

Appendix C

Agricultural Impact Assessment

February 2022

Regional Official Plan Review





**HALTON REGION
INTEGRATED GROWTH MANAGEMENT STRATEGY
AGRICULTURAL IMPACT ASSESSMENT**

Draft

DBH Soil Services Inc.

January 21, 2022

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I BACKGROUND

DBH Soil Services Inc was retained to complete an Agricultural Impact Assessment (AIA) for the growth concept options as part of the Integrated Growth Management Strategy (IGMS) for Halton Region. The original IGMS growth concept options were provided as Geographic Information System (GIS) shape files dated October 13, 2021, and included 6 opportunities identified as:

- Halton Hills, Community Area
- Halton Hills, Employment Area
- Halton Hills, Option 1
- Halton Hills, Option 2
- Milton, Community Area
- Milton, Employment Area

A revised version of the IGMS options were provided as GIS shape files dated December 22, 2021, with a final version of the GIS shape files dated January 2022 and were provided via email on January 7, 2022. This AIA reflects the original mapping

The proposed future development of these lands required the completion of an Agricultural Impact Assessment. The purpose of this AIA is to document the existing agricultural character, identify potential existing (or future) impacts growth will have on agriculture, and to provide avoidance or mitigative measures as necessary to offset any potential or real impacts.

For this study, the 6 growth concept options will be referred to as the Study Areas. For the purpose of an Agricultural Impact Assessment (AIA) report, agricultural operations and activities are evaluated in larger areas, the Secondary Study Areas, described as a potential zone of impact extending a minimum of 1500 m (1.5 km) beyond the boundary of the Study Area. This minimum 1500 m (1.5 km) area of potential impact outside the Study Areas is used to allow for characterization of the agricultural community and the assessment of impacts adjacent both on and in the immediate vicinity of the Study Area. Figure 1 illustrates the location, size and shape of the Study Areas and Secondary Study Areas with respect to the above-mentioned community features.

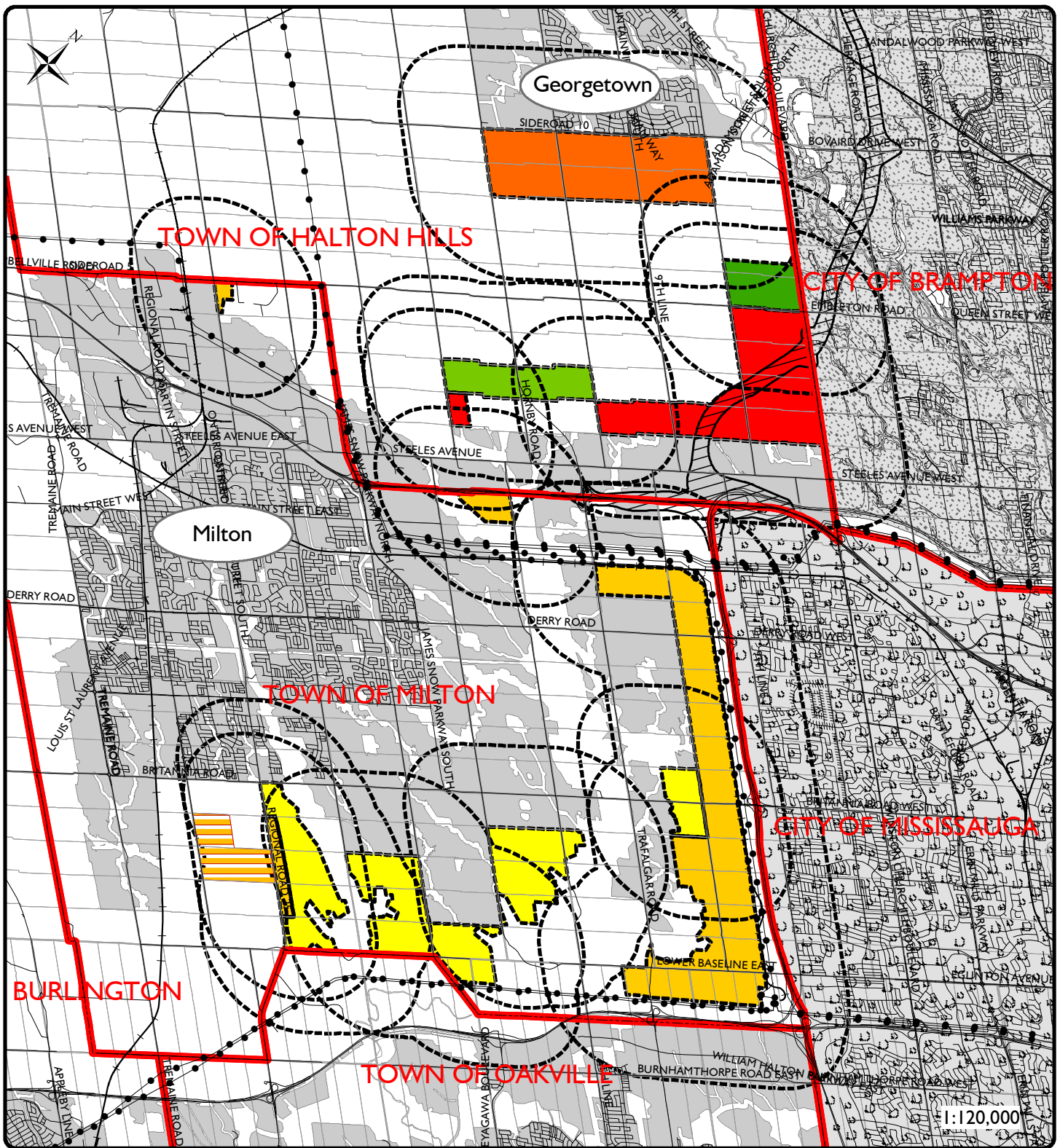
In the Regional context, the Study Areas are located in such a way that 4 of the growth concept options are located in the Town of Halton Hills, while the remaining 2 growth concept options are located in the Town of Milton.

The Study Areas comprise a mix of land uses including agricultural, rural, transportation corridors, and woodlands. The Secondary Study Areas comprise a mix of land uses including urban uses, rural uses, agricultural lands, transportation corridors, and woodlands. A large portion of the Secondary Study Areas rests within the urban boundary areas of Georgetown (Halton Hills), Milton, the City of Mississauga, and the City of Brampton. Portions of those areas

are presently used for agriculture; however due to their location within the urban boundaries, those lands have diminished or limited long term agricultural potential.

Further, the GTA West Technically Preferred Highway Corridor (Highway 413) roughly bisects the growth concept option Halton Hills Employment Area.

This report documents the methodology, findings, conclusions, and mapping completed for this study.



Legend

- Railways (MNRF)
- Hydro Line (MNRF)
- Roads (MNRF)
- ▨ City of Brampton
- ▨ City of Mississauga
- ▨ GTA West Technically Preferred Route
- ▨ Landfill (MNRF)
- ▨ Lot Lines (MNRF)
- ▨ Municipal Boundary (MNRF)
- ▨ Region of Halton Urban Lands
- ▨ Secondary Study Areas (1.5 km)
- Growth Concept**
- ▨ Halton Hills, Community Area
- ▨ Halton Hills, Employment Area
- ▨ Halton Hills, Option 1
- ▨ Halton Hills, Option 2
- ▨ Milton, Community Area
- ▨ Milton, Employment Area

Figure 1

Location

DBH Soil Services Inc.

November 2021

2 METHODOLOGY

A variety of data sources were evaluated to characterize the extent of agriculture resources and to assess any potential existing (or future) impacts to agriculture within the Study Areas and the surrounding Secondary Study Areas that may occur as a result of the proposed future development of the growth concept options.

A review of the Halton Region Official Plan (Official Plan for the Halton Planning Area, Regional Municipality of Halton, Office Consolidation July 19, 2018) was completed to determine if there are specific local guidelines and/or requirements for the completion of an Agricultural Impact Assessment study. It was noted that the Halton Region Official Plan requires that an Agricultural Impact Assessment study be completed to determine the *potential impact of urban development on existing agricultural operations, including the requirement for compliance with the Minimum Distance Separation formulae where an agricultural operation is outside the Urban area.*

The review also determined that the Region of Halton has created a document titled “*Agricultural Impact Assessment Guidelines, October 1985*”, and had updated those guidelines with a newer version from June 2014. The Region of Halton has specific standards and guidelines for completing Agricultural Impact Assessments (AIA) within the boundaries of the Region of Halton. The Halton Region guidelines are comprehensive and require considerable detail to complete.

A further review was completed to determine the existence and use of Agricultural Impact Assessment Guidelines in Ontario.

The review on the existence and use of Agricultural Impact Assessment Guidelines revealed that the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) had released draft Agricultural Impact Assessment guidelines in a document titled “*Draft Agricultural Impact Assessment (AIA) Guidance Document, March 2018*”. This document is considered as “Draft for Discussion Purposes” and does not have status. Recent discussions with staff from OMAFRA have indicated that the release of the final version of their Agricultural Impact Assessment Guidelines document is imminent, with the document to be available to the public in 2021.

Prior to the release of the OMAFRA draft AIA guidelines, the standard for completing Agricultural Impact Assessments in Southern Ontario, were the Halton Region Agricultural Impact Assessment Guidelines.

As a result of the review on the existence and use of Agricultural Impact Assessment guidelines in Ontario, this Agricultural Impact Assessment report has been completed with regard to the *Region of Halton Agricultural Impact Assessment Guidelines (2014)*, a review/reference to the OMAFRA “*Draft Agricultural Impact Assessment (AIA) Guidance Document, March 2018*” and through discussion with staff from the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA).

The Region of Halton Agricultural Impact Assessment Guidelines states that an AIA should include the following:

- Description of the proposal
- Purpose
- Applicable Planning Policies
- Onsite and Surrounding Area Physical Resource Inventory (including: soils; climate; slope; topography; drainage)
- Minimum Distance Separation (MDS) calculations
- On-site features (including: past farming practices; type and intensity of existing agricultural production; nonagricultural land use; parcel size, shape and accessibility; existing farm management; capital investment related to agriculture)
- Offsite Land Use Features (including: surrounding land use types; existing and potential constraints to onsite agriculture; regional land use, lot and tenure patterns)
- Agricultural Viability
- Assessment of Impact on Agriculture
- Mitigative Measures/Avoidance/Minimizing impact
- Conclusions

It should be noted that the use of Land Tenure is specific to the Halton Region AIA guidelines and is not a characteristic that is defined within the policies of the PPS (2020) or the Growth Plan (2019). Further, the term land tenure is not described or discussed in the OMAFRA draft AIA guidelines. As such, the use of Land Tenure has no policy direction and was not included as part of this study. Comment on land fragmentation will be provided in this AIA.

Many of these general tasks, listed above, are also identified and presented in the OMAFRA “Draft Agricultural Impact Assessment (AIA) Guidance Document, March 2018”. As a result, this AIA will follow the above referenced task list.

2.1 DATA COLLECTION

2.1.1 POLICY

Relevant policy, by-laws and guidelines related to agriculture and infrastructure development were reviewed for this study.

The review included an examination of Provincial and Municipal policy as is presented in the *Provincial Policy Statement (2020)*, the *Greenbelt Plan (2017)*, the *Growth Plan for the Greater Golden Horseshoe (2019)*, the *Oak Ridges Moraine Conservation Plan (2017)*, the *Halton Region Official Plan Office Consolidation June 19, 2018*, the *Town of Halton Hills Official Plan (May 1, 2019 Consolidation)*, the *Town of Milton Official Plan (Consolidation August 2008)*, and *The Corporation of the Town of Milton Report # PD-029-18 (June 18, 2018)*.

The review also included an examination of the *Town of Halton Hills Zoning By-Law 2010-0050 (Consolidated December 2019)*, the *Town of Milton Comprehensive Zoning By-Law 016-2014 (HUSP Urban Area)*, and the *Town of Milton Comprehensive Zoning By-Law 144-2003*,

Further, the review included an assessment of the *Minimum Distance Separation (MDS) Document – Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks. Publication 853. Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA, 2016)*. The MDS document was reviewed to determine the applicability of the document's use for this study.

An assessment of online data resources including the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), the Ministry of Natural Resources and Forestry (MNRF) Land Information Warehouse (Land Information Ontario (LIO)), the Region of Halton website, the Town of Milton website, the Town of Halton Hills website, the City of Brampton website, the City of Mississauga website, combined with telephone, email and in person communication was used to derive a list of relevant policy, by-law and guidelines. Each relevant policy, by-law and guideline was collected in digital or paper format for examination for this study.

2.1.2 PHYSIOGRAPHY

A review of the *Physiography of Southern Ontario 3rd Edition, Ontario Geological Survey Special Volume 2, Ministry of Natural Resources (1984)* was completed to document the type(s) and depth of bedrock and soil parent materials, and how these materials, in conjunction with glacial landforming processes, have led to the development of the existing soil resources.

2.1.3 TOPOGRAPHY AND CLIMATE

Topographic information was reviewed from the 1:10000 scale Ontario Base Mapping, Land Information Ontario digital contour mapping and windshield surveys.

Climate data was taken from the OMAFRA document titled *Agronomy Guide for Field Crops – Publication 811 (June 2017)*.

2.1.4 AGRICULTURAL LAND USE

Agricultural land use data was collected through observations made during roadside reconnaissance (windshield) surveys and field surveys conducted in September, October, and November 2021. Data collected included the identification of land use (both agricultural and non-agricultural), the documentation of the location and type of agricultural facilities, the location of non-farm residential units and the location of non-farm buildings (businesses, storage facilities, industrial, commercial and institutional usage).

Agricultural land use designations were correlated to the *Agricultural Resource Inventory (ARI)* (Ontario Ministry of Agriculture and Food report and maps) and the information provided in the *Agricultural System Portal (OMAFRA)* for the purpose of updating the Ontario Ministry of Agriculture and Food Land Use Systems mapping for both the Study Areas and Secondary Study

Areas.

2.1.5 MINIMUM DISTANCE SEPARATION

Minimum Distance Separation (MDS) formulae were developed by OMAFRA to reduce and minimize nuisance complaints due to odour from livestock facilities and to reduce land use incompatibility.

This AIA is based on the premise of future growth concept options, as a result MDS I calculations are required for this study in accordance with Guideline # I (as much of the Study Areas lands are Prime Agricultural Areas).

Guideline # I states

“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.”

Further, guideline #10 indicates that MDS I setbacks are required for all proposed amendments to rezone or redesignated land to permit development in Prime Agricultural Areas.

Guideline #10 states

“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”.

MDS calculations are required for all livestock barns (agricultural facilities) that are capable of housing livestock, even if the barn is not occupied.

Guideline #20 states:

“Design capacity for an MDS I calculation shall include all unoccupied livestock barns on a lot in accordance with this Implementation Guideline.”

Therefore, MDS I calculations have been made for the agricultural facilities in the Study Areas and the surrounding area (Secondary Study Areas) that either have livestock or are considered capable of housing livestock.

2.1.6 LAND FRAGMENTATION

Land fragmentation data was collected through a review of online interactive mapping on the Agmaps OMAFRA online interactive application, the Agricultural System Portal (OMAFRA), the Town of Halton Hills website, the Town of Milton website, and the Region of Halton website. This data was used to determine the extent, location, relative shape of each parcel/property within both the Study Areas and the Secondary Study Areas.

Land fragmentation can be defined as the increase in the number of smaller parcels, which are generally non-agricultural uses, within a predominantly agricultural area. Over time the increase in smaller non-agricultural land uses creates a patchwork-like distribution of rural land uses, resulting in lands lost to agricultural production. Generally, good productive areas of farmland are comprised of larger parcels with few (if any) smaller parcels interspersed.

The assessment of fragmentation will look at the size, shape and relative number of parcels within a given area and provide comment on the potential effect on agriculture.

2.1.7 SOIL SURVEY

Soil survey data and Canada Land Inventory (CLI) data was provided by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) in digital format through the Land Information Ontario website warehouse. The soils/CLI data is considered the most recent iteration of the soil information from OMAFRA.

The digital soil survey data was also correlated to the printed soil survey report and map (*The Soil Survey of Halton* (Report No. 43 of the Ontario Soil Survey. Gillespie, J. E., R. E. Wicklund and M. H. Miller, 1971) to determine if the digital soils data has been modified from the original soil survey data.

2.1.8 AGRICULTURAL SYSTEM

The Ontario Ministry of Agriculture, Food and Rural Affairs online Agricultural Systems mapping were reviewed to determine the extent of agriculture on the Study Areas, in the Secondary Study Areas, within the Town of Halton Hills, the Region of Halton, the City of Brampton and the City of Mississauga.

