2,010 individuals employed in 2016. The Town of Caledon observed a similar decrease in individuals employed by the agriculture, forestry, fishing and hunting industry, with data showing the industry employed 600 individuals in 2016 and 505 individuals in 2021. Within the Region of Peel, there were approximately 6,993 agri-food businesses in 2021, with 569 of these businesses located within the Town of Caledon. Both the Region of Peel and the Town of Caledon have experienced a slight increase in agri-food businesses from 2016 to 2021.


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As of 2021, of the 308 total farms within the Town of Caledon, seven farms were valued under \$200,000, three farms were valued between \$200,000 and \$499,999, 26 farms were valued between \$500,000 and \$999,999, and 272 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.

The Subject Lands are located in a fast-developing area in which the lands are being transformed from agriculture to *non-agricultural uses*, in part due to the Region of Peel *settlement area* boundary expansion. While agriculture in this area still provides some economic and community benefits, the influence of agriculture is waning in the *Study Area*. The general lack of investment in agricultural infrastructure, land improvements, and the land uses observed in the *Study Area* supports this conclusion.

It is expected that the proposed *development* will lead to non-farm related job creation, which is likely to offset the loss of input to the agricultural economy as a result of the redesignation of the Subject Lands and surrounding area. With the implementation of mitigation measures to minimize direct impacts on the Subject Lands, and indirect impacts on surrounding farm operations, it is expected that the proposed *development* can minimize the short-term impacts of *development* on the *Agricultural System*. However, the longer-term impacts will be difficult to mitigate as the area transforms to an urban area.

6. ASSESSMENT OF AGRICULTURAL PRIORITY

The Subject Lands are located within the Town of Caledon's *prime agricultural area*; therefore, an assessment of the agricultural priority of the Subject Lands are required to be consistent with OMAFRA's draft Agricultural Impact Assessment Guidance Document. This analysis involves an assessment of whether the lands are 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 uses*, ability to minimize potential conflict (e.g., meeting the *MDS I* setback requirements), and the zoning of the parcel.

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

- 1. They are part of the 2051 New Urban Area within the Urban System and mapped as Employment Area in the Region of Peel Official Plan. This indicates further non-agricultural *development* in the future and the likely removal of the Town of Caledon's Prime Agricultural Area designation following provincial approval of the Future Caledon Official Plan;
- 2. The Subject Lands are not located within a provincially recognized prime agricultural area;
- 3. They are not located within a *specialty crop area* and no specialty crops are grown in the vicinity;
- 4. There are no investments in agricultural tile drainage within the Subject Lands;
- 5. The Subject Lands are located in close proximity to the *settlement area* boundary of the City of Brampton. The close proximity of the *non-agricultural uses* 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;
- 6. High traffic volumes along Mayfield Road make moving farm machinery difficult and dangerous at times. Traffic volumes are expected to increase as *development* within the *Study Area* continues;
- 7. *MDS I* setback requirements can be met for the proposed *development* on the Subject Lands; and
- 8. The close proximity to a settlement boundary and *non-agricultural uses* creates *MDS II* setback constraints that limit the use of the Subject Lands for housing *livestock* and manure storage.

7. Assessment of Alternative Locations

The evaluation of alternative locations as part of an AIA needs to demonstrate that higher quality agricultural land was avoided by selecting lower priority lands when *prime agricultural areas* cannot be avoided.

Section 2.3.2 of the *PPS* 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 areas provide for the phased progression of urban development."

As previously stated, the Subject Lands are no longer provincially recognized as being part of a *prime agricultural area* following provincial approval of the Region of Peel Official Plan in November 2022. Therefore, an assessment of alternative locations for *settlement area* boundary expansion is not required for the proposed *development*.

8. ASSESSMENT OF IMPACTS TO AGRICULTURE

Farm operations can be adversely impacted by new non-agricultural *development* on adjacent lands. Nonagricultural *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 *development* will have direct and potentially indirect impacts. It is unlikely that the proposed *development* will have significant, long-term negative effects on the surrounding agricultural lands and community.

8.1 Direct Impacts

8.1.1 Prime Agricultural Lands

The Subject Lands are approximately 165.73 ha (409.53 acres) in size, of which approximately 142.33 ha are *prime agricultural lands. Development* of these lands will lead to the loss of the *prime agricultural lands*. The proposed *development* will result in the loss of approximately 142.33 ha of *prime agricultural lands*. To mitigate this loss, the lands should be kept in agricultural production until the land is needed for development.

8.1.2 Agricultural Infrastructure

There are two agricultural operations within the Subject Land which contain some agricultural infrastructure. One of the two agricultural operations (#20) is a remnant farm with two capped silos present but no infrastructure capable of housing livestock. The other (#11) appears to be a *beef operation*.

The proposed *development* will eventually result in the loss of the infrastructure associated with these operations. To mitigate this loss, the agricultural infrastructure should be left in place until the land is to be developed.

It should be noted that Operation #11 is mapped within the Planned Highway 413 Corridor. As a result, the infrastructure associated with this operation is likely to be lost due to the construction of the highway, regardless of the proposed *development* of the Subject Lands.

8.1.3 Agricultural Land Improvements

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

8.1.4 Loss of Crop Land

The Subject Lands are primarily *cultivated* for the production of common field crops but also contain large areas of idle lands and natural heritage features. Of the Subject Lands' 165.73 ha, approximately 115.79 ha of land are *cultivated*. The *development* of the Subject Lands will result in the loss of these cultivatable lands. To mitigate this loss, the lands should be left in agricultural production until the lands are needed for construction of the proposed *development*.

It is our understanding that the Subject Lands are currently tenant-farmed. If the crops grown on the Subject Lands are used to support a *livestock operation,* the operation may need to find additional ands to lease for production, or source inputs from alternative sources. Allowing the lands to remain in agricultural production until they are needed for *development* will minimize the impact on the tenant farmer.

8.2 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*.

8.2.1 Disruption to Surficial Drainage

The proposed *development* 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.

8.2.2 Disruption to Farm Operations

Farm Access Points

Most active agricultural operations in the *Study Area* are well removed from the *Subject Lands* and are unlikely to experience any form of disruption to their operations. Access points to farm operations should be identified and construction activity should ensure that access to farmlands is maintained at all times. It is unlikely that there will be a negative impact on farm operations due to the proposed *development*.

The proposed *development* will have no impact on the flexibility of surrounding lands to accommodate changes in types of farming. The adjacent lands will not be affected and will still be able to cultivate common field crops and other agricultural products without limitation.

Potential Hydrological/Hydrogeological Impacts

New non-agricultural *development* can 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. We have reviewed aerial photographic imagery to identify any obvious surface water features that could be used by livestock operations in the Study Area. Although a small number of ponds were identified, none appeared to be used as a source of water for pastured livestock. Nor did it appear that they were the source of irrigation water for crops.

We recommend that a Hydrogeological Study be prepared and include an assessment of the potential impacts on agricultural wells and water sources. It is anticipated that the Hydrogeological Study will provide recommendations to mitigate impacts if impacts to these water sources occur.

Nuisance to Farm Operations

Noise, dust, and light can have a negative impact on some farm operations. Construction may temporarily generate greater levels of noise, dust, and lighting. Litter and other construction refuse can also be blown onto adjacent farm lands.

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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 in compliance with Ministry of Environment, Conservation and Parks (MECP) guidelines.

A construction waste management plan should be in place and should includes measures to control the spread of litter during construction. No negative indirect impacts are anticipated from construction activity.

8.2.3 Trespass and Vandalism

Farm operations within the *Study Area* may already have to deal with the potential for trespass and vandalism due to the proximity of the City of Brampton *settlement area* and the abundance of *non-agricultural uses* in the surrounding area. People crossing and damaging fences and rutting fields with dirt bikes and all-terrain vehicles are examples of trespass and vandalism that may occur. There is also a chance that debris (litter) can end up in farmer's fields from construction activities, and the activities of the proposed *development*. Establishing buffers, fencing, and other edge planning techniques along the new agricultural-urban interface should be considered to minimize impacts. Edge planning techniques are discussed in further detail in Section 8.3 of this report.

8.2.4 Minimum Distance Separation

The *MDS I* setback requirements have been calculated for all active *livestock* and *retired livestock operations* capable of housing *livestock* within the *Study Area*. There are no *development* constraints related to the *MDS*. The proposed Secondary Plan and subsequent *development* will comply with the *MDS formulae*.

8.2.5 Transportation Impacts

The Region's expansion of the urban area and the Planned Highway 413 Corridor will substantially transform the agricultural character of the area. It is expected that traffic volumes will increase accordingly. Currently, there is a substantial amount of traffic along Mayfield Road, and it is likely that the proposed *development* will introduce significantly more traffic to these roads over time. Given the close proximity of the City of Brampton *settlement area* 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. Many of the farm operations to the west and east of the Subject Lands are also within the Region's *settlement area* boundary and will eventually be retired. Increased traffic levels are not anticipated to have a long-term impact on these farm operations.

It is recommended that a Traffic Impact Study be prepared as part of the Secondary Plan process. To ensure transportation impacts are minimized, recommendations outlined in a Traffic Impact Study should be adhered to if potential impacts are identified. Additionally, 'Share the Road' signage should be placed along the newly created agricultural/urban interface.

8.2.6 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.

While agriculture in the Town of Caledon still provides economic and community benefits, the influence of agriculture is waning in the *Study Area*. 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*. To mitigate the loss of agricultural inputs to the economy, the agricultural operations should continue until the lands are needed for *development*.

8.3 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 expansion occurs, some consideration should be given to minimizing the length of the AUI. The proposed *development* of the Subject Lands creates a new agricultural-urban interface that should be given special consideration during the Secondary Plan process.

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, 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.

8.3.1 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 agricultural-urban interface (AUI) as much as possible.

8.3.2 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 and 90 metres for institutional land uses.

8.3.3 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.).

8.3.4 Urban-Side Buffer Design

As part of the building setback, the urban-side buffer design should include a continuous vegetative buffer along the urban-side of the AUI 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 total 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.

8.4 Farm and Food Production Protection Act

Over time, changes within the rural areas have made it increasingly difficult for agricultural owners and operators to effectively produce food, fibre and other agricultural or horticultural products. Normal farm practices and activities may cause discomfort and inconveniences to adjacent land owners. Pressures on the farming community as a result of complaints and/or municipalities enacting by-laws that limit or prohibit certain normal farm practices can negatively impact farm operations. To minimize these negative pressures, the province introduced the *Farm and Food Production Protection Act* which states that:

"It is in the provincial interest that in agricultural areas, agricultural uses and normal farm practices be promoted and protected in a way that balances the needs of the agricultural community with provincial health, safety and environmental concerns."

Farm operations in the surrounding *prime agricultural area* have the right to continue their normal farm practices. Land use changes in the surrounding area will not limit the opportunities for continued agricultural production.

8.5 Summary of Impacts

The potential direct and indirect impacts identified are summarized in Table 4 along with the potential degree of impact, mitigation measures to avoid or minimize the potential impact, and the resulting anticipated impact.

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Table 4.Summary of Impact	ts				
Potential Impact	Relative Degree of Impact	Mitigation Measure	Anticipated Net Impact		
Direct Impacts					
Loss of prime agricultural land	High	Continue farming until lands are to be developed	Eventual loss of approximately 142.33 ha of <i>prime agricultural lands</i>		
Loss of agricultural infrastructure	Low	Allow use of agricultural infrastructure until lands are needed for <i>development</i>	Eventual loss of agricultural infrastructure from two agricultural operations		
Loss of agricultural land improvements	Low	None required	No impact		
Loss of cropland	High	 Continue farming until lands are to be developed 	Eventual loss of approximately 115.79 ha of cultivatable land		
Indirect Impacts			·		
Surficial Drainage	Low	 Prepare a Grading Plan and Stormwater Management Plan Implement recommendations 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 Comply with Ministry of Environment, Conservation and Parks (MECP) guidelines Assess the need for a construction waste management plan 	No significant impact anticipated		
Non-farm traffic	Low	Prepare a Traffic Impact Study to assess potential impacts.Implement recommendations if impact identified	No significant impact anticipated		

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Table 4.Summary of Impact	S		
	Relative		
Potential Impact	Degree of	Mitigation Measure	Anticipated Net Impact
	Impact		
Trespass, Vandalism, and Stray	Low	Consider the use of edge planning techniques along the	No significant impact
Pets	LOW	agricultural-urban interface	anticipated
Noise Duct & Light	Low	Adhere to Ministry of the Environment and	No impact anticipated
Noise, Dust & Light	LOW	Conservation and Parks (MECP) guidelines	
Land Use Compatibility	Low	Consider the use of edge planning techniques along the	No significant impact
Land Use Compatibility	LOW	agricultural-urban interface	anticipated
Conflict with MDS formulae	Low	None required. Complies with MDS Formulae	No impact
Economic	Low	None required	No significant impact
		Prepare a Hydrogeological Study to identify potential	
Wells, Irrigation, water bodies	Low	impacts	No impact anticipated
		Implement recommendations if impact identified	

9. CONSISTENCY WITH AGRICULTURAL POLICIES

9.1 Provincial Planning Statement

The updated Region of Peel Official Plan shows the Subject Lands within the 2051 New Urban Area, within the Urban System. The Provincial approval of the Region of Peel Official Plan in November of 2022 resulted in the Subject Lands being removed from the provincially recognized *prime agricultural area*. Therefore, the agricultural policies regarding *settlement area* boundary expansion in the *PPS* are no longer applicable to the Subject Lands.

The proposed *development* will comply with the *MDS formulae* and recommendations have been made to mitigate the potential impacts of the proposed *development* on the *Agricultural System*. The Subject Lands are not part of a *specialty crop area*, and they are no longer located in a provincially recognized *prime agricultural area*. The Subject Lands are lower priority agricultural lands and represent a reasonable location for the proposed *development*. The proposed *development* is consistent with the agricultural policies of the *PPS*.

9.2 Region of Peel Official Plan

The Region of Peel Official Plan recognizes the Rural System, which includes lands designated as Prime Agricultural Area and Rural Lands. The Subject Lands are not located within the Rural System of the Region of Peel. The updated Regional Official Plan shows the Subject Lands within the 2051 New Urban Area in the Urban System and designates the Subject Lands as Designated Greenfields Area. As such, adherence to the agricultural policies of the Region of Peel Official Plan is not required.

9.3 Town of Caledon Official Plan

Section 4.2.3.3.1 of the Town of Caledon Official Plan outlines the requirements for *settlement area* boundary expansion and states that "Expansions to settlements will require an amendment to this Plan and shall be undertaken through a municipal comprehensive review". Section 4.2.3.3.1 states in part that the municipal comprehensive review "will address the following:

- h) An examination of reasonable alternative locations which avoid Prime Agricultural Areas, and reasonable alternative locations on lands with lower priority in the Prime Agricultural Area;
- j) Compliance with minimum distance separation formulae;
- o) Mitigation of impacts of settlement area expansions on agricultural operations which are adjacent to or close to the settlement area to the greatest extent feasible;".

Section 5.1.1.17.1 of the Town of Caledon Official Plan states "Proposals in the Prime Agricultural Area that have the potential to negatively impact agricultural uses will require an Agricultural Impact Assessment".

This AIA fulfills the requirement of completing an Agricultural Impact Assessment for non-agricultural *development* in the Town of Caledon's Prime Agricultural Area. The proposed Secondary Plan and subsequent *development* avoids the Region's *prime agricultural areas* and the *development* utilizes lower priority agricultural lands. The proposed *development* will comply with the *MDS formulae*, and mitigation measures have been provided to minimize impacts on the *Agricultural System*.

9.4 Future Caledon Official Plan

Schedule B4 of the Future Caledon Official Plan indicates that the Subject Lands are designated as New Urban Area 2051 within the Town's Urban Area. None of the Subject Lands' developable area falls within the Town's Rural Lands or Prime Agricultural Area land use designation. Consequently, the agricultural policies of the Future Caledon Official Plan are not applicable to the proposed *development*, pending provincial approval of the Future Caledon Official Plan. Should the Province amend the Future Caledon Official Plan to exclude any portion of the Subject Lands from the Urban Area, the AIA will be revised through an addendum to ensure the proposed *development* aligns with the approved Future Caledon Official Plan.

10. CONCLUSION

This AIA has identified and described the agricultural resources and farm operations within the Subject Lands and *Study Area*. The potential impacts associated with the proposed *development* have been assessed and we have determined the following:

- The Subject Lands are part of the 2051 New Urban Area within the Urban System of the Region of Peel Official Plan. The long-term use of these lands is for urban-related uses. We anticipate that the Subject Lands will be removed from the Town of Caledon's Prime Agricultural Area designation following provincial approval of the Future Caledon Official Plan;
- 2. The Subject Lands are not part of a *specialty crop area* and no specialty crops were observed within the *Study Area*;
- 3. The Subject Lands are not part of a provincially recognized *prime agricultural area* and are considered to be lower priority agricultural lands;
- 4. Potential impacts associated with the proposed *development* are primarily limited to the loss of *prime agricultural lands*, cultivatable land, and agricultural infrastructure. Recommendations have been provided that will ensure potential impacts will be avoided or mitigated to the extent possible. The net indirect impacts will be negligible with the implementation of the recommended mitigation measures;
- 5. The proposed *development* will comply with the *MDS I* setback requirements; and
- 6. The proposed *development* is consistent with all relevant provincial and regional agricultural policies. The proposed *development* will require an Official Plan Amendment to the Town of Caledon Official Plan.

Respectfully submitted by:

Sean Colutt

Sean Colville, B.Sc., P.Ag. Colville Consulting Inc.

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John Liotta, B.Sc.Env, P.Ag. Colville Consulting Inc.

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).

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.

Dwelling:* - Any permanent building that is used, or intended to be used, continuously or seasonally, as a domicile by one or more persons and usually containing cooking, eating, living, sleeping, and sanitary facilities.

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).

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.

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.

Mottles: - are spots of colour in *soil horizons*, caused by impeded drainage. The mottle colours are recorded as faint, distinct or prominent depending on the contrast between the mottle colour and the basic horizon colour.

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

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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.

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*.

Scrub land: - means lands that are no longer farmed and woody species (young trees and shrubs) have begun regenerating and/or sparsely treed 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, that 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 horizons 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.

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

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- Town of Caledon Official Plan, Consolidated in April, 2018. https://www.caledon.ca/en/townservices/resources/Documents/business-planning-development/Official_Plan_Master_Copy.pdf.
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AIA for Tullamore Northwest Employment Secondary Plan Area, Caledon

APPENDIX A

Curriculum Vitae



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

432 Niagara St., Unit 2, St. Catharines, ON L2M 4W3 Tel: (905) 935-2161 | Email: sean@colvilleconsultinginc.com

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,

COLVILLE CONSULTING INC.

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.



JOHN LIOTTA, B.Sc. (Env.), EMA, P.Ag.

432 Niagara St., Unit 2, St. Catharines, ON L2M 4W3 Tel: (905) 935-2161 | Email: john@colvilleconsultinginc.ca

EDUCATION

Bachelor of Science in Environmental Sciences, University of Guelph, 2018 Environmental Management and Assessment Graduate Certificate, Niagara College, 2022

PROFESSIONAL AFFILIATIONS

Eco Canada – Environmental Professional in Training Ontario Institute of Agrologists – Professional Agrologist

POSITIONS HELD

2022 - Present - Colville Consulting Inc., St. Catharines, Agrologist/Ecologist

EXPERIENCE

John Liotta, Agrologist and Ecologist at Colville Consulting Inc., has over 5 years of formal educational training and experience in Environmental and Agricultural Planning. John has completed Agricultural Impact Assessments, Minimum Distance Separation (MDS) Requirements, and Agricultural Characterization Reports in his role as at Colville Consulting Inc.

Through his education at the University of Guelph and Niagara College, John has gained a broad base knowledge of Environmental and Agricultural Planning and Management, which he has applied in his current role at Colville Consulting Inc. His work at Colville Consulting Inc. includes the interpretation of provincial, regional, and local land use policies, creation and interpretation of land use maps, regional soils mapping, and agricultural protection policies. He has participated in the completion of Agricultural Impact Assessments, Minimum Distance Separation Assessments, and Agricultural Characterization Reports. His field work activities include land use surveys and post-construction avian and bat mortality monitoring for wind turbines in the County of Haldimand, Ontario.

A selection of projects John has been involved with at Colville Consulting Inc. include:

- Post-Construction Avian and Bat Mortality Monitoring for Pattern Energy, Korea Electric Power Corporation, and Samsung Renewable Energy Inc., Grand Renewable Energy Park, County of Haldimand, Ontario
- Agricultural Impact Assessment for landowner group, City of Pickering
- Agricultural Impact Assessment for landowner, Township of North Dumfries, Ontario
- Agricultural Characterization Report for landowner, Township of Beckwith, Ontario
- Agricultural Characterization Report for landowner, Town of Carleton Place, Ontario
- Minimum Distance Separation Report for landowner, Town of Caledon, Ontario
- Agricultural and Rural Lands Discussion Paper for municipality, Town of Blue Mountain, Ontario
- Agricultural Impact Assessment for Wildfield Village, Town of Caledon
- Agricultural Impact Assessment for Redford Pit Expansion, West Grey

ADDITIONAL TRAINING AND WORKSHOPS

Standard First Aid, CPR C, AED – St. John's Ambulance (2023) Workplace Hazardous Materials Information System Natural Gas Pipeline Safety Training – TC Energy (2022) Excavation Safety Training – TC Energy (2022) Supervisor (Level 2) Ground Disturbance Training (2022)

APPENDIX B

Land Use Plan





Schedule X

TULLAMORE NORTH WEST LAND USE PLAN

Presitge Industrial

General Industrial

Open Space Policy Area

Headwater Drainage Feature - To be identified through Site Specific Environmental Impact Study



- Focused Analysis Area (December, 2024)
- — Preliminary Highway Right-of-Way Design
 - Regional Arterial
- Town Arterial