The Agricultural System comprises two parts: Agricultural Land Base; and the Agri-Food Network.

The Agricultural Land Base illustrates the Prime Agricultural Areas (including Specialty Crop Areas), while the Agri-Food Network illustrates regional infrastructure/transportation networks, buildings, services, markets, distributors, primary processing, and agriculture communities.

A review of online mapping and the OMAFRA Document *Implementation Procedures for the Agricultural System in Ontario's Greater Golden Horseshoe – Supplementary Direction to a Place to Grow: Growth Plan for the Greater Golden Horseshoe, Publication 856*, was reviewed as part of this study.

2.1.9 AGRICULTURAL STATISTICS

Agricultural statistics were provided by and downloaded from the OMAFRA website. The statistics were provided in Excel format for Southern Ontario, Halton, the Greater Golden Horseshoe, and the Greater Toronto Area. The Halton data included census information for the

Town of Halton Hills, the Town of Milton, and the Region of Halton. The data sets provide information from the 2006 Census up to (and including) the 2016 Census. Three Census data sets were reviewed as part of this AIA (2006, 2011 and 2016).

3 POLICY REVIEW

Clearly defined and organized environmental practices are necessary for the conservation of land and resources. The long-term protection of quality agricultural lands is a priority of the Province of Ontario and has been addressed in the *Provincial Policy Statement (2020)*. Further, in an effort to protect agricultural lands, the Province of Ontario has adopted policy and guidelines to provide a framework for managing growth. The framework is provided in four provincial land use plans. These four provincial land use plans: *Greenbelt Plan (2017)*; *the Oak Ridges Moraine Conservation Plan (2017)*; *the Niagara Escarpment Plan (2017)*; and *the Growth Plan for the Greater Golden Horseshoe (GGH) (2019)* support the long-term protection of farmland. The four provincial land use plans have policy that require the completion of Agricultural Impact Assessment (AIA) studies for changes in agricultural land use.

Municipal Governments have similar regard for the protection and preservation of agricultural lands and address their specific concerns within their respective Official Plans on County/Regional level and Township level.

With this in mind, the: *Provincial Policy Statement (2020)*; *Greenbelt Plan (2017)*; *the Oak Ridges Moraine Conservation Plan (2017)*; *the Niagara Escarpment Plan (2017)*; and *the Growth Plan for the Greater Golden Horseshoe (GGH) (2019)* were reviewed for this study.

With respect to this AIA and the four provincial land use plans, a review of the boundaries of the Greenbelt Plan Area, the Oak Ridges Moraine Area, the Niagara Escarpment Plan Area, and the Growth Plan for the Greater Golden Horseshoe Area was completed. It was determined that the Study Areas (and Secondary Study Areas) were located within the Growth Plan for the Greater Golden Horseshoe Area and adjacent to portions of the Greenbelt area.

A review of the agricultural policies in the *Halton Region Official Plan (Office Consolidation June 19, 2018)*, the *Town of Milton Official Plan (Consolidation August 2008)*, and the *Town of Halton Hills Official Plan (May 1, 2019, Consolidation)* was completed.

The review also included an examination of the *Town of Halton Hills Zoning By-Law 2010-0050 (Consolidated December 2019)*, the *Town of Milton Comprehensive Zoning By-Law 016-2014 (HUSP Urban Area)*, and the *Town of Milton Comprehensive Zoning By-Law 144-2003*,

It was determined through these reviews, that neither the Study Areas nor the Secondary Study Area are located in a Provincially or Municipally designated Specialty Crop Area.

The relevant policies from the above-mentioned documents are presented as follows.

3.1 PROVINCIAL AGRICULTURAL POLICY

The *Provincial Policy Statement (2020)* was enacted to document the Ontario Provincial Governments development and land use planning strategies. The *Provincial Policy Statement* provides the policy foundation for regulating the development and use of land. With respect to the potential future development of the Study Areas, the following policies may apply. Agricultural policies are addressed within Section 2.3 of the *Provincial Policy Statement (2020)*.

- 2.3.1 *Prime agricultural areas shall be protected for long-term use for agriculture. Prime agricultural areas are areas where prime agricultural lands predominate. Specialty crop areas shall be given the highest priority for protection, followed by Canada Land Inventory Class 1, 2, and 3 lands, and any associated Class 4 through 7 lands within the prime agricultural area, in this order of priority.*
- 2.3.2 *Planning authorities shall designate prime agricultural areas and specialty crop areas in accordance with guidelines developed by the Province, as amended from time to time. Planning authorities are encouraged to use an agricultural system approach to maintain and enhance the geographic continuity of the agricultural land base and the functional and economic connections to the agri-food network.*
- 2.3.3 *Permitted Uses*
- 2.3.3.1 *In prime agricultural areas, permitted uses and activities are: agricultural uses, agriculture-related uses and on-farm diversified uses. Proposed agriculture-related uses and on-farm diversified uses shall be compatible with, and shall not hinder, surrounding agricultural operations. Criteria for these uses may be based on guidelines developed by the Province or municipal approaches, as set out in municipal planning documents, which achieve the same objectives.*
- 2.3.3.2 *In prime agricultural areas, all types, sizes and intensities of agricultural uses and normal farm practices shall be promoted and protected in accordance with provincial standards.*
- 2.3.3.3 *New land uses in prime agricultural areas, including the creation of lots and new or expanding livestock facilities, shall comply with the minimum distance separation formulae.*
- 2.3.4 *Lot Creation and Lot Adjustments*
- 2.3.4.1 *Lot creation in prime agricultural areas is discouraged and may only be permitted for:*
- a) *agricultural uses, provided that the lots are of a size appropriate for the type of agricultural use(s) common in the area and are sufficiently large to maintain flexibility for future changes in the type or size of agricultural operations;*
 - b) *agriculture-related uses, provided that any new lot will be limited to a minimum size needed to accommodate the use and appropriate sewage and water services;*
 - c) *a residence surplus to a farming operation as a result of farm consolidation, provided that:*
 1. *the new lot will be limited to a minimum size needed to accommodate the use and appropriate sewage and water services; and*
 2. *the planning authority ensures that new residential dwellings are prohibited on any remnant parcel of farmland created by the severance. The approach used to ensure that no new residential dwellings are permitted on the remnant parcel may be recommended by the Province, or based on municipal approaches which achieve the same objective; and*
 - d) *infrastructure, where the facility or corridor cannot be accommodated through the use of easements or rights-of-way.*
- 2.3.4.2 *Lot adjustments in prime agricultural areas may be permitted for legal or technical reasons.*
- 2.3.4.3 *The creation of new residential lots in prime agricultural areas shall not be permitted, except in accordance with policy 2.3.4.1(c).*

2.3.5 Removal of Land from Prime Agricultural Areas

2.3.5.1 Planning authorities may only exclude land from prime agricultural areas for expansions of or identification of settlement areas in accordance with policy 1.1.3.8.

2.3.6 Non-Agricultural Uses in Prime Agricultural Areas

2.3.6.1 Planning authorities may only permit non-agricultural uses in prime agricultural areas for:

- a) extraction of minerals, petroleum resources and mineral aggregate resources; or
- b) limited non-residential uses, provided that all of the following are demonstrated:
 1. the land does not comprise a specialty crop area;
 2. the proposed use complies with the minimum distance separation formulae;
 3. there is an identified need within the planning horizon provided for in policy 1.1.2 for additional land to accommodate the proposed use; and
 4. alternative locations have been evaluated, and
 - i. there are no reasonable alternative locations which avoid prime agricultural areas; and
 - ii. there are no reasonable alternative locations in prime agricultural areas with lower priority agricultural lands.

2.3.6.2 Impacts from any new or expanding non-agricultural uses on surrounding agricultural operations and lands are to be mitigated to the extent feasible.

As indicated above, these policies specifically relate to Prime Agricultural lands located within the Study Areas.

3.2 THE GROWTH PLAN FOR THE GREATER GOLDEN HORSESHOE

A review of the boundaries of the Growth Plan for the Greater Golden Horseshoe (GPGGH) area was completed. It was determined that the Study Area lands are located within the Growth Plan for the Greater Golden Horseshoe mapped area. The Study Area lands and portions of the Secondary Study Area lands are located within the 'Prime Agricultural Lands'. There are no Specialty Crop Lands within either the Study Area lands or the Secondary Study Areas.

Section 4.2.6 of the GPGHH provides policy for the Agricultural System. The respective policies for the Agricultural System are as follows:

4.2.6 Agricultural System

1. An Agricultural System for the GGH has been identified by the Province.
2. Prime agricultural areas, including specialty crop areas, will be designated in accordance with mapping identified by the Province and these areas will be protected for long-term use for agriculture.
3. Where agricultural uses and non-agricultural uses interface outside of settlement areas, land use compatibility will be achieved by avoiding or where avoidance is not possible, minimizing and mitigating adverse impacts on the Agricultural System. Where mitigation is required, measures should be incorporated as part of the non-agricultural uses, as appropriate, within the area being developed. Where appropriate, this should be based on an agricultural impact assessment.
4. The geographic continuity of the agricultural land base and the functional and economic connections to the agri-food network will be maintained and enhanced.
5. The retention of existing lots of record for agricultural uses is encouraged, and the use of these lots for non-agricultural uses is discouraged.
6. Integrated planning for growth management, including goods movement and transportation planning, will consider opportunities to support and enhance the Agricultural System.

7. Municipalities are encouraged to implement regional agri-food strategies and other approaches to sustain and enhance the Agricultural System and the long-term economic prosperity and viability of the agri-food sector, including the maintenance and improvement of the agri-food network by:

- a) providing opportunities to support access to healthy, local, and affordable food, urban and near-urban agriculture, food system planning and promoting the sustainability of agricultural, agri-food, and agri-product businesses while protecting agricultural resources and minimizing land use conflicts;
- b) protecting, enhancing, or supporting opportunities for infrastructure, services, and assets. Where negative impacts on the agri-food network are unavoidable, they will be assessed, minimized, and mitigated to the extent feasible; and
- c) establishing or consulting with agricultural advisory committees or liaison officers.

8. Outside of the Greenbelt Area, provincial mapping of the agricultural land base does not apply until it has been implemented in the applicable upper- or single-tier official plan. Until that time, prime agricultural areas identified in upper- and single-tier official plans that were approved and in effect as of July 1, 2017 will be considered the agricultural land base for the purposes of this Plan.

9. Upper- and single-tier municipalities may refine provincial mapping of the agricultural land base at the time of initial implementation in their official plans, based on implementation procedures issued by the Province. For upper-tier municipalities, the initial implementation of provincial mapping may be done separately for each lower-tier municipality. After provincial mapping of the agricultural land base has been implemented in official plans, further refinements may only occur through a municipal comprehensive review.

Figure 2 illustrates the relative location of the Study Areas and the Secondary Study Areas in the Growth Plan for the Greater Golden Horseshoe and the Agricultural System with respect to the Agricultural Land Base Mapping.

The Growth Plan for the Greater Golden Horseshoe (2019) provides the following definitions:

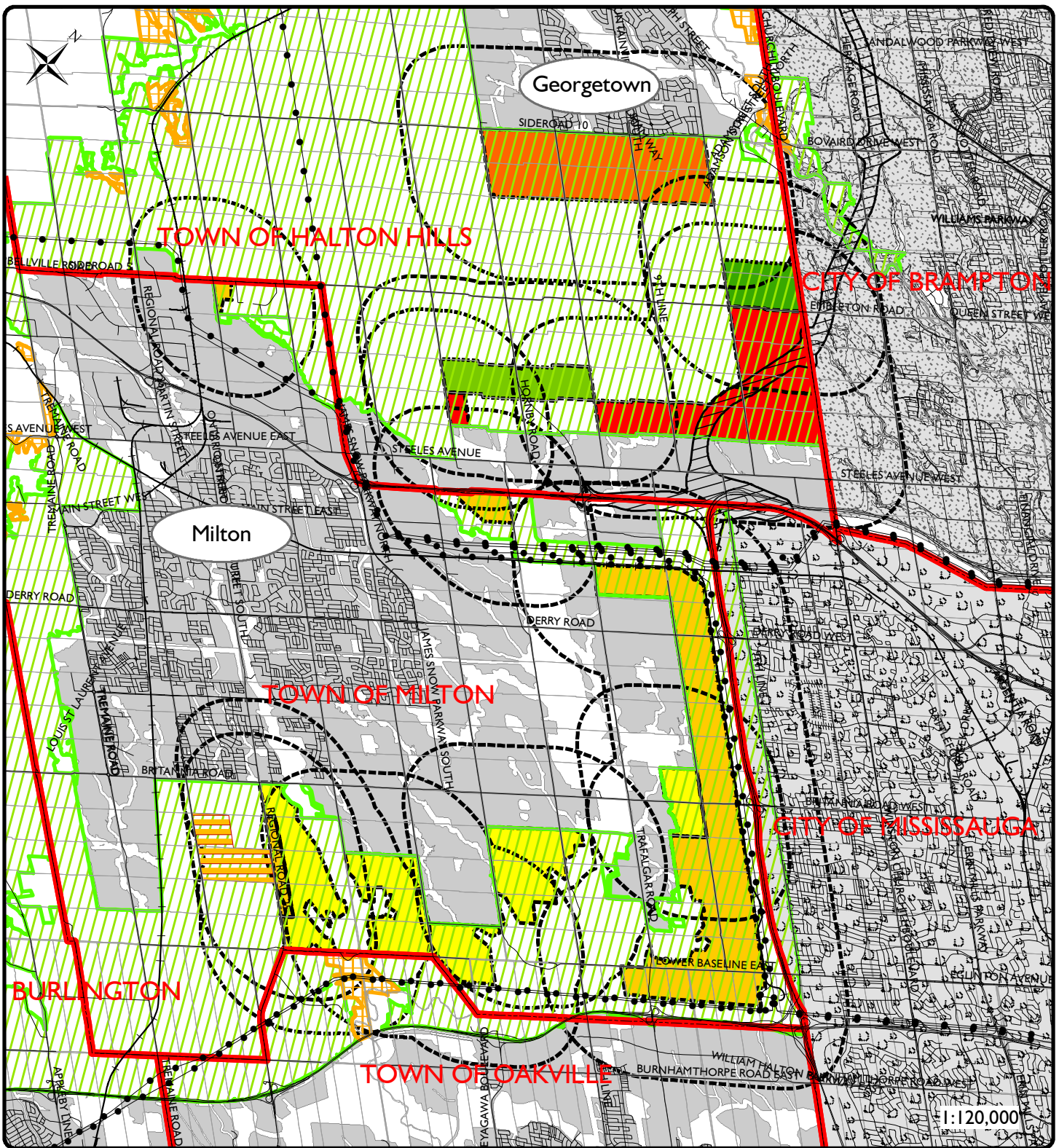
Agricultural Impact Assessment - A study that evaluates the potential impacts of non-agricultural development on agricultural operations and the *Agricultural System* and recommends ways to avoid or, if avoidance is not possible, minimize and mitigate adverse impacts. (Greenbelt Plan).

Agricultural System - The system mapped and issued by the Province in accordance with this Plan, comprised of a group of inter-connected elements that collectively create a viable, thriving agricultural sector. It has two components: 1. An agricultural land base comprised of *prime agricultural areas*, including *specialty crop areas*, and *rural lands* that together create a continuous productive land base for agriculture; 2. An *agri-food network* which includes *infrastructure*, services, and assets important to the viability of the agri-food sector. (Greenbelt Plan).

Agri-Food Network - Within the *Agricultural System*, a network that includes elements important to the viability of the agri-food sector such as regional *infrastructure* and transportation networks; on-farm buildings and infrastructure; agricultural services, farm markets, distributors, and primary processing; and vibrant, agriculture-supportive communities. (Greenbelt Plan).

As illustrated in Figure 2, the Study Areas are shown as Prime Agricultural Area, while portions of the Secondary Study Areas are illustrated as Prime Agricultural Area and urban land uses.

The Agricultural System policies will apply within the portions of the Study Areas and the Secondary Study Areas that are within the Prime Agricultural Area designation.