Potential R.O.W. Connection



APPENDIX C

Climate Normals Data

LOCATION_NAME TORONTO PEARSON (AIRPORT)	PROVINCE	PERIOD_OF_RECORD Normal	ELEMENT_GROUP	NORMALS_ELEMENT Daily Average (°C)	Jan -5	Feb -4.4	Mar /	Apr 7	May Jun 13.7	Jul 19.2	Aug 22.1	g S 21.1	ep 16.9	Oct 10	Nov 4.1	Dec Y	Year Code
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	StdDev Mean Monthly Temperature (°C)	3	3	2.2	1.6	2	1.3	1.8	1.3	1.7	1.3	2	2.1	1.3 B
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Temperature Temperature	Daily Maximum (°C) Daily Minimum (°C)	-1.2 -8.9	-0.3 -8.5	-3.8	12 1.9	19.2 8.2	24.5 13.9	27.4 16.6	26.3 15.8	22.3 11.6	14.6 5.3	7.9 0.2	<u> </u>	13.3 B 3.9 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Maximum Daily Mean (°C)	13.4	10.9	18.2	22.4	27.6	29.5	31.8	31.5	28.5	24.5	16.1	14.1	·
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Minimum Daily Mean (°C)	-24.7	-22.3	-18.8	-4.7	0.9	8.4	13.6	13.2	2010-09-07 4.5	-1	-9.6	-18.6	
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Temperature Temperature	Minimum Daily Mean (°C) Date (yyyy/mm/dd) Extreme Maximum (°C)	<u> </u>	2015-02-15	2003-03-03 26	2003-04-06	2020-05-08	1992-06-20 36.2	1992-07-31 37.9	1992-08-13 37.9	1993-09-30 35	2020-10-30	2018-11-22	2017-12-31 18.3	
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Extreme Maximum (°C) Date (yyyy/mm/dd)	2005-01-13	2017-02-23	2012-03-22	2002-04-16	2006-05-29	1994-06-18	2011-07-21	2001-08-08	2016-09-07	2019-10-01	2020-11-10	2001-12-05	
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Temperature Temperature	Minimum Daily Maximum (°C) Minimum Daily Maximum (°C) Date (yyyy/mm/dd)	-21 1994-01-15	-19.1 2015-02-15	-12.8 2003-03-03	-3 2003-04-04	4.8	10 1992-06-20	15.4 1992-07-31	16.2 1992-08-13	9.9 2000-09-28	2.3 2020-10-30	-5.9 2018-11-22	-14.5 2017-12-31	
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Maximum Daily Minimum (°C)	11.3	6.5	11.9	16.3	22.2	24.4	26	26.3	23.4	19.4	12.3	9.8	
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Extreme Minimum (°C) Date (yyyy/mm/dd)	-31	-25.5	-24.7	-9.2	-4.7	2012-06-20	7.9	2006-08-01	2001-09-09 -1.2	-5.4	-13.9	-24.3	
TORONTO PEARSON (AIRPORT)	ON ON	Normal Long-Term	Temperature	Extreme Minimum (°C) Date (yyyy/mm/dd)	1994-01-16	2015-02-15	2003-03-03 18 2	1995-04-05	2020-05-09	1998-06-05 29 5	1992-07-22	1992-08-20	1993-09-30 30	2020-10-31	2019-11-13	2004-12-20	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Maximum Daily Mean (°C) Date (yyyy/mm/dd)	2008-01-08	2017-02-23	2012-03-22	1990-04-26	2006-05-30	2012-06-20	2011-07-21	2006-08-01	1953-09-02	2002-10-01	1974-11-01	1966-12-08	
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Long-Term Long-Term	Temperature Temperature	Minimum Daily Mean (°C) Minimum Daily Mean (°C) Date (yyyy/mm/dd)	-24.7 1994-01-15	-23.4 1943-02-15	-18.8 2003-03-03	-11.1 1972-04-07	0.9	5.3 1945-06-01	<u> </u>	9.5	2.5 1965-09-27	-3.6 1969-10-22	-11.7 1949-11-26	-20.9 1942-12-20	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Extreme Maximum (°C)	17.6	17.7	26	31.1	34.4	36.7	37.9	38.3	36.7	31.8	25	20	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Minimum Daily Maximum (°C)	-21	-19.2	-15	-5	4.4	9.4	15.4	1948-08-25	6.7	0	-7.3	-17.8	
TORONTO PEARSON (AIRPORT)	ON ON	Long-Term Long-Term	Temperature	Minimum Daily Maximum (°C) Date (yyyy/mm/dd) Maximum Daily Minimum (°C)	1994-01-15	1979-02-17 6 5	1938-03-03 12 6	1972-04-07	1976-05-07	1945-06-01	1992-07-31	1964-08-13 26.3	1950-09-24 23.4	1969-10-22 19 4	1987-11-21 13 9	1955-12-20 12 8	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Maximum Daily Minimum (°C) Date (yyyy/mm/dd)	2008-01-08	2009-02-11	1989-03-28	1990-04-26	2006-05-30	1959-06-29	2011-07-21	2006-08-01	2001-09-09	2002-10-01	1956-11-01	1966-12-08	
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Long-Term Long-Term	Temperature Temperature	Extreme Minimum (°C) Extreme Minimum (°C) Date (yyyy/mm/dd)	-31.3 1981-01-04	-31.1 1943-02-15	-28.9 1950-03-04	-17.2 1972-04-07	-5.6 1966-05-07	0.6 1949-06-08	3.9 1968-07-30	1.1 1965-08-30	-3.9 1965-09-27	-8.3 1969-10-23	-18.3 1949-11-26	-31.1 1942-12-20	
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Rainfall (mm)	33.8	23.9	34	70.7	77.5	80.7	74	68.5	69.4	67	62.7	35.3	697.4 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Precipitation (mm)	61.6	50.2	50.5	76.7	77.6	80.7	74	68.5	69.4	67.2	71.8	58.6	806.8 B
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Precipitation Precipitation	Average Snow Depth (cm) Median Snow Depth (cm)	6	7	3	0	0	0	0	0	0	0	0	3	2 C 1 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Snow Depth at Month-end (cm)	8	6	0	0	0	0	0	0	0	0	0	3	1 C
TORONTO PEARSON (AIRPORT)	ON ON	Normal	Precipitation	Extreme Daily Rainfall (mm) Extreme Daily Rainfall (mm) Date (yyyy/mm/dd)	59 2020-01-11	25.8 2009-02-11	40.8 1991-03-27	55.8 <u>1992</u> -04-11	59.4 2000-05-12	53.8 2000-06-13	126 2013-07-08	41.4 1991-08-03	66.4 <u>1996-</u> 09-07	64.8 <u>1995</u> -10-05	52.4 1999-11-02	30.2 1998-12-06	
TORONTO PEARSON (AIRPORT)	ON ON	Normal	Precipitation	Extreme Daily Snowfall (cm)	26.4	30.4	15.2	10.4	2.8	0	0	0	0	2	19.4 2020-11-22	17.4 2014-12-11	
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Daily Precipitation (mm)	59	40.4	40.8	55.8	59.4	53.8	1331-07-01	41.4	66.4	64.8	52.4	30.2	
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Precipitation Precipitation	Extreme Daily Precipitation (mm) Date (yyyy/mm/dd) Extreme Snow Depth (cm)	2020-01-11 67	2001-02-08	1991-03-27 30	<u>1992-04-11</u> 12	2000-05-12	2000-06-13	2013-07-08	1991-08-03 0	1996-09-07 0	1995-10-05 0	1999-11-02 18	1998-12-06 36	
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Snow Depth (cm) Date (yyyy/mm/dd)	1999-01-15	2008-02-13	2008-03-09	1994-04-07	1991-05-01	1991-06-01	1991-07-01	1991-08-01	1991-09-01	1991-10-01	2002-11-18	2008-12-24	
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Long-Term Long-Term	Precipitation Precipitation	Extreme Daily Rainfall (mm) Extreme Daily Rainfall (mm) Date (yyyy/mm/dd)	59 2020-01-11	31.8 1975-02-24	41.7 1942-03-16	55.8 1992-04-11	92.7 1944-05-31	53.8 2000-06-13	126 2013-07-08	80.8 1970-08-30	108 1948-09-18	121.4 1954-10-15	86.1 1962-11-10	40.9 1962-12-06	
TORONTO PEARSON (AIRPORT)	ON ON	Long-Term	Precipitation Precipitation	Extreme Daily Snowfall (cm)	36.8	39.9 1965-02-25	32.3 1964-03-10	26.7 1939-04-10	2.8	0	0	0	0 1938-09-01	7.4	33.5 1940-11-30	28.2	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Daily Precipitation (mm)	59	55.9	41.7	55.8	92.7	53.8	1938-07-01	80.8	1938-09-01	1902-10-23	86.1	40.9	
TORONTO PEARSON (AIRPORT)	ON ON	Long-Term Long-Term	Precipitation Precipitation	Extreme Daily Precipitation (mm) Date (yyyy/mm/dd) Extreme Snow Depth (cm)	2020-01-11	1965-02-25 48	1942-03-16 30	<u>1992-04-11</u> 13	1944-05-31	2000-06-13	2013-07-08	1970-08-30 0	1948-09-18 0	1954-10-15 13	1962-11-10 18	1962-12-06 36	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Snow Depth (cm) Date (yyyy/mm/dd)	1999-01-15	2008-02-13	2008-03-09	1975-04-04	1955-05-01	1955-06-01	1955-07-01	1955-08-01	1955-09-01	1969-10-22	2002-11-18	2008-12-24	[.
TORONTO PEARSON (AIRPORT)	ON	Normal Normal	Days With	Thunderstorms	0.13	1.1 0.3	0.77	0.47	3.5	0 5.1	5.5	4.7	0 2.6	1.3	0.23	0.9	26.3 A
TORONTO PEARSON (AIRPORT)	ON ON	Normal	Days With	Hail	0	0	0.03	0.13	0.13	0.07	0	0.07	0	0.07	0.03	0	0.53 A
TORONTO PEARSON (AIRPORT)	ON	Normal	Days With	Smoke or Haze	2.5	2.2	2.8	2.1	3.5	4.5	4.4	4.2	2.9	2.4	3.1	2.5	37.2 A
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Maximum Temperature Days with Maximum Temperature	Days with Maximum Temperature <= -30 °C Days with Maximum Temperature <= -20 °C	0.04	0	0	0	0	0	0	0	0	0	0	0	0 C 0.04 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Maximum Temperature	Days with Maximum Temperature <= -10 °C	2.6	1.1	0.24	0	0	0	0	0	0	0	0	0.15	4 C
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON	Normal Normal	Days with Maximum Temperature Days with Maximum Temperature	Days with Maximum Temperature <= 0 °C Days with Maximum Temperature > 0 °C	16.9	13.7 14.6	6.3 24.7	0.44 29.6	31	0 30	31	0 31	0 30	31	1.5 28.5	10.7 20.4	49.5 C 315.8 C
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Maximum Temperature	Days with Maximum Temperature > 10 °C	1.2	0.77	6.2 0.6	18.9	30	30 24.6	31	31	29.9 19 7	25.2	9.2 0.24	1.6	214.7 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Maximum Temperature	Days with Maximum Temperature > 30 °C	0	0	0.0	0	0.75	3.4	7.7	4	1.3	0.08	0.24	0	17.2 C
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Maximum Temperature Days with Maximum Temperature	Days with Maximum Temperature > 35 °C Days with Maximum Temperature > 40 °C	0	0	0	0	0	0.07	0.54	0.19	0	0	0	0	0.8 C 0 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Minimum Temperature	Days with Minimum Temperature > 20 °C	0.04	0	0	0	0.08	1.4	5.5	2.4	0.4	0	0	0	9.7 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Minimum Temperature	Days with Minimum Temperature > 0 °C	3.5	1.9	7.6	20.7	30.4	30	30.4	29.8 31	29.8	28	0.24	5.5	234.7 C
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Minimum Temperature	Days with Minimum Temperature <= 2 °C	30	27.9 26.4	27.2 23.4	15.6 9.3	2.4	0	0	0	0.36	7.5	20.6 14.6	29.1 25.5	160.6 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Minimum Temperature	Days with Minimum Temperature < -2 °C	24.8	23.3	18.5	4.4	0.17	0	0	0	0.10	0.64	8.7	20.5	101 C
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Minimum Temperature Days with Minimum Temperature	Days with Minimum Temperature < -10 °C Days with Minimum Temperature < -20 °C	13.4	10.8 0.54	4 0.08	0 0	0	0	0	0	0	0	0.4	5.7 0.15	34.2 C 2.7 C
TORONTO PEARSON (AIRPORT)	ON ON	Normal	Days with Minimum Temperature	Days with Minimum Temperature < -30 °C	0.04	0	0	0	0	0	0	0	0	0	0	0	0.04 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Rainfall	Days with Rainfall >= 0.2 mm	6.2	4.6	7.2	11.7	12.7	10.8	10.3	9.8	10.2	12.8	10.4	7.5	114.1 B
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Rainfall Days with Rainfall	Days with Rainfall >= 5 mm Days with Rainfall >= 10 mm	2.2	1.8 0.96	2.2	4.7	4.8	5.2	3.9 2.5	3.9 2.3	4.5 2.3	4.1	3.7	2.6	43.5 B 23.3 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Rainfall	Days with Rainfall >= 25 mm	0.16	0.08	0.08	0.32	0.44	0.52	0.76	0.73	0.52	0.32	0.6	0.08	4.6 B
TORONTO PEARSON (AIRPORT) TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Rainfall Days with Rainfall	Days with Rainfall >= 50 mm Days with Rainfall >= 100 mm	0.04	0	0	0.04	0.04	0.07	0.08	0	0.04	0.04	0.04	0	0.39 B 0 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Snowfall	Days with Snowfall >= 0.2 cm	12.7	9.7	6.8	2.2	0.12	0	0	0	0	0.24	3.6	9.2	44.7 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Snowfall	Days with Snowfall >= 10 cm	0.56	0.5	0.36	0.28	0	0	0	0	0	0	0.30	0.52	2.2 B
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Snowfall Days with Snowfall	Days with Snowfall >= 25 cm Days with Snowfall >= 40 cm	0.04	0.08	0	0	0	0	0	0	0	0	0	0	0.12 B 0 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Precipitation	Days with Precipitation >= 0.2 mm	16.2	12	12.3	12.5	12.7	10.8	10.3	9.8	10.2	12.8	12.6	14.9	147.3 B
TORONTO PEARSON (AIRPORT)	ON ON	Normal	Days with Precipitation	Days with Precipitation >= 1 mm Days with Precipitation >= 5 mm		8.1	8.3	9.5 5	9.1	9 5.2	8 3.9	7.4	7.8 4.5	9.2	8.9 4.3	10 4	105.5 B 50.3 B
TORONTO PEARSON (AIRPORT)	ON ON	Normal	Days with Precipitation	Days with Precipitation >= 10 mm	1.7	1.5	1.4	2.8	2.5	3	2.5	2.3	2.3	2.2	2.4	1.6	26.1 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Precipitation	Days with Precipitation >= 50 mm	0.16	0.15	0.08	0.32	0.04	0.02	0.08	0.73	0.52	0.04	0.04	0.12	0.39 B
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Days with Precipitation Days with Snow Depth	Days with Precipitation >= 100 mm Days with Snow Depth >= 1 cm	0	0 20.4	0 11.4	0	0	0	0	0	0	0 0	0	0	0 B 68.6 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Snow Depth	Days with Snow Depth >= 5 cm	13.4	10.5	6.5	0.61	0	0	0	0	0	0	0.91	5.5	37.4 C
TORONTO PEARSON (AIRPORT)	ON ON	Normal	Days with Snow Depth Days with Snow Depth	Days with Snow Depth >= 10 cm Days with Snow Depth >= 20 cm	7.1	6 1.6	4 0.78	0.22	0	0	0	0	0	0 0	0.32	3.2 0.82	20.8 C 5.3 C
TORONTO PEARSON (AIRPORT)	ON ON	Normal	Days with Snow Depth	Days with Snow Depth >= 30 cm	0.78	0.79	0.04	0	0	0	0	0	0	0	0	0.23	1.8 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Snow Depth	Days with Snow Depth >= 100 cm	0.13	0	0	0	0	0	0	0	0	0	0	0	0 C
TORONTO PEARSON (AIRPORT)	ON ON	Normal Normal	Wind Wind	Wind Speed (km/h) Most Frequent Wind Direction	17.9 W	17.8 W	17.5 N	17.3 N	14.8 N	14 W	13.9 N	13.1 N	13.4	15 W	16 W	17 W	15.7 A V A
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Days with Winds >= 52 km/h	2.3	2.4	2.4	3.2	1.4	1.2	0.5	0.78	0.67	2.2	2.5	2.6	22.3 C
IUKUNIU PEARSON (AIRPORT)	UN	normal	เงงเทล	uays with winds >= 63 km/h	0.65	0.64	0.74	0.92	0.35	0.3	0.15	0.17	0.1	0.57	0.82	0.32	5.7 C