Legend

- | | | |
|--------------------------------------|--|-------------------------------|
| —+— Railways (MNRF) | Municipal Boundary (MNRF) | Growth Concept |
| ●—● Hydro Line (MNRF) | Region of Halton Urban Lands | Halton Hills, Community Area |
| — Roads (MNRF) | Secondary Study Areas (1.5 km) | Halton Hills, Employment Area |
| City of Brampton | Provincial Agricultural Land Base | Halton Hills, Option 1 |
| City of Mississauga | Candidate Area | Halton Hills, Option 2 |
| GTA West Technically Preferred Route | Prime Agricultural Area | Milton, Community Area |
| Landfill (MNRF) | | Milton, Employment Area |
| Lot Lines (MNRF) | | |

Figure 2

Provincial Land Base Mapping

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3.3 GREENBELT PLAN

A review of the Greenbelt Plan (2017) mapping indicates that the Study Areas are not located within the Greenbelt Plan Area, however, portions of the Secondary Study Areas are located within the Greenbelt Plan area. Figure 3 illustrates the relative location of the Greenbelt Plan Area with respect to the Study Areas and the Secondary Study Areas.

The portions of the Secondary Study Areas that are within the Greenbelt Plan Area are considered as Protect Countryside.

The Greenbelt Plan has specific policies for Prime Agricultural Lands and provides the policies in Section 3.13. Section 3.1.3 states:

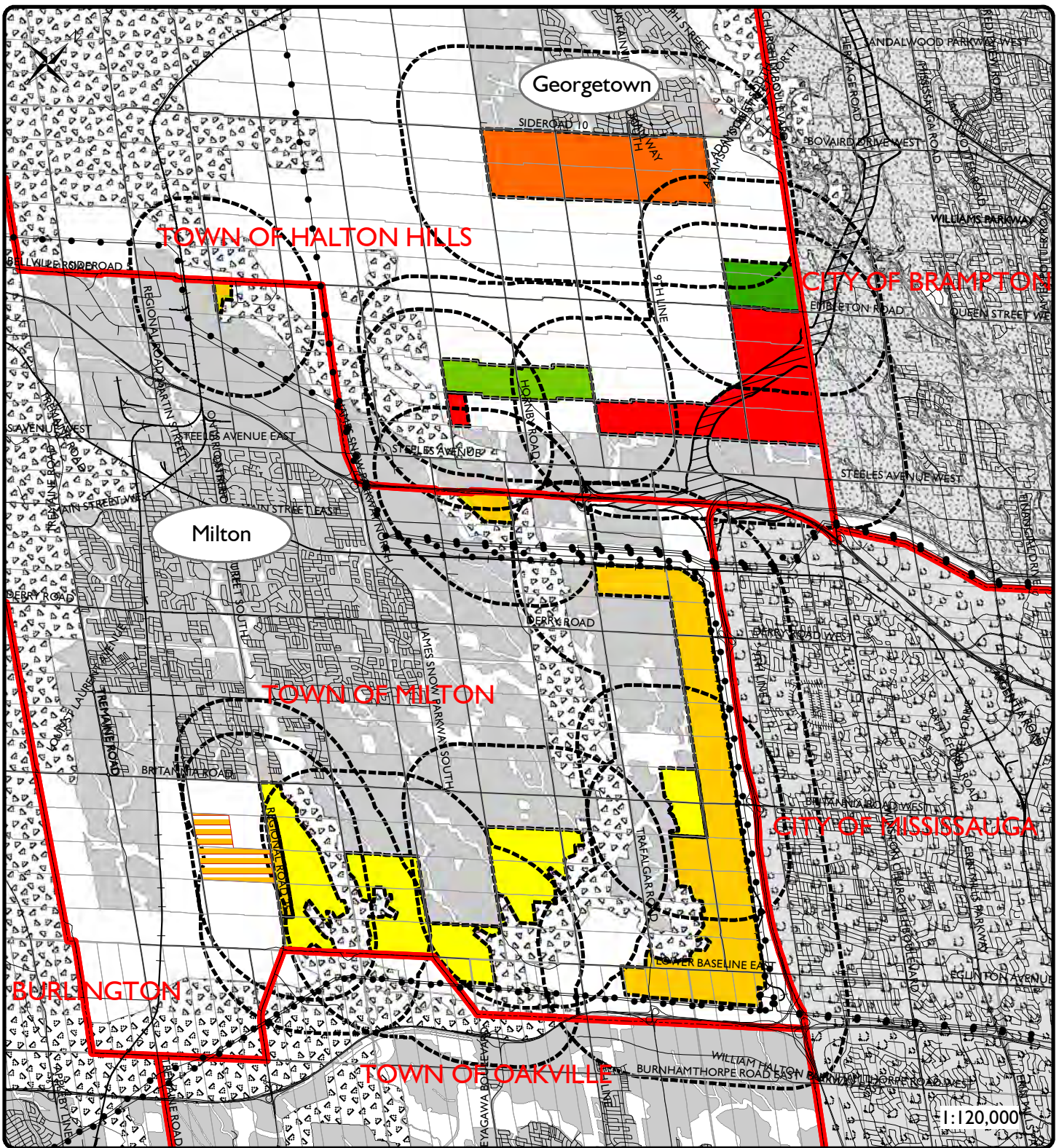
For lands falling within prime agricultural areas of the Protected Countryside, the following policies shall apply:

1. *All types, sizes and intensities of agricultural uses and normal farm practices shall be promoted and protected and a full range of agricultural uses, agriculture-related uses and on-farm diversified uses are permitted based on provincial Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas. Proposed agriculture-related uses and on-farm diversified uses shall be compatible with and shall not hinder surrounding agricultural operations.*
2. *Lands shall not be redesignated in official plans for non-agricultural uses except for:*
 - a) *Refinements to the prime agricultural area and rural lands designations, subject to the policies of section 5.3; or*
 - b) *Settlement area boundary expansions, subject to the policies of section 3.4.*
3. *Non-agricultural uses may be permitted subject to the policies of sections 4.2 to 4.6. These uses are generally discouraged in prime agricultural areas and may only be permitted after the completion of an agricultural impact assessment.*
4. *New land uses, including the creation of lots (as permitted by the policies of this Plan), and new or expanding livestock facilities, shall comply with the minimum distance separation formulae.*
5. *Where agricultural uses and non-agricultural uses interface, land use compatibility shall be achieved by avoiding or, where avoidance is not possible, minimizing and mitigating adverse impacts on the Agricultural System, based on provincial guidance. Where mitigation is required, measures should be incorporated as part of the non-agricultural uses, as appropriate, within the area being developed.*
6. *The geographic continuity of the agricultural land base and the functional and economic connections to the agri-food network shall be maintained and enhanced.*

3.4 OFFICIAL PLAN AND ZONING BY-LAW POLICY

Official Plan policies are prepared under the Planning Act, as amended, of the Province of Ontario. Official Plans generally provide policy comment for land use planning while taking into consideration the economic, social and environmental impacts of land use and development concerns. For the purpose of this AIA study, a review of the agricultural policies in the *Halton Region Official Plan* (Office Consolidation June 19, 2018), the *Town of Milton Official Plan* (Consolidation August 2008), and the *Town of Halton Hills Official Plan* (May 1, 2019, Consolidation) was completed.

It should be noted that the Halton Region Official Plan is undergoing a review, and the Agricultural Impact Assessment Guidelines may change as part of the review.



Legend

- Railways (MNRF)
- Hydro Line (MNRF)
- Roads (MNRF)
- City of Brampton
- City of Mississauga
- Greenbelt Plan Designation (MNRF)
- GTA West Technically Preferred Route
- Landfill (MNRF)
- Lot Lines (MNRF)
- Municipal Boundary (MNRF)
- Region of Halton Urban Lands
- Secondary Study Areas (1.5 km)
- Growth Concept**
- Halton Hills, Community Area
- Halton Hills, Employment Area
- Halton Hills, Option 1
- Halton Hills, Option 2
- Milton, Community Area
- Milton, Employment Area

Figure 3

Greenbelt Mapping

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3.4.1 HALTON REGION OFFICIAL PLAN (OFFICE CONSOLIDATION)

A review of the *Halton Region Official Plan (Office Consolidation June 19, 2018)* Map I – Regional Structure revealed that the Study Areas are identified as Agricultural Area, while the Secondary Study Areas comprise Agricultural Areas, Regional Natural Heritage Areas and Urban Areas.

Figure 4 illustrates a select portion of the Regional Structure Map (Halton Region Official Plan). The approximate location of the Study Areas and the Secondary Study Areas has been illustrated on Figure 4.

Section 139.9 of the Halton Region Official Plan (Office Consolidation June 19, 2018) provides policy on the Prime Agricultural Areas in the Region of Halton. Select policies are presented as follows.

- 139.9 The purpose of the Prime Agricultural Areas, as shown on Map 1E, is to assist in interpreting policies of this Plan and to assist the City of Burlington and the Towns of Milton and Halton Hills in developing detailed implementation policies for their respective Official Plans.*
- 139.9.1 The Prime Agricultural Areas shown on Map 1E include lands in the Agricultural Area and Regional Natural Heritage System designations. Together these lands support and advance the goal to maintain a permanently secure, economically viable agricultural industry and to preserve the open space character and landscape of Halton's non-urbanized area.*
- 139.9.2 It is the policy of the Region to:*
- (1) Require Local Municipalities to designate Prime Agricultural Areas in accordance with Map 1E, within their Official Plans and include detailed supporting policies which implement the related goals, objectives and policies of this Plan.*
 - (2) Within the Greenbelt Plan Area, prohibit the redesignation of land within Prime Agricultural Areas to permit non-agricultural uses, except where permitted by the Greenbelt Plan.*
 - (3) Outside the Greenbelt Plan Area, permit the removal of land from Prime Agricultural Areas only where the following have been demonstrated through appropriate studies to the satisfaction of the Region:*
 - a) necessity for such uses within the planning horizon for additional land to be designated to accommodate the proposed uses;*
 - b) amount of land area needed for such uses;*
 - c) reasons for the choice of location;*
 - d) justification that there are no reasonable alternate locations of lower capability agricultural lands;*
 - e) no negative impact to adjacent agricultural operations and the natural environment;*
 - f) there are no reasonable alternatives that avoid Prime Agricultural Areas as shown on Map 1E, and*
 - g) the land does not comprise a specialty crop area.*
- Extraction of mineral aggregate resources is permitted in Prime Agricultural Areas in accordance with Section 110(6.1).*

A review of the Halton Region Official Plan (Office Consolidation June 19, 2018) Map 1E illustrates the Agricultural System and Settlement Areas. Figure 5 illustrates select portions of the Map 1E. As illustrated in Figure 5, the Study Areas are within the Prime Agricultural Areas. The Secondary Study Areas includes portions of Urban Areas and Prime Agricultural Areas.

There are no specialty crop areas defined within the Region of Halton. The Study Areas and Secondary Study Areas do not comprise any lands designated as specialty crop lands/areas.

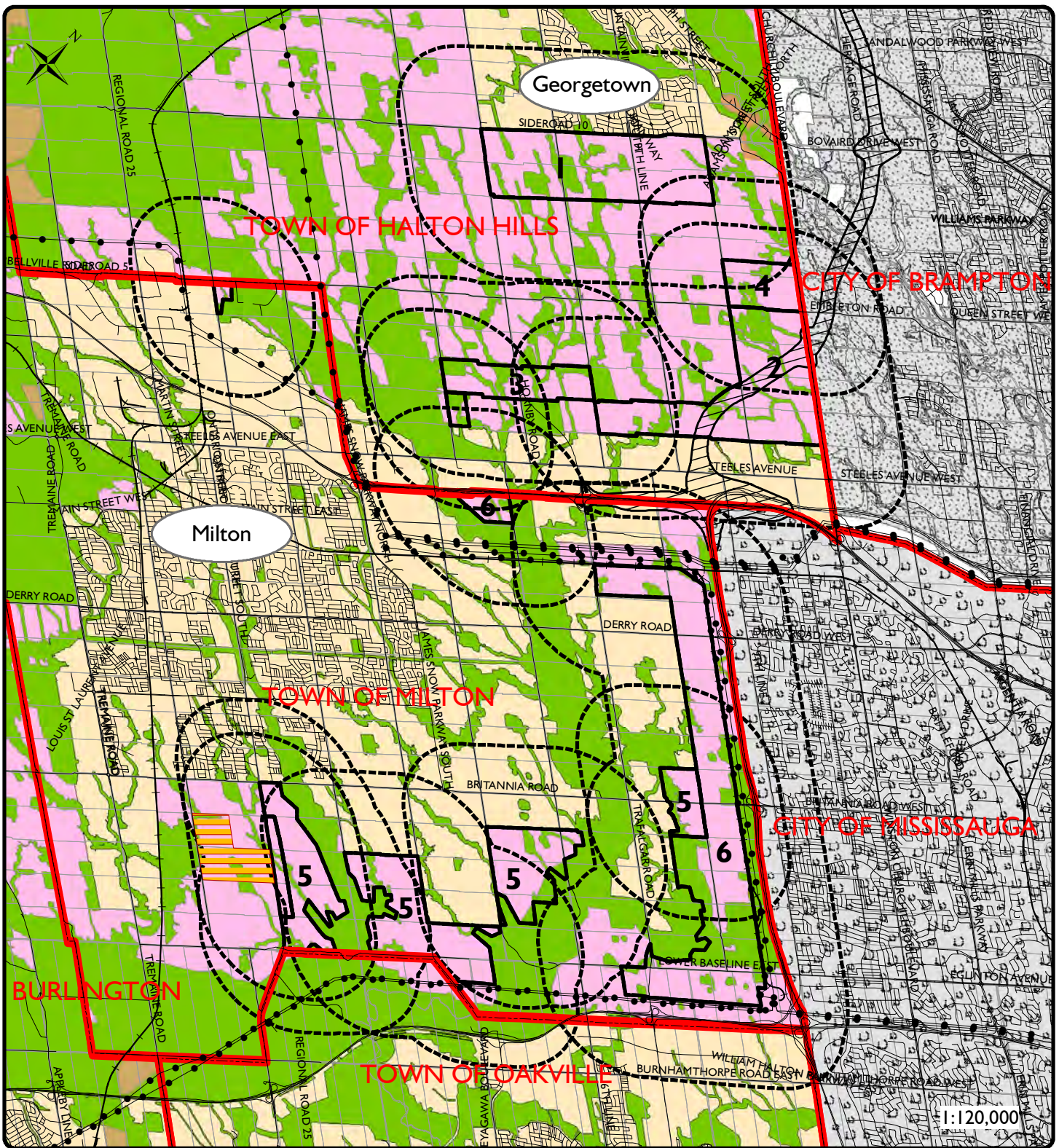
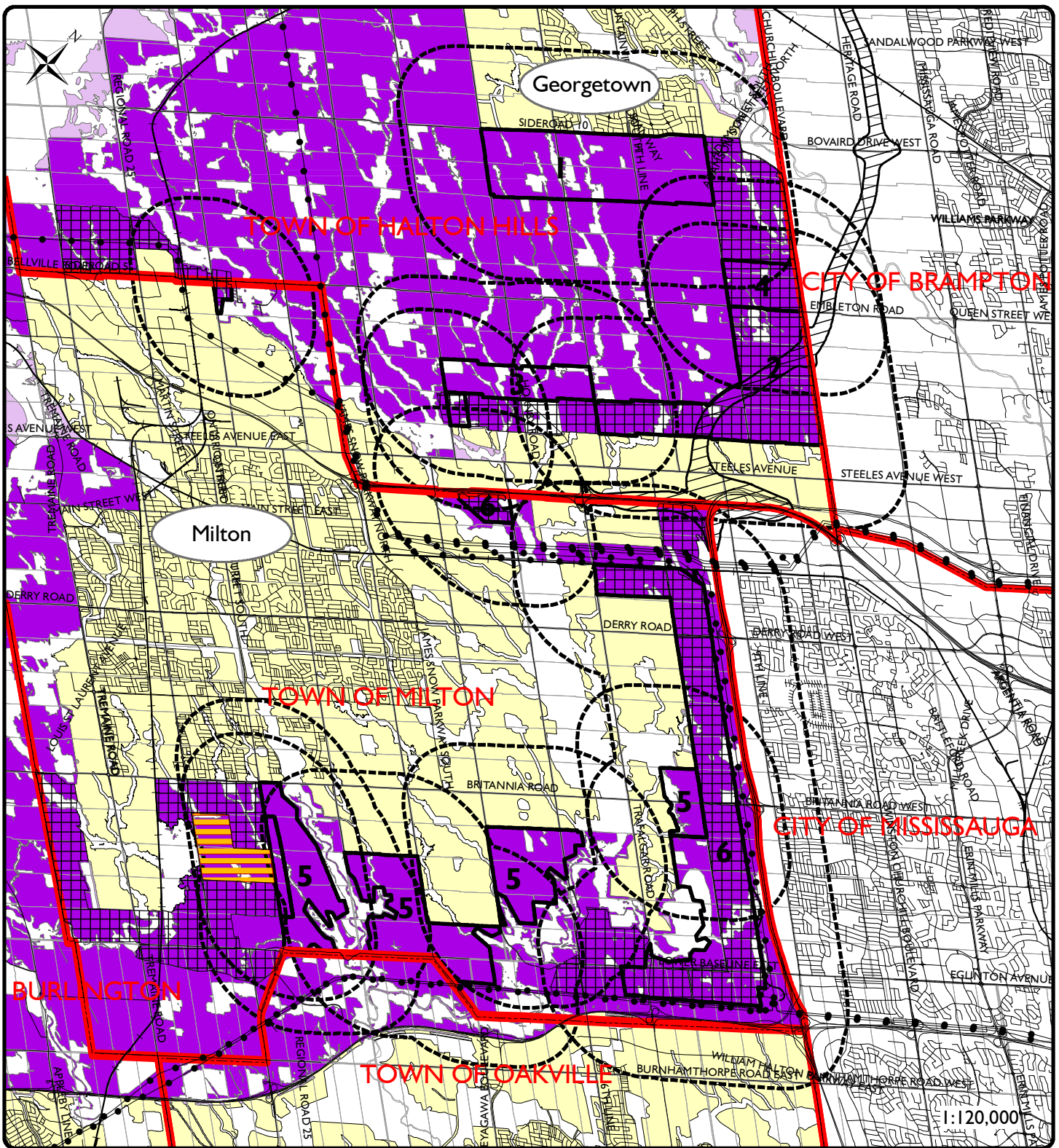