TOBONTO PEARSON (AIRPORT)	ON Normal	\//	ïnd	Days with Gusts ≥ 90 km/h	0 19	0.32	0.29	0.2	0	0.13	0.1	0	0 11	0.22	0.32	0 14	20
		\/\	ind	Extreme Wind Speed (km/h)	80	70	0.20	82	70	50	56	59	61		72	76	20
			ind	Extreme Wind Speed (km/h) Data (was/mm/dd hhumi)	00		2000 02 11 10:00	02	2002 05 10 12:00					2002 10 15 12:00	72	2000 12 20 0:00	
TORONTO PEARSON (AIRPORT)	ON Normat	VV		Extreme wind Speed (km/h) Date (yyyy/mm/dd mi.mi)	2017-01-11 2:00	2002-02-01 15:00	2009-03-11 10:00	2011-04-28 10:00	2002-05-10 12:00	2011-06-01 15:00	1996-07-19 13:00	1992-08-10 19:00	2005-09-29 11:00	2003-10-15 12:00	1992-11-12 23:00	2008-12-28 9:00	
TORONTO PEARSON (AIRPORT)	ON Normal	VV	INC	Direction of Extreme Wind Speed	VV V	V	VV	VV V	V W	V	NW	NVV	NVV V	/V	W	VV	
TORONTO PEARSON (AIRPORT)	ON Normal	W	ind	Direction of Extreme Wind Speed Date (yyyy/mm/dd hh:mi)	2017-01-11 2:00	2002-02-01 15:00	2009-03-11 10:00	2011-04-28 10:00	2002-05-10 12:00	2011-06-01 15:00	1996-07-19 13:00	1992-08-10 19:00	2005-09-29 11:00	2003-10-15 12:00	1992-11-12 23:00	2008-12-28 9:00	
TORONTO PEARSON (AIRPORT)	ON Normal	W	ind	Extreme Gust Speed (km/h)	109	96	96	115	89	98	3 104	115	106	102	2 106	109	
TORONTO PEARSON (AIRPORT)	ON Normal	W	ïnd	Extreme Gust Speed (km/h) Date (yyyy/mm/dd)	1996-01-27	1997-02-27	1996-03-19	2009-04-25	1996-05-19	1991-06-15	5 2013-07-19	2009-08-11	2010-09-22	2002-10-07	1995-11-11	1996-12-01	
TORONTO PEARSON (AIRPORT)	ON Normal	W	ind	Direction of Extreme Gust Speed	SW W	V	NE	W S	W S'	W	NW	NE	NW V	N	W	S	
TORONTO PEARSON (AIRPORT)	ON Normal	W	ind	Direction of Extreme Gust Speed Date (yyyy/mm/dd)	1996-01-27	1997-02-27	1996-03-19	2009-04-25	1996-05-19	1991-06-15	5 2013-07-19	2009-08-11	2010-09-22	2002-10-07	1995-11-11	1996-12-01	
TORONTO PEARSON (AIRPORT)	ON Long-Term	W	ind	Extreme Wind Speed (km/h)	80	77	97	82	71	63	61	71	77	92	2 80	76	
TORONTO PEARSON (AIRPORT)	ON Long-Term	W	ind	Extreme Wind Speed (km/h) Date (yyyy/mm/dd hh:mi)	2017-01-11 2:00	1958-02-17 8:00	1959-03-15 18:00	2011-04-28 10:00	1964-05-09 15:00	1980-06-20 10:00	1964-07-13 2:00	1958-08-31 13:00	1954-09-22 0:00	1954-10-16 0:00) 1955-11-16 19:00	2008-12-28 9:00	
TORONTO PEARSON (AIRPORT)	ON Long-Term	W	ïnd	Direction of Extreme Wind Speed	W N		SW	w w	V N	W	E	W	W V	N	W	W	
TORONTO PEARSON (AIRPORT)	ON Long-Term	W	ind	Direction of Extreme Wind Speed Date (yyyy/mm/dd hh:mi)	2017-01-11 2:00	1958-02-17 8:00	1959-03-15 18:00	2011-04-28 10:00	1964-05-09 15:00	1980-06-20 10:00) 1964-07-13 2:00	1958-08-31 13:00	1954-09-22 0:00	1954-10-16 0:00) 1955-11-16 19:00	2008-12-28 9:00	
TORONTO PEARSON (AIRPORT)	ON Long-Term	W	ind	Extreme Gust Speed (km/h)	115	105	124	115	109	107	7 135	115	106	104	122	109	
TORONTO PEARSON (AIRPORT)	ON Long-Term	W	ind	Extreme Gust Speed (km/h) Date (vvv/mm/dd)	1978-01-26	1956-02-25	1964-03-05	2009-04-25	1983-05-02	1990-06-03	1956-07-01	2009-08-11	2010-09-22	1989-10-14	1955-11-17	1996-12-01	
TOBONTO PEABSON (AIBPOBT)	ON Long-Term	W	ind	Direction of Extreme Gust Speed	F W	V	SW	w w	/ W		NW	NF	NW N	JW	SW	<u>s</u>	
TOBONTO PEABSON (AIBPOBT)	ON Long-Term	W	ind	Direction of Extreme Gust Speed Date (vvv/mm/dd)	1978-01-26	1956-02-25	1964-03-05	2009-04-25	1983-05-02	1990-06-03	1956-07-01	2009-08-11	2010-09-22	1989-10-14	1955-11-17	1996-12-01	
TOBONTO PEABSON (AIBPOBT)	ON Normal			Degree Days Above 24 °C	0	0	0	0	0.5	5 9	18.2	79	1 7			0	34.1 C
			aree Days	Degree Days Above 18 °C	0	0	0	0.7	16	65.0	120.5	101.1	22.4		, e	0	347.6 C
			agroe Days	Degree Days Above 10°C	0	0	0.5	2.5	20.5	122 /	120.0	101.1	70.0	10 /		0	672.4 C
			egree Days	Degree Days Above 13 C	0	0	0.5	3.5	105.5	132.4	210.3	241.0	79.9			0	1405.7 C
TORONTO PEARSON (AIRPORT)			egree Days	Degree Days Above 10 °C	0.2	1 7	4.4	22.3	125.5	2/0.2	500.7	341.9	203.8	JZ.2		0.3	
TORONTO PEARSON (AIRPORT)	ON Normal			Degree Days Above 5 °C	3	1./	22.2	89.5	265	425.1	528.7	496.9	351.3	155	39.5	5.2	2387.2 0
TORONTO PEARSON (AIRPORT)	ON Normal	De	egree Days	Degree Days Above 0 °C	22.1	17.9	/9.3	214.9	419.3	5/5.1	683.7	651.9	501.3	308.1	131.4	38.7	3643.7 C
TORONTO PEARSON (AIRPORT)	ON Normal	De	egree Days	Degree Days Below 0 °C	1/5.2	134	59.6	3.1	0	0) 0	0	0	0.1	13.4	87.3	4/2.6 C
TORONTO PEARSON (AIRPORT)	ON Normal	De	egree Days	Degree Days Below 5 °C	311.1	259.2	157.5	27.6	0.7	0	0	0	0	5.9	9 71.5	208.8	1042.4 C
TORONTO PEARSON (AIRPORT)	ON Normal	D	egree Days	Degree Days Below 10 °C	463.3	398.9	294.7	110.6	16.2	0.1	0	0	2.5	54.2	2 188	358.8	1887.3 C
TORONTO PEARSON (AIRPORT)	ON Normal	De	egree Days	Degree Days Below 15 °C	618.1	540.2	445.8	241.6	85.2	7.3	3 0.2	0.3	28.6	167.4	332.1	513.6	2980.4 C
TORONTO PEARSON (AIRPORT)	ON Normal	De	egree Days	Degree Days Below 18 °C	711.1	625	538.3	328.8	154.7	30.3	3.8	7.2	71.1	252.4	422	606.6	3751.3 C
TORONTO PEARSON (AIRPORT)	ON Normal	Q	uintiles	Quintile 1 (Lower Bound)	24.4	20.2	18	29.2	14.4	20.4	20.4	11.6	25.2	17.6	õ 10.2	17	
TORONTO PEARSON (AIRPORT)	ON Normal	Q	uintiles	Quintile 1 (Upper Bound)	37.5	25.5	30	47.8	47.8	45	5 34	39.5	44.2	40.2	2 33	36.2	
TORONTO PEARSON (AIRPORT)	ON Normal	Q	uintiles	Quintile 2 (Upper Bound)	47.6	38.4	40.7	63.5	67.4	59.4	57.6	52.6	52.5	54.2	2 58	52	
TORONTO PEARSON (AIRPORT)	ON Normal	Q	uintiles	Quintile 3 (Upper Bound)	63.2	47.3	52.8	88.6	79.6	72.7	7 85.3	67.4	69.8	66.3	3 70.8	62.5	
TORONTO PEARSON (AIRPORT)	ON Normal	Q	uintiles	Quintile 4 (Upper Bound)	72.2	75.3	63.7	102.7	93.3	109	100.8	91.9	86.3	95.6	6 91.9	72.4	
TORONTO PEARSON (AIRPORT)	ON Normal	Q	uintiles	Quintile 5 (Upper Bound)	133.3	107.6	98.4	133.8	152.8	191.6	6 193.2	154.4	166.2	136.2	2 141.2	99.8	
TORONTO PEARSON (AIRPORT)	ON Normal	H	umidex	Days with Humidex >= 30	0	0	0	0.17	3.5	10) 18.3	16.2	7.2	0.55	5 0	0	55.9 A
TOBONTO PEARSON (AIRPORT)	ON Normal	Н	umidex	Days with Humidex >= 35	0	0	0	0	0.9	4	1 8	6.2	2.1	0.14	1 0	0	21.3 A
TOBONTO PEARSON (AIBPORT)	ON Normal	H	umidex	Days with Humidex $>= 40$	0	0	0	0	0.07	0.93	3 2.1	1.3	0.14	() 0	0	468
TOBONTO PEABSON (AIBPOBT)	ON Normal	Н	umidex	Extreme Humidex	19	19.1	29.6	34.9	42.6	45.6	50.3	46.6	43	.39 1	27.4	21.1	
	ON Normal	н	umidex	Extreme Humidex Date (\\\\\\mm\/mm/dd)	2005-01-13	2018-02-20	20.0	2002-04-16	2006-05-30	2018-06-30	1995-07-1/	2006-08-01	2018-09-05	2007-10-08	2020-11-10	1998-12-06	
			umidex	Extreme Humidex	10	10 1	2012 00 22	2002 04 10	2000 03 00	2010 00 00	50.3	2000-00-01	2010 00 00	2007 10 00	2020 11 10	22.0	
	ON Long Torm			Extreme Humidex Date (www/mm/dd)	2005 01 12	2019 02 20	29.0	1000 04 25	2006 05 20	2019 06 20	1005 07 14	2006 09 01	1052 00 01	2007 10 09	20.0	1092 12 02	
	ON Long-Term			Dave with Wind Chill < 20	2005-01-13	2010-02-20	2012-03-22	1990-04-23	2000-05-30	2010-00-30	1995-07-14	2000-06-01	1953-09-01	2007-10-00	0.17	1902-12-03	20.614
		VV		Days with Wind Chill < -20	0.0	/	1.8	0	0	0	0	0	0	(0.17	2.8	20.6 A
	ON Normal	VV		Days with Wind Chill 4 - 40	1.8	0.76	0.1	0	0	0	0	0	0	(0	0.14	2.8 A
	ON INOrmal	W		Days with Wind Chill < -40	0.03	0.03	0	0	0	0		0	0	(0	U.U6 A
TORONTO PEARSON (AIRPORT)	ON Normal	W	Ind Chill	Days with Wind Chill < -50	0	0	0	0	0	0	0	0	0	(0	0	0 A
TORONIO PEARSON (AIRPORT)	UN Normal	W		Extreme Wind Chill	-40.2	-40.6	-36.2	-18.5	-8.9	0	0	0	-5.2	-8.9	-22.9	-37.2	
IUKUNIU PEARSON (AIRPORT)	UN Normal	W		Extreme Wind Chill Date (yyyy/mm/dd)	1994-01-15	2015-02-15	2003-03-03	1995-04-05	2020-05-09	1991-06-01	1991-07-01	1991-08-01	1993-09-30	2020-10-30	2005-11-25	2004-12-20	
TORONTO PEARSON (AIRPORT)	ON Long-Term	W	ind Chill	Extreme Wind Chill	-44.7	-40.6	-36.2	-25.4	-9.5	0	0 0	0	-8	-13.5	-25.4	-38.5	
TORONTO PEARSON (AIRPORT)	ON Long-Term	W	ind Chill	Extreme Wind Chill Date (yyyy/mm/dd)	1981-01-04	2015-02-15	2003-03-03	1972-04-07	1963-05-01	1953-06-01	1953-07-01	1953-08-01	1965-09-27	1969-10-23	1958-11-30	1980-12-25	<u>_</u>
TORONTO PEARSON (AIRPORT)	ON Normal	H	umidity	Average Vapour Pressure (kPa)	0.4	0.4	0.5	0.6	1	1.5	5 1.8	1.8	1.4	1	0.7	0.5	1 A
TORONTO PEARSON (AIRPORT)	ON Normal	H	umidity	Average Relative Humidity - 0600LST (%)	79.2	77.4	75.2	73	75.7	77.6	õ 79.3	83.7	85.5	83.6	81.4	80.7	79.3 A
TORONTO PEARSON (AIRPORT)	ON Normal	H	umidity	Average Relative Humidity - 1500LST (%)	69.7	65.7	58.5	53.4	53.6	54.4	52.9	55.2	57.3	61.6	66.7	70.5	60 A
TORONTO PEARSON (AIRPORT)	ON Normal	Pr	essure	Average Station Pressure (kPa)	99.6	99.6	99.6	99.4	99.4	99.3	99.4	99.5	99.7	99.6	99.6	99.6	99.5 A
TORONTO PEARSON (AIRPORT)	ON Normal	Pr	essure	Average Sea Level Pressure (kPa)	101.7	101.7	101.7	101.5	101.5	101.4	101.4	101.6	101.7	101.7	/ 101.8	101.7	101.6 A
TORONTO PEARSON (AIRPORT)	ON Normal	Vi	sibility	Visibility < 1 km (hours with)	10	9.2	5.5	2.8	3.5	2.1	0.6	0.4	1.4	4.3	6.7	7	53.4 A
TORONTO PEARSON (AIRPORT)	ON Normal	Vi	sibility	Visibility 1 to 9 km (hours with)	126.9	97.1	76.3	60.5	50.6	53.5	39.7	43.4	43.8	55.1	82.5	103.8	833.2 A
TORONTO PEARSON (AIRPORT)	ON Normal	Vi	sibility	Visibility > 9 km (hours with)	606.9	571.7	662	656.3	689.5	664	702.9	699.5	674.3	684.1	630.3	632.9	7874.4 A
TORONTO PEARSON (AIRPORT)	ON Normal		oud Amount	Cloud Amount 0 to 2 tenths (hours with)	129.8	154.2	206.3	184.4	221.7	212	229.5	261.4	257.1	200.2	141.7	131.8	2330 D
TORONTO PEARSON (AIRPORT)	ON Normal		oud Amount	Cloud Amount 3 to 7 tenths (hours with)	94.6	104.6	117.6	121.6	152.7	179 7	214.4	200.2	166.8	139	108.3	99.8	1699.2 D
TOBONTO PEARSON (AIRPORT)	ON Normal			Cloud Amount 8 to 10 tenths (hours with)	510 7	<u> </u>	/20 1	<u></u>	369.7	208 2	3 214	200.2	296.1	۸۵۸ ۶ ۸۵۸	3 170	512 /	4738 8 D
TOBONTO PEARSON (AIRPORT)	ON Normal	Fr	ost-Free	Average Date of Last Spring Frost		+21.2	420.1	717.1	000.7	020.0	000.1	202.4	200.1		4,0	012.7	27-Anr C
	ON Normal	Fr	ost-Free	Average Date of First Fall Frost													20-Oct C
		r r	ost-Free	Average Length of Frost-Free Daried												174	
			031-1166	Inverage Lengui of Flost-Flee Fellou												1/4	Days U

APPENDIX D

Agricultural Crop Statistics

County & Township Ag Profile - Peel Regional Municipality; Townships: Brampton, Caledon

Peel Regional Municipality at a Glance - 2021

County & Township Ag Profile - Peel Regional Municipality; Townships: Brampton, Caledon Peel Regional Municipality at a Glance - 2016

Peel Regional Municipality at a Glance - 2011



bem	Caledon	Province	Percent of province	Percent from 2016	lbam	Caledon	Province	Percent of province	Percent from 2016	Item	Caledon	Province	Percent of province	Percent from 2011	Item	Caledon	Province	Percent of province	Percent from 2011	Item	Caledon	Province	Percent of province	f Item	Caledon	Province	Percent of province
Farms, 2021 Census (number)					Major Field Crops, 2021 Census (acres)					Farms, 2016 Census (number)					Major Field Crops, 2016 Census (acres)					Farms, 2011 Census (number)				Major Field Crops, 2011 Census (acres)			
Total	. 308	48.346	0.64%	-10.72%	Winter wheat	9.822	1.144.406	0.86%	-	Total	345	49.600	0.70	-5.48	Winter wheat	0	1.080.378	0.00	-100.00	Total	365	5 51.96		70 Winter wheat	9.686	1.100.003	0.88
Under 10 acres	32	3.217	0.99%	10.34%	Oats for grain	344	84.320	0.41%	-	Under 10 acres	29	3.061	0.96	45.00	Oats for grain	0	82.206	0.00	-	Under 10 acres	21	2.74		73 Oats for grain	0	71.040	0.00
10 to 69 acres	97	12.686	0.76%	-27.61%	Barley for grain	916	68.756	1.33%		10 to 69 acres	134	12.625	1.06	-5.63	Barley for grain	0	103.717	0.00		10 to 69 acres	143	12.68	1 1	12 Barley for grain.	0	126.881	0.00
70 to 129 acres	59	10 924	0.54%	-7.81%	Mixed grains	443	59.961	0.74%	4.24%	70 to 129 acres	64	10 742	0.60	-7.25	Mixed grains	425	5 92.837	0.46		70 to 129 acres	ei.	1177		59 Mixed grains	0	106 162	0.00
130 to 179 acres	22	4 422	0.50%	-8.33%	Com for grain	18 776	2 202 465	0.85%	-	130 to 179 acres	24	4 592	0.52	-4.00	Com for grain		2 162 004	0.00	-100.00	130 to 179 acres	21	4.99		50 Com for grain	12 292	2 032 356	0.60
180 to 239 acres	22	3 981	0.55%	22 22%	Com for silene	1.471	289.678	0.51%		180 to 239 arres	18	4 282	0.42	-18.18	Com for silone		295.660	0.00	-100.00	180 to 239 arres	2	4.80		46 Com for silene	1.973	271 701	0.72
240 to 399 acres	14	5 398	0.26%	-26.32%	Hav	12 656	1 704 017	0.74%	45.35%	240 to 399 acres	19	6,008	0.32	-29.63	Hav	8 707	7 1 721 214	0.51	-45.23	240 to 399 acres	2	6.46		42 Hav	15,898	2 077 911	0.77
400 to 559 acres	21	2,885	0.73%	5.00%	Soybeans	26 211	2 806 255	0.93%	15.48%	400 to 559 acres	20	3.093	0.65	11.11	Sovbears	22 698	2 783 443	0.82	14.98	400 to 559 acres	11	3.39		54 Sovbeana	19 741	2 464 870	0.80
580 to 759 pores	10	1.698	0.59%	25 00%	Potatoes	4	39 193	0.01%	.83.33%	580 to 759 arres		1 990	0.40	-33.33	Potatoes	24	34.685	0.07	-51.02	580 to 759 arres	1	2 10		59 Protatoes	49	37 384	0.12
760 to 1,119 acres	13	1 600	0.81%	-18.75%						760 to 1.119 acres	16	1 593	1.00	-20.00						760 to 1.119 acres	21	1.58		26			
1 120 to 1 599 acres		720	0.97%	75.00%	Major Fruit Crons 2021 Census (arres)					1 120 to 1 599 acres		901	0.50	33.33	Major Fruit Crons 2016 Census (arres)					1 120 to 1 599 acres	-	79		38 Major Fruit Crons 2011 Census (acres)			
1 600 to 2 239 acres	5	451	1 1 1 %	-37 50%	Total fuit crons	196	48.661	0.40%	31 54%	1,600 to 2,239 acres		457	1.75	33.33	Total fait cross	149	51 192	0.29	-22.80	1 600 to 2 239 acres		43		38 Total fait cross	193	52 740	0.37
2 240 to 2 879 acres	-	179	2.89%		Annies	66	10,009	0.34%		2 240 to 2 879 arres		100	0.00		Andes		15 902			2 240 to 2 879 acres		10		00 Annies	102	16 930	0.6/
2 990 to 2 510 some			0.00%		Sour Cherrise		4,000	0.00%		2 890 to 2 510 pome		100	0.00		Sour Chorrise		× 10,020	0.00		2,890 to 2,510 pomo				00 Sour Cherrine	192	0.040	0.04
2.500 cores and over	1	110	0.95%	0.00%	Bassies	0	1,363	0.00%		2.520 access and over	1	110	0.00	0.00	December		5 2,121	0.00		2,000 to 0,010 monet				00 Descher		2,542	
5,510 acres and over		110	0.0074	0.00%	Orange		4,000	0.00%		5,520 80108 815 0461			0.91	0.00	Oraque			0.00		5,510 MCH #10 044				Orange		40,000	
Land Line 2021 Cancer (asses)					Oraphaniae	54	2,612	2 1205		Land Line 2018 Concus (asses)					Oraphanian		x 10,710 x 2,015			Land Line 2011 Cancer (acces)				Otrasharrian	54	3 393	1.6/
Land in score	70.400	0.054.044	0.9196	10 1016	Decebanice		1,000	2.05%		Land in crone	co 000	0.004.000	0.70	2.20	Decharging		. 2,010			Land in cross	04.70			73 Dasobarias		0,200	1.04
Summerfoliou land	. 73,460	9,051,011	2.56%	278.00%	тапровтны	10	430	3.4374		Summarfoliau Ined	63,239	9,021,298	0.70	0.64	наронны	,	x 650			Summarfollow land	64,724	0,929,94		10	*	902	
Terre of a data to the	. 30/	13,904	0.500	00.00%	Malaa Maanaa ka Gaaraa daga Gaaraa ka					Terre of a did a set of	15	15,665	0.40	-2.04	Malas Managable Oscara (MAC Oscara (A					T		23,40		20 Malac Manadable Oraces (0014 Oraces (orac			
Notwork land for posture	. 2,135	400,400	0.53%	-29.90%	Total uppetable	res)	407.000	0.97%	00.58%	Notwol load for pasture	3,046	314,105	0.50	-23.62	Total appartables	cres)		0.18	20.42	Notural land for pasture	4,00	046,75		 Major Vegetable Crops, 2011 Census (acr 27 Totol uncentrables 	A) 045	100 505	0.22
Christman land for particular	- 2,159	626,305	0.04%	00.000	Count and	4/9	127,893	0.07 %	88.2014	Christman land for particular diamaterial	3,704	/63,000	0.40	4.04	Count com	240	3 135,420	0.10	-30.45	Christman land for particular	3,004	904,00		40 Count and a second	340	129,595	0.23
Cristinas crees, woodand & wetand	- 3,860	1,269,535	0.30%	-25.06%	Sweet corn	112	20,518	0.35%		Cristinas pees, woodand & wetand	5,152	1,542,637	0.33	-23.37	owers corn		x 22,910			Crisbinas pees, woodand & wedand	6,72	5 1,612,44		42 Devel com	61	25,540	0.24
All other land.	3,680	404,/14	0.91%	35.89%	Tomatoes	28	14,614	0.19%	7.69%	All other land	2,708	470,909	0.58	-23.22	Tomatoes	26	5 15,744	0.17	-27.78	All other land.	3,52	468,82	s u	/5 Tomatoes	36	16,558	0.22
Total area of farms.	85,652	11,768,071	0.73%	9.65%	Green peaks	28	14,044	0.20%	211.11%	Total area of farms.	77,986	12,348,463	0.63	-0.00	Green peaks	9	16,268	0.06		Total area of tarms.	82,655	12,668,23	5 0	co Green peas	х	15,121	
					Green or wax beans	18	8,709	0.21%	260.00%						Green or wax beans	5	5 9,732	0.05	-44.44					Green or wax bears	9	9,186	0.10
Greenhouse Area, 2021 Census (squar	e feet)		0.000	C4 0484	I have a family of a state of a	-				Greenhouse Area, 2016 Census (square	reet)		0.40	CC 40	I have a firm of the second seco	-				Greenhouse Area, 2011 Census (square	feet)			in the state because and a state of the state			
Total area in the	112,279	201,055,888	0.00%	-01.04%	Elvestock inventories, 2021 Census (nun	nour)	1 001 010	0.000	F 4024	Focal area in Use	294,236	158,511,328	0.19	-00.12	Envestock inventories, 2016 Census (nu	nber)			04.00	I CEAL AFEN IN LEVE.	655,620	133,520,54		40 Elvestock inventories, 2011 Census (num Total costs and others)	Jury	4 744 0.04	0.00
Free Orebelliteter and Oreser dem					Total Gattle and Carves	0,300	1,004,810	0.02%	-0.46%	E 0					Total Gattle and Garves	0,040	1,623,710	0.54	-21.90	F 0				Total caste and carves	11,331	1,741,301	0.60
Parm Capital Value, 2021 Census (rarm	is reporting)		0.50%	00.000	Dout and	1,940	299,540	0.05%	1.15%	Parm Capital Value, 2016 Census (rarms	reporting)		0.40	40.40	Dout and	1,918	5 305,514	0.63	-0.47	Parm Capital Value, 2011 Census (ranns	reporting			40 Deaf arms	1,927	291,263	0.66
Orber \$200,000	. /	1,212	0.56%	-22.22%	Beel coas	1,184	224,194	0.53%		Orber \$200,000		2,142	0.42	-10.10	Deel cows	,	x 236,253			Orber \$200,000	1	2,56		43 Deel cows	1,/1/	282,062	0.61
\$200,000 to \$499,999	. 3	3,223	0.09%	-89.66%	Dairy cows	1,505	327,272	0.46%		\$200,000 to \$499,999	29	7,433	0.39	93.33	Dairy cows	,	x 311,960	-	-	\$200,000 to \$499,999	15	12,99		12 Dairy cows	2,336	318,158	0.73
\$500,000 to \$999,999	· 26	8,699	0.30%	-67.90%	Total pgs	165	4,071,902	0.00%	189.47%	\$500,000 to \$999,999	81	12,500	0.65	28.57	Total pigs	57	7 3,534,104			\$500,000 to \$999,999	63	3 15,27	s u	41 Total pigs	ж	3,088,646	
\$1,000,000 and over	- 272	35,212	0.77%	10.57%	Total sheep and lambs	542	322,508	0.17%	-42.40%	\$1,000,000 and over	246	27,525	0.89	-3.91	Total sheep and lambs	941	1 321,495	0.29	-2.79	\$1,000,000 and over	25	3 21,11	3 1	21 Total sheep and lambs	968	352,807	0.27
Total Gross Farm Receipts, 2021 Cens	us (farms repor	rting)			Poultry Inventories, 2021 Census (numbe	er)				Total Gross Farm Receipts, 2016 Censu	s (farms report	tina)			Poultry Inventories, 2016 Census (numb	er)				Total Gross Farm Receipts, 2011 Censu	s (farms repo	rting)		Poultry Inventories, 2011 Census (number	a		
Under \$10.000	. 64	7 277	0.88%	-12.33%	Total hers and chickens	351 400	53,802,772	0.65%	82.51%	Under \$10.000	73	9.536	0.77	-21.51	Total hers and chickens	192 538	8 50 750 994	0.38	-11.16	Under \$10.000		12.26		76 Total hers and chickens	216 721	46 902 316	0.46
\$10,000 to \$24,999	. 43	7.429	0.58%	-33.85%	Total turkeya	2.098	2.453.126	0.09%	1879.25%	\$10,000 to \$24,999	65	8.376	0.78	1.56	Total turkeya	106	3.772.146			\$10,000 to \$24,999	6	9.09		70 Total turkeys	X	3.483.828	
\$25,000 to \$49,999	. 43	6.263	0.69%	-10.42%		2,000				\$25,000 to \$49,999	48	6 755	0.71	-2.04						\$25,000 to \$49,999	4	672		73	-		
\$50,000 to \$99,999	. 26	6.093	0.43%	-23.53%						\$50,000 to \$99,999.	34	6.263	0.54	13.33						\$50,000 to \$99,999	31	618		48			
\$100,000 to \$249,999	. 41	6.817	0.60%	-26.79%						\$100,000 to \$249,999.	56	7.022	0.80	-13.85						\$100.000 to \$249.999	65	5 6.98		93			