Figure 4
Regional Structure
Halton Region Official Plan

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Legend

●—● Hydro Line (MNRF)	Municipal Boundary (MNRF)	Region of Halton Land Use Map
— Railways (MNRF)	Secondary Study Areas (1.5 km)	Agricultural Area
— Roads (MNRF)	Growth Concept	Hamlet
City of Brampton	1, Halton Hills, Community Area	Mineral Resource Extraction Area
City of Mississauga	2, Halton Hills, Employment Area	North Aldershot Policy Area
GTA West Technically Preferred Route	3, Halton Hills, Option 2	Regional Natural Heritage System
Landfill (MNRF)	4, Halton Hills, Option 1	Urban Area
Lot Lines (MNRF)	5, Milton, Community Area	
	6, Milton, Employment Area	



Legend

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> ●—● Hydro Line (MNRF) — Railways (MNRF) — Roads (MNRF) ■ Agricultural System Outside Prime Agricultural Area ■ Agricultural System - Prime Agricultural Areas ▨ Future Strategic Employment Lands (Map 1c) | <ul style="list-style-type: none"> ▨ GTA West Technically Preferred Route ▨ Landfill (MNRF) ▨ Lot Lines (MNRF) ▨ Municipal Boundary (MNRF) ▨ Secondary Study Areas (1.5 km) ▨ Urban Area | <p>Growth Concept</p> <ul style="list-style-type: none"> □ 1, Halton Hills, Community Area □ 2, Halton Hills, Employment Area □ 3, Halton Hills, Option 2 □ 4, Halton Hills, Option 1 □ 5, Milton, Community Area □ 6, Milton, Employment Area |
|---|--|---|

Figure 5
Halton Region Official Plan
Agricultural System

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A review of the Halton Region Official Plan (Office Consolidation June 19, 2018) Map IC illustrated the Future Strategic Employment Areas. Figure 5 illustrated the Future Strategic Employment Areas. It was noted that significant portions of the Study Areas are located within the Future Strategic Employment Areas, indicating Halton Region’s future considerations for those lands.

It is clear from this mapping that the future focus of the lands identified as Future Strategic Employment Areas will be for employment lands and not for agricultural uses.

3.4.2 TOWN OF HALTON HILLS OFFICIAL PLAN

The *Town of Halton Hills Official Plan (May 1, 2019, Consolidation)* was reviewed to determine the designated land uses within the Study Areas and Secondary Study Areas. The following section provides policy, select mapping from the Official Plan and comment on how the Official Plan relates to the Study Areas and Secondary Study Areas that are located within the Town of Halton Hills.

Figure 6 Town of Halton Hills Schedule IA – Land Use Plan

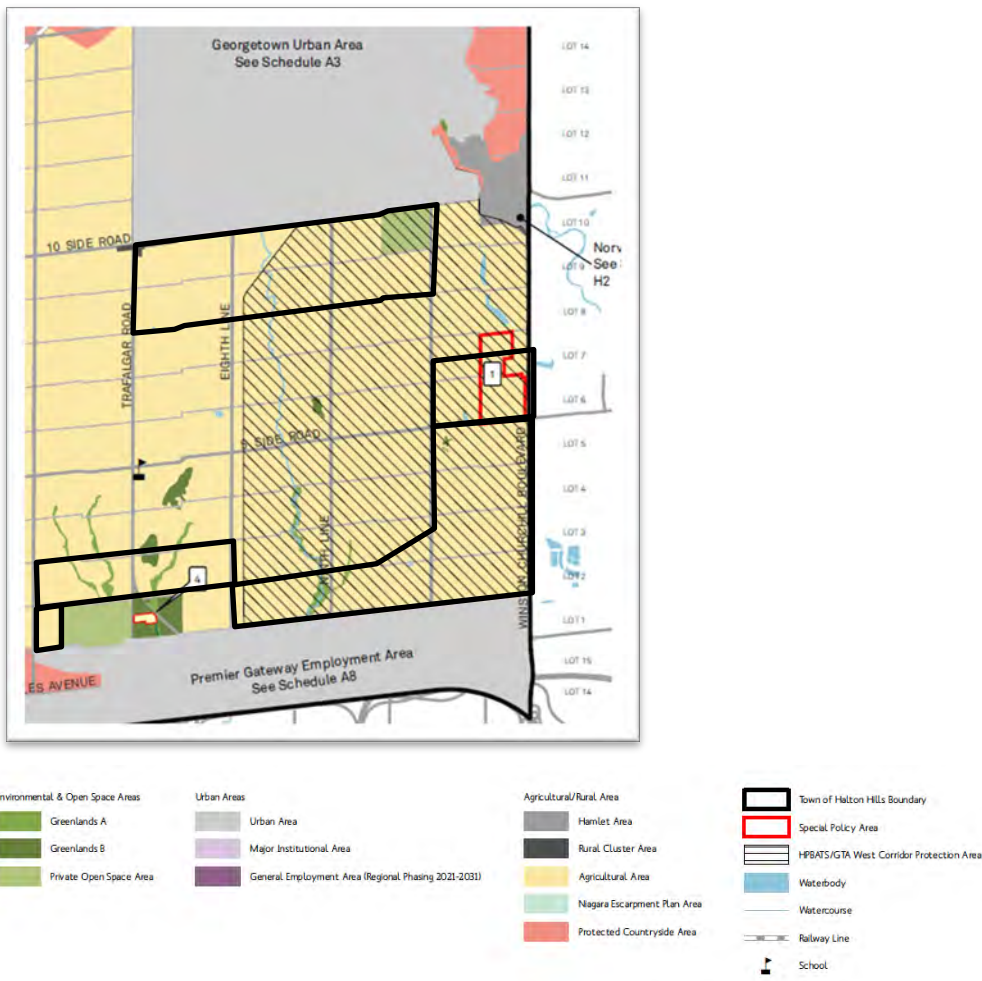


Figure 6 provides a select portion of the *Town of Halton Hills Official Plan (May 1, 2019 Consolidation) Schedule 1A – Land Use Plan*. As illustrated in Figure 6, the 5 portions of the Study Areas located within the Town of Halton Hills were comprised of Agricultural Areas, Greenlands A and Greenlands B areas. The greatest portions of the Study Areas were considered as Agricultural Areas.

It is also noted that portions of 3 of the Study Areas were also within the HPBATS/GTA West Corridor Protection Area. The Halton-Peel Boundary Area Transportation Study (HPBATS) was a joint study between the Region of Peel, Halton Region, the City of Brampton, the Town of Caledon and the Town of Halton Hills that had objectives of an interconnected roadway network near the Halton-Peel Boundary, easier use of public transit, carpooling and High Occupancy Vehicle (HOV) lanes, and improving the flow of inter-regional traffic.

Further, that the majority of the Study Areas within Halton Hills abut existing urban land uses and designations including Georgetown, Milton, the City of Brampton and the City of Mississauga.

The Secondary Study Areas within the Town of Halton Hills (not illustrated for clarity of describing the Study Areas), comprised Agricultural Areas, Greenlands A, Greenlands B, Urban Areas, Hamlet Areas, and Protected Countryside Areas.

A further review of Amendment 10 Schedule A17 – Future Strategic Employment Areas (no date) to the *Town of Halton Hills Official Plan (May 1, 2019 Consolidation)* illustrated that portions of the Study Areas within the Town of Halton Hills comprised Agricultural Areas, Greenlands A, Greenlands B, and proposed Future Strategic Employment Areas. Figure 7 illustrates a select portion of Schedule A17 with the Study Areas overlay in a solid black line.

There are no specialty crop areas defined in the *Town of Halton Hills Official Plan (May 1, 2019 Consolidation) Schedule 1A – Land Use Plan*. No portions of the Study Areas or Secondary Study Areas are located within a Municipality designated Specialty Crop Area.

General Agricultural Area policies are presented in Part E (Section E1.4) of the *Town of Halton Hills Official Plan (May 1, 2019 Consolidation)*. Select policies are provided below.

E1.4 LAND USE POLICIES

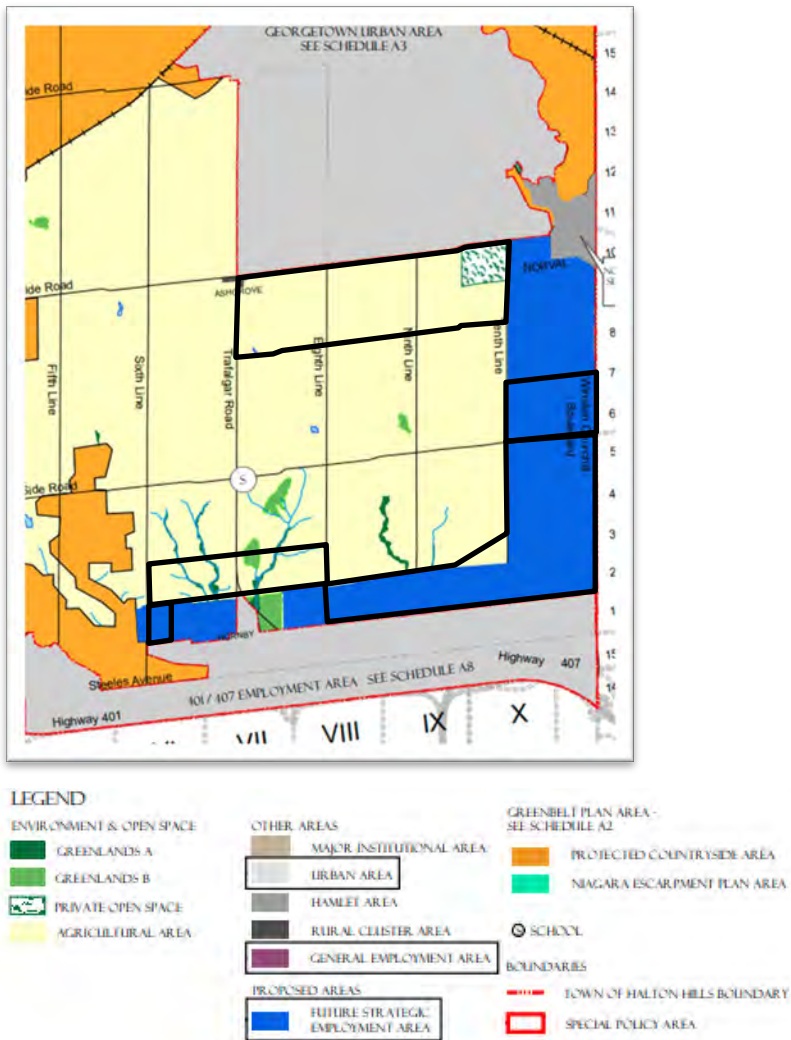
E1.4.1 The Creation of New Lots

In accordance with the intent of this Plan to maintain and protect the agricultural resources and rural character of the Town, lot creation is prohibited unless specifically provided for in Section F1.2 of this Plan.

E1.4.2 Accessory Residential Uses on Farm Properties

The establishment of additional dwelling unit(s) on a commercial farm for bona fide farm help is permitted, provided the lands are appropriately zoned. Prior to considering an application for re-zoning, and/or site plan approval in accordance with Section G5 of this Plan, Council shall be satisfied that the second dwelling unit:

Figure 7 Town of Halton Hills Official Plan Amendment No. 10



- a) is required for farm help as set out in a detailed submission addressing matters such as labour requirements related to the size and nature of the farm operation, and an assessment of the available residential accommodation on the farm;
- b) will be located within the existing farm-building cluster;
- c) can be serviced by appropriate sewage and water services; and,
- d) will be designed and/or located to be compatible or otherwise blend in with the farm operation.

E1.4.6 Commercial Uses on Farm Properties

Secondary commercial uses on farm properties are permitted subject to Site Plan Control in accordance with Section GB of this Plan. Prior to approving such an application, Council shall be satisfied that:

- a) the use is clearly associated with and located on a commercial farm;
- b) the retail component has a gross floor area of no more than 500 square metres; and,
- c) the majority of the products offered for sale, in terms of monetary value, are produced or manufactured on the farm property.

The implementing Zoning By-law shall further detail appropriate performance standards for secondary commercial uses on farm properties.

EI.4.7 Farm Related Tourism Establishments

Given the proximity of the Town to growing urban areas, the Town supports the development of uses that highlight the importance and value of the agricultural economy. On this basis, uses such as farm machinery and equipment exhibitions, farm tours, petting zoos, hay rides and sleigh rides, processing demonstrations, pick your own produce, small-scale farm theme playgrounds for children and small-scale educational establishments that focus on farming instruction are permitted in the Agricultural Area designation as an accessory use on a commercial farm subject to Site Plan Control in accordance with Section GB of this Plan. Prior to approving such an application, Council shall be satisfied that:

- a) the proposed use shall not have a negative impact on the enjoyment and privacy of neighbouring properties;
- b) adequate on-site parking facilities are provided for the use, in addition to the parking required for the principal use on the property, and such parking is provided in locations compatible with surrounding land uses;
- c) the proposed access to the site will not cause a traffic hazard;
- d) the proposed use can be serviced with an appropriate water supply and an appropriate means of sewage disposal;
- e) the proposed use enhances the rural and open space character of the Town through the preservation of older barns and/or the establishment of a built form that is compatible with the rural surroundings;
- f) the building housing the proposed use is located within the existing farm-building cluster where possible and shall utilize a common driveway with the principal use of the property, and,
- g) the signage advertising the use is to be designed and located in accordance with the Town's sign by-law and where applicable the development criteria contained in the Niagara Escarpment Plan.

Farm related tourism uses shall not exceed 250 square metres of gross floor area. The implementing Zoning By-law shall further detail appropriate performance standards for the farm-related tourism establishments.

EI 4.9 Recreational and Other Non-Agricultural Uses

The development of new recreational uses and expansions to existing recreational uses, such as golf courses and driving ranges, and cemeteries is not permitted on lands designated Agricultural Area by this Plan since it is the intent of this Plan to protect lands which are suitable for agricultural uses for as long as possible. However, Official Plan and Zoning By-law applications to develop such uses may be considered subject to the submission of appropriate studies, including an Agricultural Impact Assessment, that demonstrates to the satisfaction of the Town and the Region of Halton that:

- a) there is a need within the planning horizon of this Plan for the proposed use;
- d) the proposed use can be serviced with an appropriate water supply and an appropriate means of sewage disposal;
- e) the proposed use enhances the rural and open space character of the Town through the preservation of older barns and/or the establishment of a built form that is compatible with the rural surroundings;
- f) the building housing the proposed use is located within the existing farm-building cluster where possible and shall utilize a common driveway with the principal use of the property, and,
- g) the signage advertising the use is to be designed and located in accordance with the Town's sign by-law and where applicable the development criteria contained in the Niagara Escarpment Plan.