\$250,000 to \$499,999.	32	4.448	0.72%	6.67%
\$500,000 to \$999,999.	26	3.954	0.66%	44.44%
\$1,000,000 to \$1,999,999	9	2.452	0.37%	-40.00%
\$2,000,000 and over	8	1,696	0.47%	33.33%
Farms by Industry Group, 2021 Census (nun	ber of farms			
Beef cattle ranching and farming	43	7.986	0.54%	19.44%
Dairy cattle and milk production	12	3,188	0.38%	-33.33%
Hog and pig farming	3	1.189	0.25%	200.00%
Poultry and egg production	10	2.061	0.49%	11.11%
Sheep and goat farming	4	1,309	0.31%	-42.86%
Other animal production	55	4.556	1.21%	-38.20%
Oilseed and grain farming	93	18,194	0.51%	-3.13%
Vegetable and melon farming	27	1.582	1.73%	42.11%
Fruit and tree nut farming	10	1.211	0.83%	-16.67%

\$250,000 to \$499,999 \$500,000 to \$999,999 \$1,000,000 to \$1,999,999 \$2,000,000 and over	32 26 9 8	4,448 3,954 2,452 1,698	0.72% 0.66% 0.37% 0.47%	6.67% 44.44% -40.00% 33.33%		\$250,000 to \$499,909 \$500,000 to \$399,909 \$1,000,000 to \$1,999,999 \$2,000,000 and over	30 18 15 6	4,707 3,689 2,019 1,233	0.64 0.49 0.74 0.49	-3.23 20.00 25.00 0.00	1550,000 to 3609,000 500,000 to 969,969 11,000,000 to 11,109,969 22,000,000 to 11,109,969	31 15 12 6	5,086 3,248 1,558 803	0.61 0.46 0.77 0.75
Farms by Industry Group, 2021 Census (numb	er of farms)	•				Farms by Industry Group, 2016 Census (numb	or of farms)				Farms by Industry Group, 2011 Cansus (num	ber of farms)		
Beef cattle ranching and farming	43	7,986	0.54%	19.44%		Beef cattle ranching and farming	36	6,786	0.53	-18.18	Beef cattle ranching and farming	44	7,105	0.62
Dairy cattle and milk production	12	3,188	0.38%	-33.33%		Dairy cattle and milk production	18	3,439	0.52	-18.18	Dairy cattle and milk production	22	4,036	0.55
Hog and pig farming	3	1,189	0.25%	200.00%		Hog and pig farming	1	1.229	0.08		Hog and pig farming	0	1.235	0.0
Poultry and egg production	10	2.061	0.49%	11.11%		Poultry and egg production	9	1.816	0.50	12.50	Poultry and egg production	8	1.619	0.48
Sheep and goat farming	4	1.309	0.31%	-42.86%		Sheep and goat farming.	7	1.097	0.64	0.00	Sheep and goat farming	7	1.446	0.48
Other animal production	55	4 556	1.21%	-38.20%		Other animal production	89	5 902	1.51	8.54	Other animal production	82	6.966	1.10
Oilseed and grain farming	93	18 194	0.51%	-3.13%		Oilseed and grain farming	96	16.876	0.57	7.87	Oilseed and grain farming	89	15.818	0.56
Venetable and melon farming	27	1.582	1 73%	42 11%		Venetable and melon farming	19	1.856	1.02	35.71	Venetable and makes farming	14	1.531	0.9
Fruit and tree nut farming	10	1 211	0.83%	-16.67%		Fruit and tree nut farming	12	1 382	0.88	0.00	Full and tree nut farming.	12	1.548	0.7
Greenhouse, numery and finiculture		1.672	0.84%	-12 50%		Greenhouse, runsery and fininulture	-	2,060	0.78	-44.83	Greenhouse runsers and finite time	20	2,272	12
Other crop farming	37	5.418	0.68%	-11.90%		Other crop farming	42	7,187	0.58	-27.59	Other crop farming	58	8.274	0.7

\$250,000 to \$499,999	31	5.086	0.61
\$500,000 to \$999,999.	15	3.248	0.46
\$1,000,000 to \$1,999,999.	12	1.558	0.77
\$2,000,000 and over	6	803	0.75
Farms by Industry Group, 2011 Census (nun	ther of farms		
Beef cattle ranching and farming	44	7.105	0.62
Dairy cattle and milk production	22	4.036	0.55
Hog and pig farming	0	1.235	0.00
Poultry and egg production	8	1.619	0.49
Sheep and goat farming	7	1,446	0.48
Other animal production	82	6.966	1.18
Oilseed and grain farming	89	15.818	0.56
Vegetable and melon farming	14	1.531	0.91
Fruit and tree nut farming	12	1.548	0.78
Greenhouse, nursery and floriculture	29	2 372	1.22
	**	-, -, -, -	

APPENDIX E

Canada Land Inventory Information

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
31	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.
51	Very frequent inundation with some crop damage; estimated frequency of flooding is at least
51	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
41	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
JK	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.

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

Determination of Subclass T for Very Gravelly and Sandy Soils

Slope %	ilope % <2		2-5		5-9		9-15		15-30		30-60		>60	
Slope type	S	С	S	С	S	С	S	С	S	С	S	С	S	С
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	Soil Class	Soil Class
	Bedrock	(Drainage in	(Drainage not
	(cm)	place or	feasible)
		feasible)	
Very gravelly, sandy, or loamy extending >40 cm from	>100	2W	4W, 5W
the surface, or, <40 cm of any other textures overlying			
very gravelly, sandy or loamy textures			
>40 cm depth of clayey or very fine clayey textures, or,	>100	3W	5W
<40 cm of any other texture overlying clayey or very			
fine clayey textures			
<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

East Elevation

© 260°W (T) ● 43°48'32"N, 79°45'37"W ±3m ▲ 239m



Photo 1: Operation #1 - Industrial operation, shop with heavy equipment observed outside.

North East Elevation

© 239°SW (T) ● 43°48'59"N, 79°46'14"W ±2m ▲ 251m



Photo 2: Operation #3 – Unoccupied livestock facility, former dairy operation.

North Elevation

© 195°S (T) ● 43°48'56"N, 79°47'41"W ±2m ▲ 261m



Photo 3: Operation #8 - Beef operation with bank barn in fair condition and two implement sheds.

South West Elevation

© 41°NE (T) ● 43°48'51"N, 79°47'29"W ±2m ▲ 258m



Photo 4: Operation #9 - Remnant farm with uncapped silo and bank barn in poor condition, missing boards.

North Elevation

© 176°S (T) ● 43°48'37"N, 79°47'11"W ±2m ▲ 258m



Photo 5: Operation #11 – Hobby farm, three barns in good condition, one appears converted for storage.



Photo 6: Operation #12 - Remnant farm, implement shed in poor condition.

South Elevation © 8°N (T) ● 43°48'8"N, 79°46'29"W ±2m ▲ 246m PUBLIC NOTICE FILE NUMBER: RZ 2021-0011 TEMPORARY ZONING BYLAW AMENDMENT Ion has received a Zoning By from Malone Given Parsons L Inc to facilitate the developme outdoor storage of trucks and and outgoor ae (3) years. The pro Agricultural (A1) to Aaricultur TXX) for Notice of Public Meeting Public Meeting: January 10, 2023, 7:00 pm .ocation: Hybrid / Council Chamber, Town Hall For more information about this matter, including information about app the Planning Department at www.caledon.ca/notices, or by email to plann 805.584.2272 x. 7336 during Dusiness hours. TOWN OF CALEDON llustration is a conceptual plan for information purposes and it is subject to ch ation is currently under review by the Town of Caledon. C24113 18 Dec 2024, 11:43:51 15

Photo 7: Operation #14 - Remnant farm, barn in fair condition. Heavy equipment in rear, public notice displayed.



Photo 8: Operation #18 – Hobby farm, manure pile at front of property, sign advertising sheep, lambs, and rabbits.

North Elevation

© 159°S (T) ● 43°47'21"N, 79°46'51"W ±2m ▲ 250m



Photo 9: Operation #18 – Hobby farm, barn and implement sheds in rear.

South East Elevation

Photo 10: Operation #21 – Hobby farm, barn in fair condition, capped silo. Former dairy operation.

East Elevation

© 266°W (T) ● 43°48'37"N, 79°48'35"W ±2m ▲ 272m



West Elevation

© 69°E (T) ● 43°47'29"N, 79°48'30"W ±2m ▲ 271m



Photo 12: Operation #24 - Grain elevators, 2 implement sheds. Trucks observed loading grain.

APPENDIX G

Land Use Notes

Land Use Survey Notes – AIA for Tullamore Northwest Employment Secondary Plan					
Weather	December 18, 2024				
Temperature	-2°C	File	C24113		

Site No.	Type of Use	Type of Operation	MDS Calculation Required?	Description of Operation
1	Non- Agricultural	Industrial	No	Heavy equipment observed outside of shop, no sign associated with business.
2	Non- Agricultural	Industrial	No	Marrax Destruction and Excavation Ltd. Rexwell Disposal Services Ltd. Demolition, recycled aggregates, excavating, e-waste collection, small equipment hauling.
3	Agricultural	Unoccupied Livestock Facility	Yes	Uncapped silo, outdoor storage. Spoke with tenant, former dairy operation, unsure of capacity. No livestock for at least three years.
4	Non- Agricultural	Industrial	No	North Star Fright Forwarders. Shop and outdoor storage.
5	Agricultural	Cash Crop Operation	No	2 implement sheds in good condition. Roadside stand selling fresh eggs (closed). Small chicken coop, MDS not applicable.
6	Agricultural	Equestrian Operation	Yes	Caledon Equestrian School. 10 horses observed. Wooden bank barn in poor condition, 2 capped silos, multiple paddocks. Plastic covered riding area in rear. Multiple field shelters. Outdoor manure storage southwest of barn. Caledonequestrian.com (905) 584-2022
7	Agricultural	Remnant Farm	No	3 capped silos, 2 implement sheds in poor condition and overgrown. No structures capable of housing livestock.
8	Agricultural	Beef Operation	Yes	Bank barn in fair condition, two implement sheds, grain bin, outdoor manure storage. Spoke with landowner in June, 2024, 25 cattle, 12 sheep.

9	Agricultural	Remnant Farm	No	Uncapped silo, barn in poor condition with missing boards. Implement shed in fair/poor condition. Gravel stockpile outside. No structures capable of housing livestock.
10	Non- Agricultural	Industrial	No	Metro Truck.
11	Agricultural	Beef Operation	Yes	 Three barns in fair condition, 1 implement shed, outdoor manure storage. Spoke with landowner in June 2024, who said they have 50 pigs, 75 lay hens, 25 goats, 35 cattle, 25 ducks, 10 rabbits, and 100 pigeons, and a liquid earthen manure pit
12	Agricultural	Remnant Farm	No	Implement shed in poor condition, property abandoned. No access. No structures capable of housing livestock.
13	Non- Agricultural	Industrial	No	Apra Truck Lines and Apra Warehouse.
14	Agricultural	Remnant Farm	No	Steel sided barn in fair condition, large dump truck in back, public notice sign File #RZ 2021-0011, no trespassing signs, no structures appear capable of housing livestock.
15	Agricultural	Remnant Farm	No	Former cash crop operation. No structures capable of housing livestock.
16	Non- Agricultural	Industrial	No	Industrial shop in rear of property.
17	Non- Agricultural	Industrial	No	Patrella Transport Ltd.
18	Agricultural	Hobby Farm	Yes	Manure pile near front of property, no trespassing, sign out front saying sheep, lambs, and rabbits for sale, OFA member
19	Non- Agricultural	Recreation	No	Mayfield Golf Club.
20	Agricultural	Remnant Farm	No	Barn demolished, 2 capped silos remain.

21	Agricultural	Hobby Farm	Yes	Bank barn in fair condition, capped silo, implement shed, OFA member, Harvistore system. Spoke with landowner in June 2024, 4 beef cattle, but used to be a dairy operation with max capacity of 100.
22	Agricultural	Remnant Farm	No	Barn collapsed, implement shed in fair condition. Silo decommissioned.
23	Agricultural	Remnant Farm	No	New construction on property, no trespassing, appears to have remnant barns, very large gardens, and outdoor storage. Appears to be used to produce vegetables. No structures capable of housing livestock.
24	Agriculture- Related	Grain Elevator	No	Grain elevators, 2 implement sheds, transport trucks moving grain.
25	Non- Agricultural	Recreational	No	Baty's Roost Golf and Country Club.
26	Agricultural	Remnant Farm	No	Former chicken operation. Property abandoned, 2 barns in poor condition.
27	Agricultural	Remnant Farm	No	Large implement shed in poor condition, very overgrown. No structures capable of housing livestock.
28	Non- Agricultural	Industrial	No	Stone-Ridge Waste Transfer Facility.
29	Non- Agricultural	Industrial	No	Truck Parking and Storage.
30	Agricultural	Unoccupied Livestock Facility	Yes	Barn and paddocks appear to be in fair condition based on aerial review.

	Total Number	Active	Retired or Remnant	
Agricultural	18	 1 – Cash Crop Operation 1 – Equestrian Operation 2 – Beef Operation 2 – Hobby Farm 	10 – Remnant Farm 2 – Unoccupied Livestock Facility	
Agriculture-related	1	1 – Grain Elevator	0	
On-farm Diversified	0	0	0	
	Total Number	Туре		
Non-Agricultural	11	2 – Recreational 9 – Industrial		

APPENDIX H

AgriSuite MDS Report





C24113

General information

Application date Dec 19, 2024

Applicant contact information () ON Municipal file number

Location of subject lands (!)

Regional Municipality of Peel Town of Caledon Roll number: 2124 Proposed application New or expanding settlement area boundary

1/2/25, 9:06 AM

Calculations

Operation 11

Farm contact information (!)

ON

Location of existing	livestock facility or
anaerobic digestor	()

AgriSuite

Total lot size 20 ha

Regional Municipality of Peel Town of Caledon Roll number: 2124

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Liquid	Swine, Feeders (27 - 136 kg), Full Slats	50	9.5 NU	48 m²
Solid	Chickens, Layer hens (for eating eggs; after transfer from pullet barn), Floor Run	75	0.5 NU	7 m²
Solid	Goats, Dairy Kids, Confinement	25	0.8 NU	19 m²
Liquid	Ducks, Muscovy	25 m²	1 NU	25 m²
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	35	35 NU	163 m²
Solid	Rabbits, Breeding females (including males, replacements & market animals), 1 Tier Cages	10	0.3 NU	18 m²

Setback summary

Existing manure storage	H1. Liquid, outside, no cover, sloped-sided storage			
Design capacity	47.1 NU			
Potential design capacity	47.1 NU			
Factor A (odour potential)0.87Factor D (manure type)0.72	1	Factor B (design capacity) 254. Factor E (encroaching land use)	12 2.2	

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	327 m (1073 ft)
Actual distance from livestock barn	NA
Storage base distance 'S' (minimum distance from manure storage)	462 m (1516 ft)
Actual distance from manure storage	NA

Farm contact in ON	nformation (!)	Loc: ana Reg Tow Roll	ation of existing liv erobic digestor ional Municipality of nof Caledon number: 2124	estock facility or of Peel	Total lot size 9.5 ha	
Livestock/ma	nure summary					
Manure Form	Type of livestock/	manure		Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Sheep, Ewes & rar unweaned offspri	ns (dairy operation ng & replacements)	; includes	134	22.3 NU	286 m²
Setback sumr	mary					
Existing manu	ure storage	V3. Solid, outside	, no cover, >= 30% [DM		
Design capac	city	22.3 NU				
Potential desi	ign capacity	22.3 NU				
Factor A (odour Factor D (manu	r potential) 0.7 ire type) 0.7			Factor B (design cap Factor E (encroachin	acity) 204.66 g land use) 2.2	
Building ba (minimum d	ase distance 'F' (A x distance from lives	B x D x E) tock barn)				221 m (725 ft)
Actual dista	ance from livestock	barn				NA
Storage bas (minimum)	se distance 'S' distance from man	ure storage)				221 m (725 ft)
Actual dista	ance from manure	storage				NA

Farm contact in ON	oformation (!)		Location of existing anaerobic digestor Regional Municipali Town of Caledon Roll number: 2124	livestock facility or 	Total lot size 40.21 ha	
Livestock/ma	nure summary					
Manure Form	Type of livestock	/manure		Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Dairy, Heifers Lar Holsteins), Deep	ge Frame (182 Bedded	2 - 545 kg) (eg.	100	50 NU	650 m²
Setback sumr	mary					
Existing man	ure storage	V4. Solid, ou	tside, no cover, 18-30	% DM, with covered liq	uid runoff storage	
Design capac	city	50 NU				
Potential des	ign capacity	50 NU				
Factor A (odour Factor D (manu	r potential) 0.7 re type) 0.7			Factor B (design o Factor E (encroac	capacity) 260 ching land use) 2.2	
Building ba (minimum)	ise distance 'F' (A x distance from lives	B x D x E) tock barn)				281 m (922 ft)
Actual dista	ance from livestock	k barn				NA
Storage bas (minimum	se distance 'S distance from man	ure storage)				281 m (922 ft)
Actual dista	ance from manure	storage				NA

Farm contact inf ON	ormation (!)		Location of existing live anaerobic digestor (! Regional Municipality of Town of Caledon Roll number: 2124	stock facility or) Peel	Total lot size 4.18 ha	
Livestock/man	ure summary					
Manure Form	Type of livesto	ock/manure	Existing maximum number	Existing maximu (NU)	n number	Estimated livestock barn area
Solid	Unoccupied Li Barn	vestock	594 m²	29.7 NU		594 m²
Unoccupie The calcu Setback summ Existing manu Design capaci Potential design	ed Barn or Unuse lated setback is b nary re storage ty gn capacity	d Storage (Op based on assu - Not Specif 29.7 NU 29.7 NU	eration 3) mptions for an unoccupied fied -	l barn or unused storage	e that may not re	flect the actual design capacity.
Factor A (odour Factor D (manure	ootential) 1 e type) 0.7			Factor B (design capa Factor E (encroaching	city) 219.4 land use) 2.	2
Building bas (minimum d Actual dista	e distance 'F' (A : istance from live nce from livestoc	k B x D x E) stock barn) k barn				338 m (1109 ft) NA
Storage bas (minimum d	e distance 'S' istance from man	nure storage)				No existing manure storage
Actual dista	nce nom manule	Siolage				NA

Farm contact information (!) ON			Location of existing live anaerobic digestor Regional Municipality o Town of Caledon Roll number: 2124	estock facility or) f Peel	Total lot size 4.02 ha	
Livestock/mar	nure summary					
Manure Form	Type of livesto	ck/manure	Existing maximum number	Existing maximum (NU)	n number	Estimated livestock barn area
Solid	Unoccupied Liv Barn	vestock	350 m²	17.5 NU		350 m²
Setback summ Existing manu Design capaci	nary Ire storage ity	- Not Specif 17.5 NU	fied -			
Factor A (odour Factor D (manur	potential) 1 re type) 0.7	17.5 NG		Factor B (design capac Factor E (encroaching I	ity) 191.66 and use) 2.2	2
Building bas (minimum c	se distance 'F' (A x distance from lives	a B x D x E) stock barn)				296 m (971 ft)
Actual dista	ince from livestoc	k barn				NA
Storage base distance 'S' (minimum distance from manure storage)						No existing manure storage
Actual distance from manure storage						NA

Farm contact informatio ON	n (!)	Location of existing l anaerobic digestor Regional Municipality Town of Caledon Roll number: 2124	livestock facility or () y of Peel	Total lot size 24.95 ha				
Livestock/manure sur	mmary							
Manure Type of Form	f livestock/manure		Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area			
Solid Horses unwear	, Large-framed, mature; > ned offspring)	680 kg (including	14	20 NU	423 m²			
Setback summary	Setback summary							
Existing manure storage V3. Solid, outside, no cover, >= 30% DM								
Design capacity	20 NU							
Potential design capac	city 20 NU							
Factor A (odour potentia Factor D (manure type)	l) 0.7 0.7		Factor B (design capacity) 199.99 Factor E (encroaching land use) 2.2					
Building base distance 'F' (A x B x D x E) 216 m (709 ft) (minimum distance from livestock barn)								
Actual distance from livestock barn NA								
Storage base distan (minimum distance	ce 'S from manure storage)				216 m (709 ft)			
Actual distance from	n manure storage				NA			

Operation 8									
Farm contact information (!) ON		Location of existing livestock facility or anaerobic digestor [] Regional Municipality of Peel Town of Caledon Roll number: 2124		Total lot size 38 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 m	onths), Confinement	25	8.3 NU	116 m²				
Solid	Sheep, Ewes & rams (dairy opera unweaned offspring & replacem	ation; includes ents)	12	2 NU	26 m²				
Setback su	mmary								
Existing m	Existing manure storage V3. Solid, outside, no cover, >= 30% DM								
Design cap	bacity 10.3 NU								
Potential d	esign capacity 10.3 NU								
Factor A (odd Factor D (ma	Factor A (odour potential)0.78Factor D (manure type)0.7			Factor B (design capacity) 167.76 Factor E (encroaching land use) 2.2					
Building base distance 'F' (A x B x D x E) 202 m (66: (minimum distance from livestock barn)									
Actual d	Actual distance from livestock barn NA								
Storage base distance 'S' 202 m (663 ft) (minimum distance from manure storage)									
Actual distance from manure storage									
Preparer signoff & disclaimer									
Preparer conta ON	ct information								
Signature of preparer									

 Øu/del
 05-05-2025

 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.