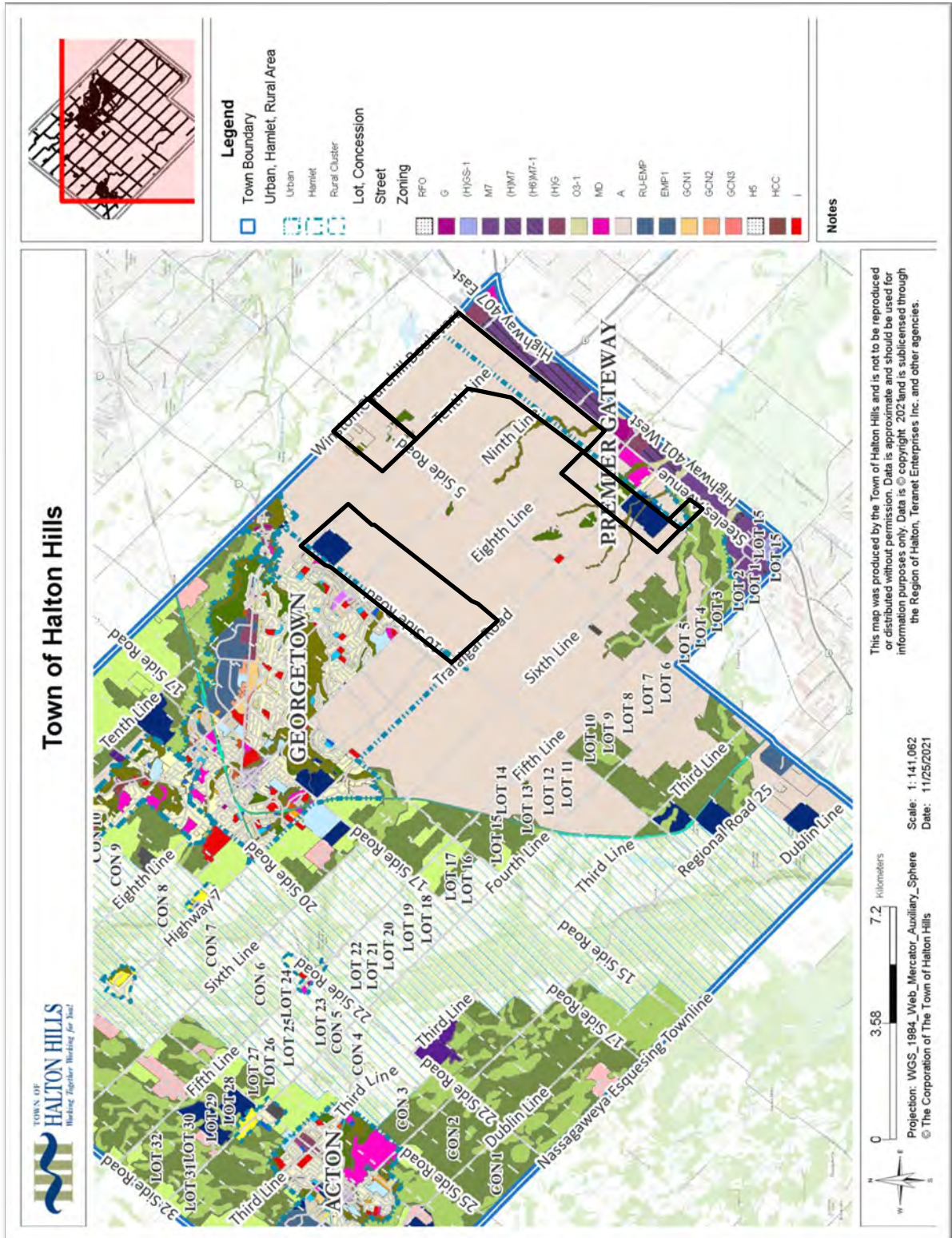
Farm related tourism uses shall not exceed 250 square metres of gross floor area. The implementing Zoning By-law shall further detail appropriate performance standards for the farm-related tourism establishments.

3.4.3 TOWN OF HALTON HILLS ZONING BY-LAW 2010-0050

The Town of Halton Hills Zoning By-Law 2010-0050 (Consolidated December 2019) was reviewed to determine the designated zoning on the lands within the Study Areas and Secondary Study Areas in the Town of Halton Hills.

Figure 8 illustrates a portion of the online interactive zoning designations for the Study Area and portions of the Secondary Study Area. As illustrated on Figure 8, portions of the Study Area include areas zoned as A – Agricultural Zone, EPI – Environmental Protection One, EP2 –

Figure 8 Town of Halton Hills Zoning By-Law 2010-0050



Environmental Protection Two, and RU-EMP(14) – Rural Employment Zone. The Secondary Study Area includes portions of A – Agricultural Zone, EP1 - Environmental Protection One, EP2 - Environmental Protection Two, D - Development, RCRI – Rural Cluster Residential, OS4 – Open Space, RCC – Rural Cluster Commercial, (H)C – Hamlet Commercial, D(24) - Development, O3-1 -. The following symbols were illustrated on the online interactive Zoning map, but no reference to the symbol was found in the *Town of Halton Hills Zoning By-Law 2010-0050 (Consolidated December 2019)*, (H)M7, C, (H)G, and O3-1.

Part 9 of the *Town of Halton Hills Zoning By-Law 2010-0050 (Consolidated December 2019)* provides comment on the permitted uses in the Non-Urban Zones. Agricultural uses are listed under the Non-Urban Zones. Zone standards for Agriculture indicate a minimum lot area of 4.0 ha.

3.4.4 TOWN OF MILTON OFFICIAL PLAN

The *Town of Milton Official Plan (Consolidated August 2008)* and Official Plan Amendment No.31 were reviewed to determine the designated land uses within the Study Areas and Secondary Study Areas in the Town of Milton. The review of the documentation indicated that there is an approved Official Plan and that there are Official Plan Amendments that are subject to approval. The following section provides policy, mapping and comment on the official plan.

Figure 9 provides an illustration of select portions of the *Town of Milton Official Plan Amendment No. 31 Schedule A – Land Use*. As illustrated in Figure 9, portions of the Study Area are considered Agricultural Area and Natural Heritage Area. Portions of the Secondary Study Areas have been defined as Urban Areas (Milton and the City of Mississauga), Agricultural Area, Halton Waste Management Site, Parkway Belt West Plan Area, Natural Heritage Areas, and Greenbelt Natural Heritage Area. There are no specialty crop areas defined in the Town of Milton Official Plan (Consolidated August 2008) Schedule A – Land Use.

General Agricultural Area policies are presented in Section 4.4 of the *Town of Milton Official Plan (Consolidated August 2008)*. The respective policies are provided below.

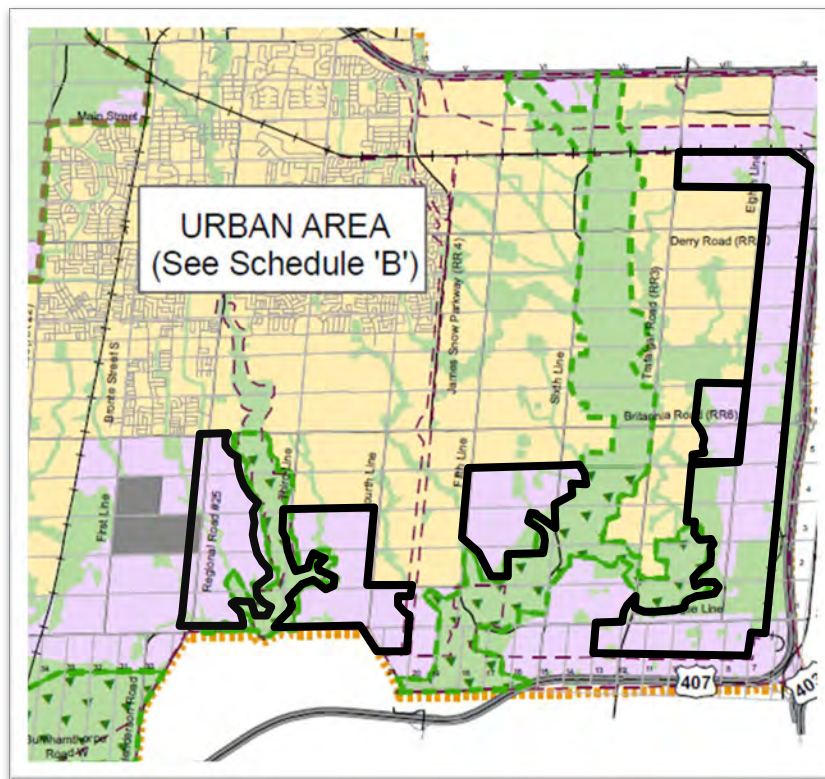
4.4.1 GENERAL PURPOSE

4.4.1.1 *The purpose of the Agricultural Area designation is:*

- a) *To recognize agriculture as the primary activity and land use;*
- b) *To preserve prime agricultural soil;*
- c) *To maintain as much as possible lands for existing and future farm use;*
- d) *To protect farms from incompatible activities and land uses which would limit agricultural productivity or efficiency;*
- e) *To reduce the fragmentation of lands suitable for agriculture and provide for their consolidation;*
- f) *To provide for the rental of farming lands for agricultural purposes;*
- g) *To promote a diverse, innovative and economically strong agricultural industry in Milton;*
- h) *To promote agriculture-related tourism and direct sales of farm produce and accessory products to visitors;*

- i) To preserve the farm community as an important part of the Town's rural fabric;
- j) To promote environmentally sensitive and sustainable farm practice;
- k) To retain or increase tree cover for harvest, soil erosion protection and buffering from adjoining non-farm land;
- l) To preserve the open-space character, topography and landscape of the Agricultural Area;
- m) To ensure that lands can sustain agricultural activity without environmental degradation;
- n) To promote agricultural uses in a manner sensitive to the ecological balance and the farming community; and,
- o) To prohibit the dumping of non-agricultural soils, fill, concrete or other such materials anywhere within the Agricultural Area.

Figure 9 Schedule A – Land Use (Town of Milton Official Plan Amendment No.31)



No portions of the Study Area or Secondary Study Area are located within a Municipality designated Specialty Crop Area.

3.4.5 THE CORPORATION OF THE TOWN OF MILTON REPORT # PD-029-18 (JUNE 18, 2018),

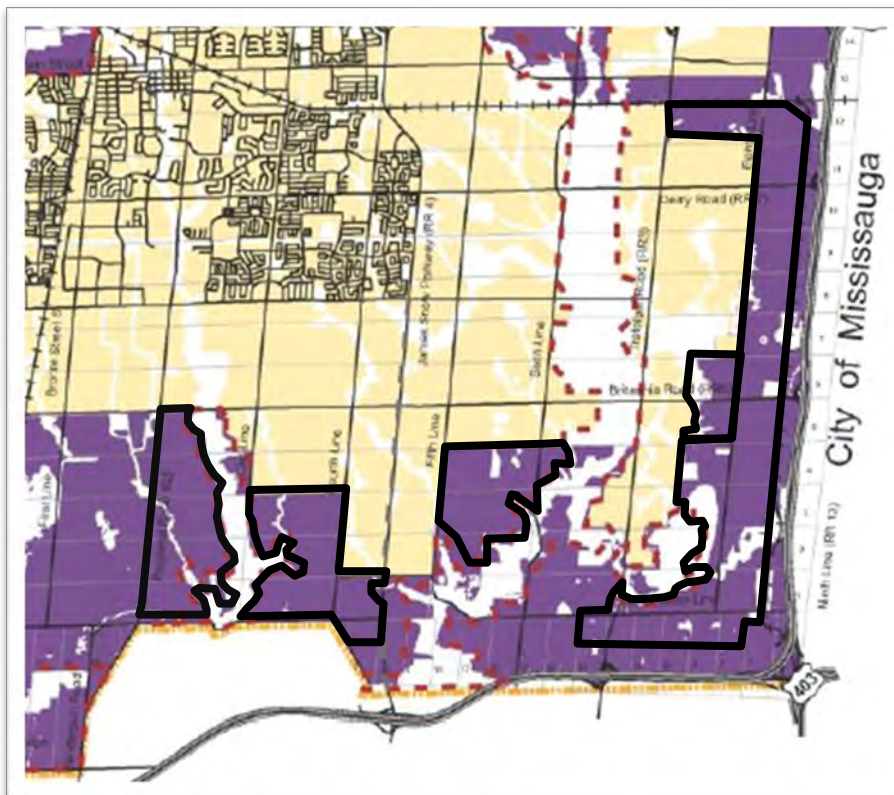
The Corporation of the Town of Milton Report # PD-029-18 (June 18, 2018), the Amendment No. 31 to the Official Plan of the Town of Milton (August 2020), and the Town of Milton website were reviewed to determine the status and changes to the land use mapping for the Town of Milton.

The review of the Corporation of the Town of Milton Report # PD-029-18 (June 18, 2018), the Amendment No.31 to the Official Plan of the Town of Milton (August 2020) illustrated the Agricultural System and Settlement Areas of the Town of Milton.

Figure 10 illustrates a portion of Schedule 18 (draft) of the Corporation of the Town of Milton Report # PD-029-18 (June 18, 2018).

The approximate location of the Study Areas is illustrated as a solid black line. The Secondary Study Areas were not illustrated for the purposes of clearly identifying the Study Areas. As illustrated in Figure 10, the Study Areas are located within the Prime Agricultural Area designations.

Figure 10 Town of Milton Official Plan Amendment No. 31 Schedule 18 (Draft)





3.4.6 THE TOWN OF MILTON COMPREHENSIVE ZONING BY-LAW

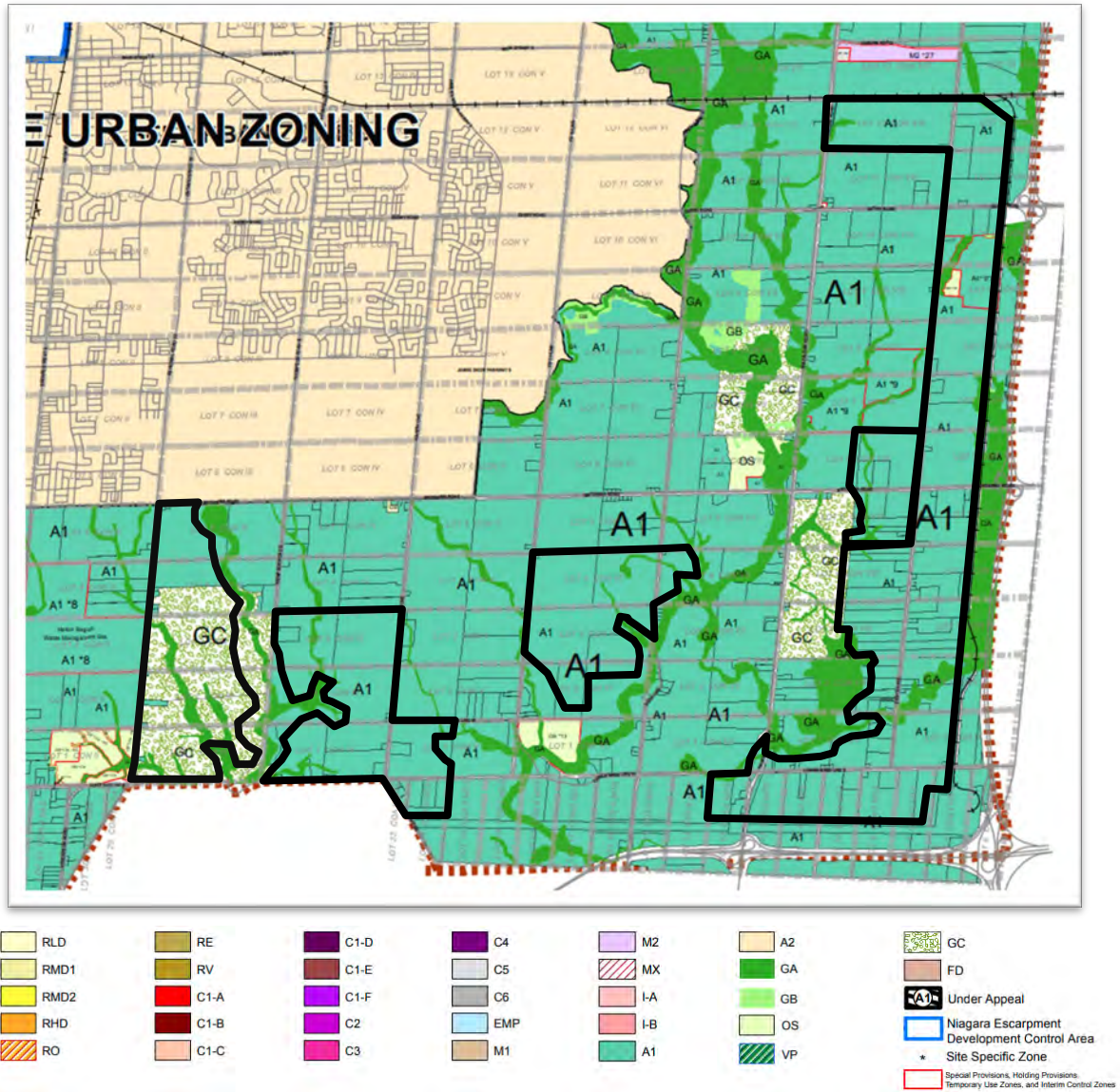
A review of the *Town of Milton Comprehensive Zoning By-Law 144-2003 (Consolidation October 2019)* and the *Town of Milton Comprehensive Zoning By-Law 016-2014 (HUSP Urban Area – Consolidation June 2019)* was completed to determine the respective zoning within the Study Area and Secondary Study Areas. It was determined the *Town of Milton Comprehensive Zoning By-Law 144-2003 (Consolidation October 2019)* provided zoning information for the rural areas, and the *Town of Milton Comprehensive Zoning By-Law 016-2014 (HUSP Urban Area – Consolidation June 2019)* provided zoning for the urban areas.

Figure 11 illustrates select portions of the Town of Milton Comprehensive Zoning By-Law 144-2003 – Rural Area (Planning and Development Department). As illustrated in Figure 11, the Study Areas comprise AI Agriculture, GC Golf Course, GA Greenlands A, AI*177 Agriculture (Union Gas Compressor Station), and GB Greenlands B.

The approximate location of the Study Area is illustrated with a solid black line circle. The approximate location of the Secondary Study Area is illustrated with a dashed black line circle.

There is no zoning in place for Specialty Crop lands.

Figure 11 Town of Milton Comprehensive Zoning By-Law 144-2003



4 AGRICULTURAL RESOURCE POTENTIAL

4.1 PHYSICAL CHARACTERISTICS

The physiographic resources within the Study Area and the Secondary Study Area are described in this section. The physiographic resources identify the overall large area physical characteristics documented as background to the soils and landform features. These characteristics are used to support the description of the soils and agricultural potential of an area.

4.1.1 PHYSIOGRAPHY

On review of the Land Information Ontario (LIO) digital physiographic region data, and *The Physiography of Southern Ontario 3rd Edition*, (Ontario Geological Survey Special Volume 2, Ministry of Natural Resources, 1984), it was determined that portions of the Study Areas and the Secondary Study Areas are located within the Peel Plain Physiographic unit and the South Slope Physiographic Unit.

The Peel Plain Physiographic unit is described as a level to undulating tract of clay soil material covering the central portions of Halton, Peel and York Regions. This area has a gradual slope toward Lake Ontario. Drainage from this area is through the Credit, Humber, Rouge and Don Rivers, each of which have cut deep valley systems.

The South Slope Physiographic Region is considered the southern slopes of the Oak Ridges Moraine ranging from the Niagara Escarpment to the Trent River. The South Slope Physiographic Region topography generally slopes down toward Lake Ontario. East of Maple the slope is smooth and drumlinized. West of Maple the surface is associated with ground moraine with limited topography. Stream courses have carved steep sided channels in the South Slope Physiographic Region.

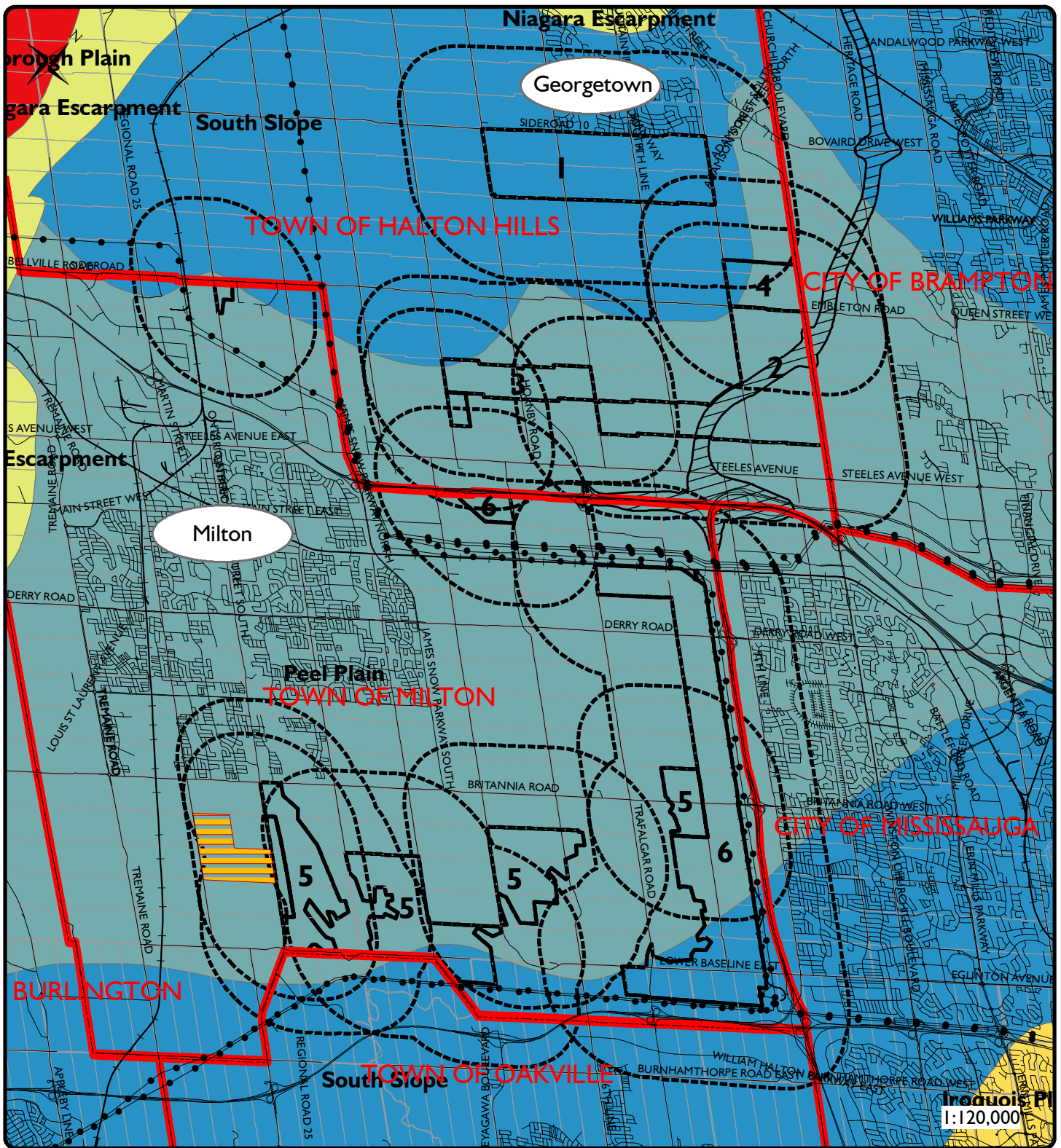
Figure 12 illustrates the location of the Study Areas and the Secondary Study Areas with respect to the Physiographic Regions in Ontario.

4.1.2 TOPOGRAPHY AND CLIMATE

Topographic information was reviewed and correlated to the 1:10000 scale Ontario Base Mapping, Land Information Ontario digital contour mapping, aerial photo interpretation and windshield surveys.

The topography of the Study Area is comprised of gentle to moderate sloping lands primarily used for agricultural production of common field crops. Steep sloping lands were noted in areas adjacent to stream courses.

Climate data was taken from the OMAFRA document titled 'Agronomy Guide for Field Crops –



Legend

●—● Hydro Line (MNRF)	Growth Concept	REGION
— Railways (MNRF)	1, Halton Hills, Community Area	Flamborough Plain
— Roads (MNRF)	2, Halton Hills, Employment Area	Guelph Drumlin Field
▨ GTA West Technically Preferred Route	3, Halton Hills, Option 2	Horseshoe Moraines
▨ Landfill (MNRF)	4, Halton Hills, Option 1	Iroquois Plain
— Lot Lines (MNRF)	5, Milton, Community Area	Niagara Escarpment
▭ Municipal Boundary (MNRF)	6, Milton, Employment Area	Norfolk Sand Plain
⋯ Secondary Study Areas (1.5 km)		Peel Plain
		South Slope

Figure 12
Physiography

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 November 2021

Publication 811 (June 2009)' and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Factsheet – Crop Heat Units for Corn and Other Warm Season Crops in Ontario, 1993.

The Study Area and Secondary Study Area are located near the 3100 Crop Heat Units (CHU-MI) available for corn production in Ontario. The Crop Heat Units (CHU) index was originally developed for field corn and has been in use in Ontario for 30 years. The CHU ratings are based on the total accumulated crop heat units for the frost-free growing season in each area of the province. CHU averages range between 2500 near North Bay to over 3500 near Windsor. The higher the CHU value, the longer the growing season and greater are the opportunities for growing value crops.

Crop Heat Units for corn (based on 1971-2000 observed daily minimum and maximum temperature (OMAFRA, 2009)) map is illustrated on Figure 13. The approximate location of the Study Area and Secondary Study Area is marked with a blue star.

Figure 13 Crop Heat Units Map



Source: Figure 1-1 Crop Heat Units – Agronomy Guide for Field Crops (Publication 811)

4.2 EXISTING LAND USE

The land use for both the Study Areas and the Secondary Study Areas was completed through windshield surveys (completed in September to November 2021), a review of recent aerial photography, Google Earth Imagery, Bing Imagery, Birdseye Imagery, the Region of Halton online Imagery, the Town of Halton Hills online imagery, the Town of Milton online imagery, and correlation to the OMAFRA Land Use Systems mapping. The review of land use included the

documentation of land uses on aerial photography during the roadside reconnaissance survey. This recorded data was digitized in Arcmap resulting in the creation of more than 1900 individual land use polygons. The assessment of the Secondary Study Areas, and intersection and overlap of the Secondary Study Areas resulted in the creation of more than 4800 land use polygons. Agricultural and non-agricultural land uses are illustrated on Figure 14.

The terms used in the Agricultural Land Use assessment were derived from the OMAFRA Agricultural Resource Inventory (ARI) 1983 Coverage. It should be noted that not all terms were relevant or used in this AIA. Only the terms that were appropriate for this area were utilized. For the purposes of this AIA additional terms or more relevant terms such as 'common field crop' were used. As example, 'common field crop' indicates crop production that includes corn and soybean. The ARI 1983 Coverage land use terms include:

- Built up
- Cherries
- Corn System
- Extraction Pits and Quarries
- Grazing System
- Hay System
- Idle Agricultural Land (5 - 10 years)
- Idle Agricultural Land (> 10 years)
- Market Gardens/Truck Farms
- Mixed System
- Nursery
- Orchard
- Pasture System
- Recreation
- Reforestation
- Sod Farm
- Swamp/Marsh/Bog
- Unknown
- Vineyard
- Vineyard-Orchard
- Water
- Woodlands

The windshield survey identified the types of land uses including farm and non-farm uses (built up areas, commercial, and roads). Farms were identified as livestock, cash crop, retired, or remnant. Livestock operations were further differentiated to the type of livestock based on the livestock seen at the time of the survey, through a review of on farm infrastructure (type of buildings, manure system, feed (bins, bales), and types of equipment) or through any signage associated with the respective agricultural operation. This type of assessment may indicate that a farm or barn has the capability of a certain type of livestock but does not actually have livestock at that location. The data is collected in this fashion to aid in the Minimum Distance Separation (MDSI) calculations that are provided later in this study.



Legend

- Hydro Line (MNRF)
- Railways (MNRF)
- Roads (MNRF)
- ▨ GTA West Technically Preferred Route
- ▤ Secondary Study Areas (1.5 km)
- ▧ Landfill (MNRF)
- ▩ Lot Lines (MNRF)
- ▭ Municipal Boundary (MNRF)

Growth Concept

- 1, Halton Hills, Community Area
- 2, Halton Hills, Employment Area
- 3, Halton Hills, Option 2
- 4, Halton Hills, Option 1
- 5, Milton, Community Area
- 6, Milton, Employment Area

Existing Land Use

- built up
- common field crop
- forage/pasture
- garden
- landfill
- market garden
- nursery stock
- open field
- orchard
- plowed
- pond
- recreation
- scrubland
- small grains
- unknown
- vineyard
- woodlot

Figure 14
Existing Land Use

DBH Soil Services Inc.
November 2021

It should be noted that the roadside survey is based on a line-of-sight assessment process. Therefore, dense brush, woodlands, tall crops, and topography can prevent an accurate assessment of some fields and/or buildings. In those instances, measures are taken to try to identify the crop and/or buildings through conversations with landowners (if applicable) or review of aerial photography. In some instances, no information is available. In those instances, the field polygon will be identified as 'unknown crop' or 'unknown building use or type'.

Agricultural cropping patterns were identified and mapped. Corn and soybean crops were mapped as common field crops. Small grains are typically characterized as including winter wheat, barley, spring wheat, oats and rye. Forage crops may include mixed grasses, clovers and alfalfa. Other areas used for pasture, haylage or hay were mapped as 'forage/pasture'.

Non-farm (built up or disturbed areas) uses may include non-farm residential units, commercial, recreational, estate lots, services (utilities), industrial development and any areas that have been man-modified and are unsuitable for agricultural land uses (cropping).

Land Use information was digitized in Geographic Information System (GIS - ARCMAP) to illustrate the character and extent of Land Use in both the Study Areas and the Secondary Study Areas. Area calculations for each land use polygon (area) were calculated within the GIS software and exported as tabular data. The data is presented as follows. Land use designations and land use definitions are provided in Table I.

Table I Typical Land Use Designations

Land Use Designation	Land Use Definitions
Built Up/Disturbed Areas	Residential, commercial, industrial, man modified, existing road system
Common Field Crop	Corn, Soybean, Cultivated
Forage/Pasture	Forage/Pasture
Garden	Small garden areas
Landfill	Municipal Landfill
Market garden	Market garden crops
Nursery stock	Nursery stock (trees, shrubs, etc)
Open field	Unused field (1 – 5 years)
Orchard	Tree fruit (apples, pears, cherries, etc)
Plowed	Plowed agricultural field
Pond	Ponded area
Recreation	Recreational land uses (golf course, soccer fields, sports fields, etc)
Scrubland	Unused field (> 5 years)
Small grains	Small grain crops (oats, wheat, barley, etc)
Unknown	Unknown land use (not visible from roadside)
Vineyard	Grape production
Woodlands	Woodlots, treed fence rows, etc

It was noted in both the Study Areas and the Secondary Study Areas, that many of the barns had been used for the production of various types of livestock in the past, and that many of those operations have retired, with a few of the barns having been demolished. A number of large horse operations were noted in the Secondary Study Areas. This type of livestock operation can be well suited to areas that are in close proximity to urban or non-agricultural land uses, as these types of facilities provide board for the horses and a place for local/urban residents to ride.

It should also be noted that this land use assessment looked at the lands and did not include the roads as part of the built-up area.

4.2.1 EXISTING LAND USE – STUDY AREA

The Study Areas land use comprised a variety of uses including built up, common field crop, forage/pasture, market garden, nursery stock, open field, orchard, planted, plowed, pond, recreation, scrubland, small grains, unknown, and woodlands.

The Halton Hills Community Area comprises land use of approximately 7.7 percent as built up, 78.2 percent as common field crop, 1.1 percent as open field, 6.0 percent as scrubland, and 7.0 percent as woodlands.

The Halton Hills Employment Area comprises land use of approximately 10.6 percent as built up, 52.9 percent as common field crop, 6.7 percent as forage/pasture, 7.9 percent as open field, 0.1 percent as orchard, 2.2 percent as planted, 0.4 percent as pond, 5.4 percent as scrubland, 8.8 percent, as small grains, and 4.9 percent as woodlands.

The Halton Hills Option 1 Area comprises land use of approximately 15.6 percent as built up, 58.3 percent as common field crop, 7.5 percent as recreation, 2.4 percent as scrubland, 2.7 percent as unknown land use, and 13.5 percent as woodlands.

The Halton Hills Option 2 comprises land use of approximately 4.7 percent as built up, 74.3 percent as common field crop, 1.0 percent as open field, 2.7 percent as scrubland, and 17.3 percent as woodlands.

The Milton Community Area comprises land use of approximately 5.9 percent as built up, 50.0 percent as common field crop, 9.3 percent as forage/pasture, 0.1 as nursery stock, 1.1 percent as open field, 3.3 percent as plowed, 0.1 percent as pond, 19.2 percent as recreation, 2.9 percent as scrubland, 3.4 percent, as small grains, 2.5 percent as unknown land use, and 2.3 percent as woodlands.

The Milton Employment Area comprises land use of approximately 24.3 percent as built up, 34.6 percent as common field crop, 5.7 percent as forage/pasture, 6.4 percent as market garden, 1.1 as nursery stock, 6.8 percent as open field, 0.1 percent as pond, 1.8 percent as recreation, 10.7 percent as scrubland, 1.6 percent as unknown land use, and 6.9 percent as woodlands.

Table 2 illustrates the percent occurrence of the land uses for Secondary Study Areas.

Table 2 Existing Land Use – Study Area Percent Occurrence

Land Use	1 – Halton Hills Community Area Percent	2 – Halton Hills Employment Area Percent	3 – Halton Hills Option 1 Percent	4 – Halton Hills Option 2 Percent	5 – Milton Community Area Percent	6 – Milton Employment Area Percent
Built Up/Disturbed Areas	7.7	10.6	15.6	4.7	5.9	24.3
Common Field Crop	78.2	52.9	58.3	74.3	50.0	34.6
Forage/Pasture	0.0	6.7	0.0	0.0	9.3	5.7
Market garden	0.0	0.0	0.0	0.0	0.0	6.4
Nursery stock	0.0	0.0	0.0	0.0	0.1	1.1
Open field	1.1	7.9	0.0	1.0	1.1	6.8
Orchard	0.0	0.1	0.0	0.0	0.0	0.0
Planted	0.0	2.2	0.0	0.0	0.0	0.0
Plowed	0.0	0.0	0.0	0.0	3.3	0.0
Pond	0.0	0.4	0.0	0.0	0.1	0.1
Recreation	0.0	0.0	7.5	0.0	19.2	1.8
Scrubland	6.0	5.4	2.4	2.7	2.9	10.7
Small grains	0.0	8.8	0.0	0.0	3.4	0.0
Unknown	0.0	0.0	2.7	0.0	2.5	1.6
Woodlands	7.0	4.9	13.5	17.3	2.3	6.9
Totals	100.0	100.0	100.0	100.0	100.0	100.0

On review of the Land Use data it was observed that the predominant land uses in the Study Areas include common field crop production, built-up areas, and woodlands. The next greatest percent of land use is derived from forage/pasture lands, small grains, and scrubland.

Recreational uses including golf courses and soccer fields were also noted within Halton Hills Option 1, Milton Community Area, and Milton Employment Areas.

4.2.2 EXISTING LAND USE – SECONDARY STUDY AREA

The Secondary Study Area consists of a variety of land uses including, but not limited to built-up/disturbed areas, common field crops, forage/pasture lands, small grains, open field, orchard, road/rail corridors, open field, pond, recreation, and woodlands areas. Also noted were areas of unknown use, due to line-of-sight restrictions where land use could not be seen from the roadside.

The Secondary Study Area Halton Hills Community Area comprises land use of approximately 25.4 percent as built up, 44.5 percent as common field crop, 6.0 percent as forage/pasture, 0.3 percent as market garden, 0.7 as nursery stock, 0.9 percent as open field, 0.1 percent as orchard, 6.0 percent as plowed, 0.1 percent as pond, 0.1 percent as recreation, 2.2 percent as

scrubland, 3.2 percent, as small grains, 0.6 percent as unknown land use, and 10.3 percent as woodlands.

The Secondary Study Area Halton Hills Employment Area comprises land use of approximately 16.5 percent as built up, 46.0 percent as common field crop, 6.6 percent as forage/pasture, 0.5 percent as market garden, 0.4 as nursery stock, 2.1 percent as open field, 0.6 percent as orchard, 0.4 percent as plowed, 0.8 percent as pond, 2.5 percent as recreation, 5.4 percent as scrubland, 4.5 percent, as small grains, 0.7 percent as unknown land use, and 10.3 percent as woodlands.

The Secondary Study Area Halton Hills Option 1 Area comprises land use of approximately 12.6 percent as built up, 42.4 percent as common field crop, 14.9 percent as forage/pasture, 0.8 percent as market garden, 1.0 as nursery stock, 1.3 percent as open field, 2.6 percent as orchard, 0.9 percent as plowed, 0.7 percent as pond, 4.0 percent as scrubland, 4.3 percent, as small grains, 1.4 percent as unknown land use, and 12.9 percent as woodlands.

The Secondary Study Area Halton Hills Option 2 Area comprises land use of approximately 13.4 percent as built up, 45.5 percent as common field crop, 6.0 percent as forage/pasture, 0.3 percent as market garden, 2.8 percent as open field, 0.1 percent as orchard, 0.9 percent as plowed, 3.8 percent as recreation, 6.3 percent as scrubland, 1.5 percent, as small grains, 0.8 percent as unknown land use, and 18.7 percent as woodlands.

The Secondary Study Area Milton Community Area comprises land use of approximately 15.3 percent as built up, 38.1 percent as common field crop, 3.7 percent as forage/pasture, 2.8 percent as landfill, 1.5 percent as market garden, 0.7 as nursery stock, 3.4 percent as open field, 0.1 percent as orchard, 1.2 percent as planted, 0.4 percent as pond, 6.1 percent as recreation, 5.7 percent as scrubland, 0.1 percent, as small grains, 0.8 percent as unknown land use, and 15.3 percent as woodlands.

The Secondary Study Area Milton Employment Area comprises land use of approximately 27.0 percent as built up, 35.8 percent as common field crop, 2.9 percent as forage/pasture, 1.9 percent as landfill, 0.2 percent as market garden, 1.8 as nursery stock, 4.8 percent as open field, 0.5 percent as planted, 0.4 percent as pond, 4.9 percent as recreation, 6.7 percent as scrubland, 0.4 percent as small grains, 0.4 percent as unknown land use, and 21.1 percent as woodlands.

Table 3 illustrates the percent occurrence of the land uses for Secondary Study Areas.

Table 3 Land Use – Secondary Study Area Percent Occurrence

Land Use	1 – Halton Hills Community Area	2 – Halton Hills Employment Area	3 – Halton Hills Option 1	4 – Halton Hills Option 2	5 – Milton Community Area	6 – Milton Employment Area
Built Up/Disturbed Areas	25.0	16.5	12.6	13.4	15.3	27.0
Common Field Crop	44.5	46.0	42.4	45.5	38.1	35.8
Forage/Pasture	6.0	6.6	14.9	6.0	3.7	2.9
Landfill	0.0	0.0	0.0	0.0	2.8	1.9
Market garden	0.3	0.5	0.8	0.3	1.5	0.2
Nursery stock	0.7	0.4	1.0	0.0	0.7	1.8
Open field	0.9	2.1	1.3	2.8	3.4	4.8
Orchard	0.1	0.6	2.6	0.1	0.1	0.0
Planted	0.0	0.0	0.0	0.0	1.2	0.5
Plowed	6.0	0.4	0.9	0.9	0.0	0.0
Pond	0.1	0.8	0.7	0.0	0.4	0.4
Recreation	0.1	2.5	0.0	3.8	6.1	4.9
Scrubland	2.2	5.4	4.0	6.3	5.7	6.7
Small grains	3.2	4.5	4.3	1.5	0.1	0.4
Unknown	0.6	0.7	1.4	0.8	0.8	0.4
Woodlands	10.3	13.0	12.9	18.7	15.3	12.1
Totals	100.0	100.0	100.0	100.0	100.0	100.0

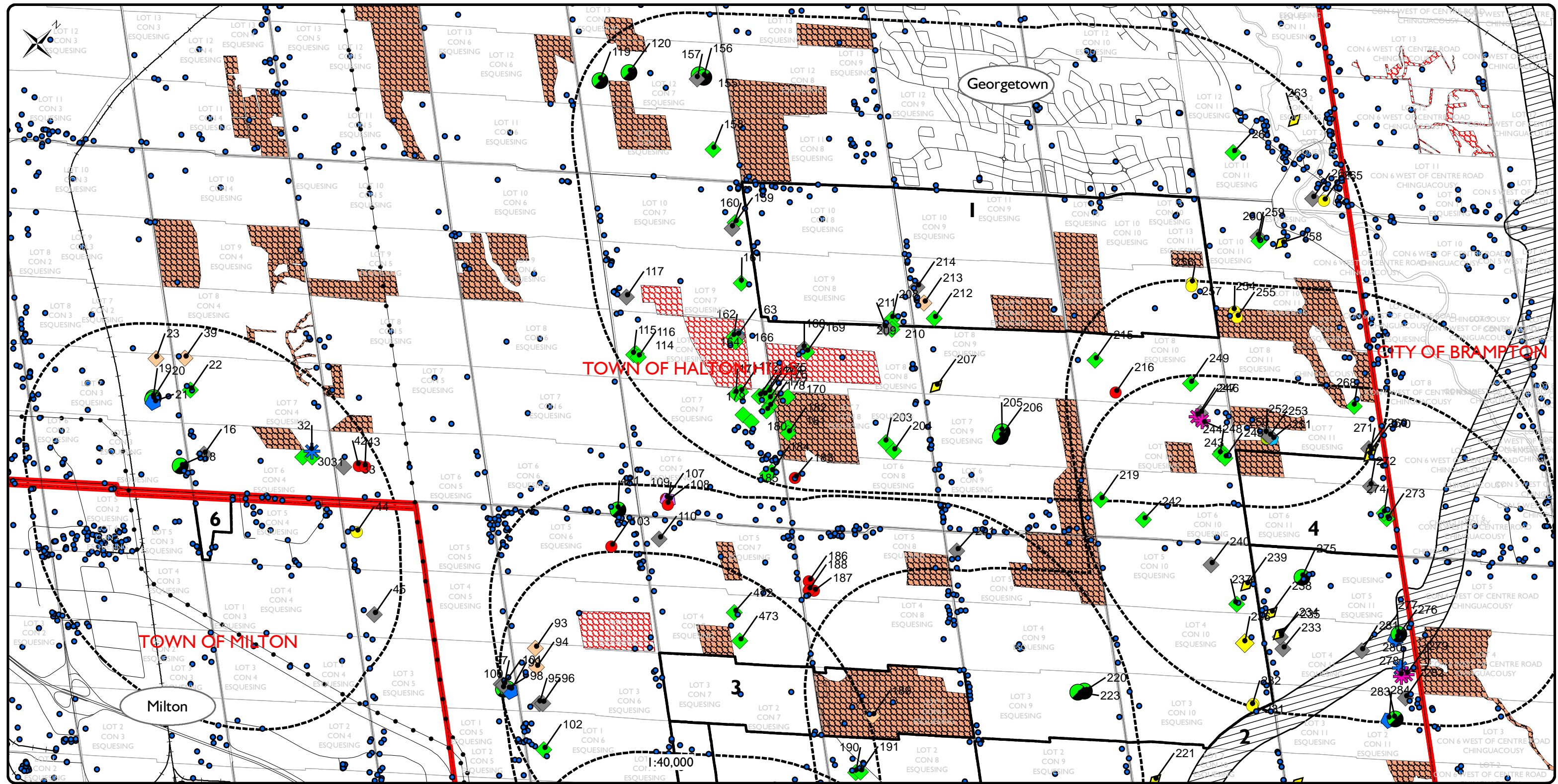
On review of the Land Use data it was observed that the predominant land uses in the Secondary Study Areas include common field crop production, built-up areas, and woodlands. The next greatest percent of land use is derived from forage/pasture lands, small grains, and scrubland.

4.3 AGRICULTURAL INVESTMENT

Agricultural investment is directly associated with the increase in capital investment to agricultural lands and facilities. In short, the investment in agriculture is directly related to the money used for the improvement of land through tile drainage or irrigation equipment, and through the improvements to the agricultural facilities (barns, silos, manure storage, sheds).

As a result, the lands and facilities that have increased capital investment are often considered as having greater tendency for preservation than similar capability lands and facilities that are undergoing degradation and decline (no or limited upkeep). The investment in agriculture is often readily identifiable through observations of the condition and type of the facilities, field observations and a review of OMAFRA artificial tile drainage mapping.

Investment in agricultural is illustrated in Figures 15a, 15b and 15c – Agricultural Investment.



Legend

- Water Wells (MOE)
- Hydro Line (MNRF)
- Railways (MNRF)
- Roads (MNRF)
- ▨ GTA West Technically Preferred Route
- ▭ Lot Lines (MNRF)
- ▬ Municipal Boundary (MNRF)
- - - Secondary Study Areas (1.5 km)

Growth Concept

- ▭ 1, Halton Hills, Community Area
- ▭ 2, Halton Hills, Employment Area
- ▭ 3, Halton Hills, Option 2
- ▭ 4, Halton Hills, Option 1
- ▭ 5, Milton, Community Area
- ▭ 6, Milton, Employment Area

Tile Drainage System Type

- ▨ Random
- ▨ Systematic

Building Code

- beef
- ▭ commercial
- ✱ dairy
- goats
- ✱ greenhouse
- ✱ hay storage
- horse
- ▭ hobby horse
- ▭ machine shed

- ponies/donkey
- remnant
- ▭ riding arena
- ▭ run in shed
- ▭ retired

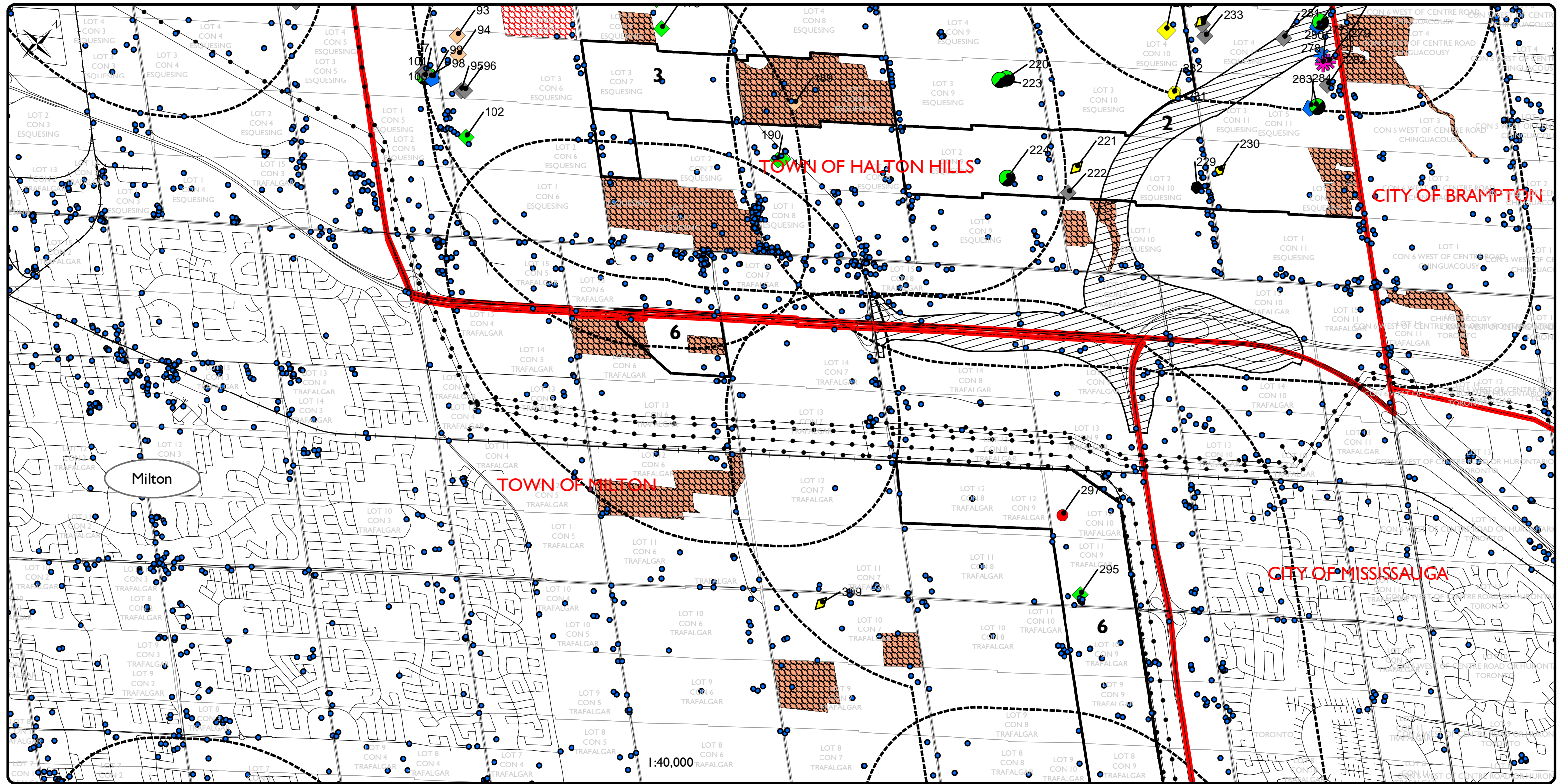
- ◆ shed
- sheep
- tension fabric
- unknown

Figure 15a

Agricultural Investment

DBH Soil Services Inc.

January 2022



Legend

- Water Wells (MOE)
- - - Hydro Line (MNRF)
- Railways (MNRF)
- Roads (MNRF)
- ▨ GTA West Technically Preferred Route
- Lot Lines (MNRF)
- ▭ Municipal Boundary (MNRF)
- - - Secondary Study Areas (1.5 km)

Growth Concept

- ▭ 1, Halton Hills, Community Area
- ▭ 2, Halton Hills, Employment Area
- ▭ 3, Halton Hills, Option 2
- ▭ 4, Halton Hills, Option 1
- ▭ 5, Milton, Community Area
- ▭ 6, Milton, Employment Area

Tile Drainage System Type

- ▨ Random
- ▨ Systematic

Building Code

- beef
- commercial
- ★ dairy
- goats

- ▭ greenhouse
- ★ hay storage
- horse
- hobby horse
- machine shed

- ponies/donkey
- remnant
- ▭ riding arena
- run in shed
- retired

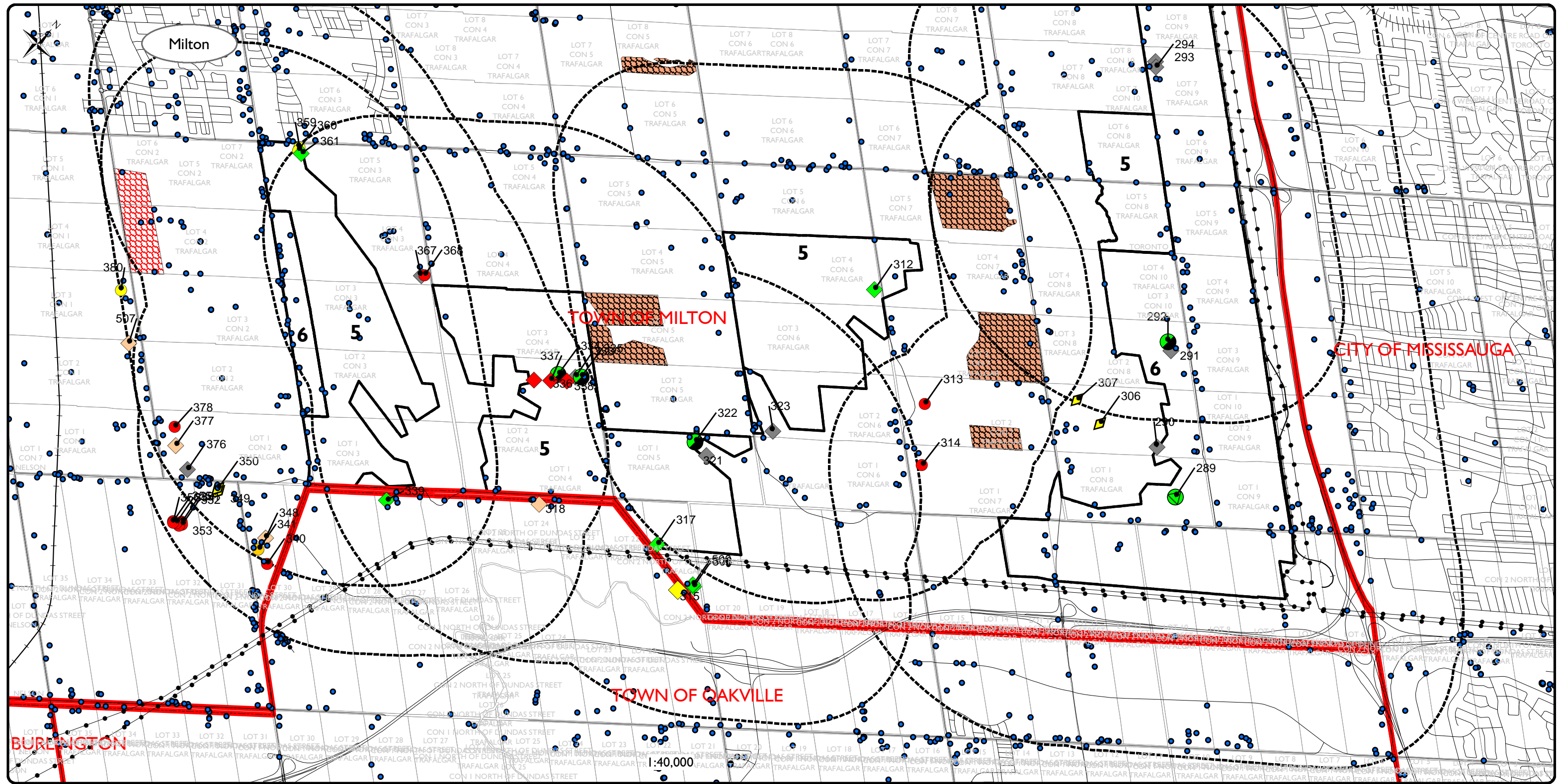
- ◆ shed
- sheep
- tension fabric
- unknown

Figure 15b

Agricultural Investment

DBH Soil Services Inc.

January 2022



Legend

- Water Wells (MOE)
- Hydro Line (MNRF)
- Railways (MNRF)
- Roads (MNRF)
- ▨ GTA West Technically Preferred Route
- ▭ Lot Lines (MNRF)
- ▭ Municipal Boundary (MNRF)
- ▭ Secondary Study Areas (1.5 km)

Growth Concept

- ▭ 1, Halton Hills, Community Area
- ▭ 2, Halton Hills, Employment Area
- ▭ 3, Halton Hills, Option 2
- ▭ 4, Halton Hills, Option 1
- ▭ 5, Milton, Community Area
- ▭ 6, Milton, Employment Area

Tile Drainage System Type

- ▨ Random
- ▨ Systematic

Building Code

- beef
- commercial
- dairy
- goats

- greenhouse
- hay storage
- horse
- hobby horse
- machine shed

- ponies/donkey
- remnant
- riding arena
- run in shed
- retired

- shed
- sheep
- tension fabric
- unknown

Figure I5c

Agricultural Investment

DBH Soil Services Inc.

January 2022

Agricultural Investment also looks at the investment in facilities that the local farmers might require (grain elevators, abattoirs, cold storage facilities). It was noted that a large poultry processing facility was located on the east side of Winston Churchill Boulevard north of Steeles Avenue. It was also noted that a large cold storage facility (Conestoga Cold Storage) was located within the urban area of the City of Mississauga, east of Winston Churchill Boulevard, between Highways 407 and 401. Additional comment regarding investment in agricultural services is provided in Section 4.7 Agricultural Systems Portal.

4.3.1 AGRICULTURAL FACILITIES

Agricultural facilities (facilities that may be capable of housing livestock) and barns were identified through a combination of aerial photographic interpretation, a review of online digital imagery (Google Earth Pro, Bing Mapping, and Birds Eye Imagery), a review of Ontario Base Mapping and roadside evaluations. The agricultural facilities or potential livestock facilities that were identified on mapping and imagery prior to conducting field investigations included buildings used for the active housing of livestock, barns that were empty and not used to house livestock, barns in poor structural condition, barns used for storage and any other large building that had the potential to house livestock. Field investigations revealed that some of the buildings identified from the preliminary mapping and imagery no longer existed (demolished or torn down), or were not agricultural, but used for activities (commercial, storage, etc).

Agricultural activities such as livestock rearing usually involve an investment in agricultural facilities. Dairy operations require extensive facilities for the production of milk. Poultry and hog operations require facilities specific for those operations. Beef production, hobby horse and sheep operations usually require less investment capital (when compared to dairy operations or other high value operations).

Some cash crop operations are considered as having a large investment in agriculture if they have facilities that include grain handling equipment such as storage, grain driers and mixing equipment that is used to support ongoing agricultural activities. Figures 15a-c illustrate the location of buildings, agricultural facilities, and tile drainage for both the Study Areas and the Secondary Study Areas.

A total of 197 agricultural facilities or buildings were identified within the Study Areas and Secondary Study Areas. Table 4 illustrates the relative number count for agricultural facilities in each Study Area and Secondary Study Area.

Table 4 Agricultural Facilities and Study Areas

Number of Agricultural Facilities	1 – Halton Hills Community Area	2 – Halton Hills Employment Area	3 – Halton Hills Option 1	4 – Halton Hills Option 2	5 – Milton Community Area	6 – Milton Employment Area
Study Area	6	19	3	1	19	9
Secondary Study Area	78	51	43	28	48	47

A description of the facilities is provided in Appendix A, while photographs and/or aerial photography/satellite imagery of the respective barns are located in Appendix B.

4.3.2 ARTIFICIAL DRAINAGE

An evaluation of artificial drainage in the Study Areas and within the Secondary Study Areas was completed through a correlation of observations noted during the reconnaissance roadside survey, aerial photographic/aerial imagery interpretation and a review of the Ontario Ministry of Agriculture and Food (OMAF) Artificial Drainage System Mapping.

Visual evidence supporting the use of subsurface tile drains would have included observations of drain outlets to roadside ditches or surface waterways, and surface inlet structures (hickenbottom or French drain inlets).

Evidence in support of subsurface tile drainage on aerial photographs would be based on the visual pattern of tile drainage lines as identified by linear features in the agricultural lands and by the respective light and dark tones on the aerial photographs, often referred to as a 'herring bone' pattern. The light and dark tones relate to the moisture content in the surface soils at the time the aerial photograph was taken.

OMAFRA Artificial Drainage System Maps were downloaded from Land Information Ontario (LIO) in October 2021 and were reviewed to determine if an agricultural tile drainage system had been registered anywhere in the Study Areas, or in the Secondary Study Areas. It should be noted that there are inherent limitations in the OMAFRA data, as the data is a compilation of data from multiple sources including paper maps and digital files. OMAFRA is aware of the issue.

The OMAFRA Artificial Drainage System data illustrates the location and type of tile drainage systems. The type of tile drainage system is defined as either 'random' or 'systematic'. A random tile drainage system is installed to drain only the low areas or areas of poor drainage within a field. A systematic tile drainage system refers to a method of installing drain tile at specific intervals across a field, in an effort to drain the entire field area. From a cost perspective, a systematic tile drainage system would have a greater cost, or investment in agriculture when compared to a random tile drainage system.

Figures 15a-c illustrates the OMAFRA Artificial Drainage Systems Mapping for the Study Areas and Secondary Study Areas. As observed in Figures 15a-c, there are two areas of systematic tile drainage in the Halton Hills Community Area concept lands (1), there are small areas of systematic tile drainage in the Halton Hills Employment Area concept lands, there is a large section of systematic tile drainage in the Halton Hills Option 2 concept lands (3), there are areas of systematic tile drainage within Halton Hills Option 1 concept lands (4), there are no tile drainage systems identified in the Milton Community Area concept lands (5), and there are small areas of systematic tile drainage within the Milton Employment concept lands (6).

Any proposed development in these areas need to take into consideration the extent and location of tile drainage systems to ensure that there is no damage to any tile drainage system outside the concept areas.

4.3.3 WATER WELLS

A review was completed of the MNRF Water Well records to determine the extent of recorded water wells in the Study Areas and the Secondary Study Areas. The review of water well records involved a download of the latest version of the Water Well Records from the Land Information (LIO) data warehouse. The water well data is provided by the Ontario Ministry of the Environment to the LIO data warehouse. The data that is presented in this report is a direct representation of the MOE dataset.

The Water Well locations are identified on Figures 15a-c. As illustrated on Figures 15a-c, numerous water wells are located within both the Study Areas and the Secondary Study Areas.

The review of water well records was completed to determine the location and extent of water wells in the area, and to identify any potential concerns or impacts that may occur as a result of the proposed future development of the growth concepts. Generally, many livestock operations use ground water for their livestock, and any disruption to the water in terms of quality and/or quantity could have a significant impact to the operation.

Due to the locations and numbers of water wells in the Study Areas and the Secondary Study Areas, it will be important to either preserve the existing wells, or properly engineer the closing/capping of the well to prevent potential groundwater contamination.

4.3.4 IRRIGATION

Observations noted during the reconnaissance survey indicated that farms within the Study Area and the Secondary Study Area lands are not irrigated. It was noted that none of these lands are not set up for the use of irrigation equipment. Visual evidence supporting the use of irrigation equipment would include the presence of the irrigation equipment (piping, water guns, sprayers, tubing/piping, etc), the presence of a body of water (pond, lake, water course) capable of sustaining the irrigation operation and lands that are appropriate for the use of such equipment (large open and level fields).

There appears to be no capital investment related to irrigation systems the Study Areas or the Secondary Study Areas.

4.3.5 LANDFORMING

Landforming is the physical movement of soil materials to create more uniformly sloped lands for the ease of mechanized operations. The costs associated with landforming can be exorbitant, depending on the volumes of soils moved.

No landforming for the purposes of enhancing an agricultural operation was noted within the Study Areas or the Secondary Study Areas.

Significant landforming for the purposes of development were noted in many areas that are designated urban.

4.4 MINIMUM DISTANCE SEPARATION (MDS I)

Minimum Distance Separation (MDS) formulae were developed by OMAFRA to reduce and minimize nuisance complaints due to odour from livestock facilities and to reduce land use incompatibility.

A review of the Minimum Distance Separation (MDS) Document – Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks (Publication 853. Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). 2016) revealed that MDS guideline #6 indicates that all livestock facilities within a 750 m distance of a Type A land use and a 1500 m distance of a Type B land use shall be investigated.

MDS guideline #10 indicates that MDS I setbacks are “required for all proposed amendments to rezone or redesignate land to permit development in prime agricultural areas and rural lands present zoned or designated for agricultural use.”

As required in the MDS Guidelines (MDS Guideline # 16 – Obtaining Required Information to Calculate the MDS Setbacks) every effort is to be made to contact landowners in an attempt to collect accurate and site-specific data for each of the agricultural facilities that have the potential to house livestock within the 1500 m buffer. However, during these times of Covid-19, the ability to approach a landowner directly at their house, or in their farmyard, has been reduced. As a result, attempts were made to identify and contact each landowner by telephone. In the instances where the landowner was not available during by telephone, data was collected through alternate means including the use of online imagery (Google Earth, Bing Imagery, Birdseye Imagery), Agricultural Information Atlas (Ontario Ministry of Agriculture, Food and Rural Affairs, (OMAFRA)), Region of Halton, Town of Milton, and the Town of Halton Hills online interactive mapping, and internet searches.

Further, in instances where landowners could not be contacted, the livestock potential was based on the most appropriate livestock for that particular livestock facility (ie: based on observed signage, manure piles, feed storage, barn type/style, discussions with adjacent neighbours/landowners). The respective size of the farm property was determined from Township Assessment data. The relative physical size (area in m²) of the agricultural facility was measured from online sources such as Google Earth. The use of these data sources will provide a potentially greater MDS I distance then if the data is collected from the landowner, due to the measurement of the entire barn roof area (including eaves/overhang) and that the entire area measured is used as potential livestock space, thereby assuming that no portions of the barn are used for storage or feed (ie. No feed rooms, offices, tack rooms, etc).

MDS guideline #34 Type B land uses (more sensitive) are typically characterized by a high density of human occupancy, habitation or activity including an Official Plan amendment to permit development on land outside a settlement area, or a zoning by-law amendment to permit development on land outside a settlement area. The proposed use for the Study Area lands (Community and Employment) requires that the MDS study will be completed to a Type B assessment.

Therefore, with respect to the above-mentioned guidelines, MDS I calculations are required for this study. MDS I calculations were completed as part of the requirement of this study and were completed for the Study Areas and the Secondary Study Areas.

Minimum Distance Separation data was collected through observations made during the reconnaissance surveys completed between September through November 2021.

Data collected for this study included the identification of land use, identification and visual assessment of barns or any building capable of housing livestock, identification of animal types (if observed on the property or noted on signage on the property) and number of animals (if observed) and barn location with respect to other land uses.

It should be noted that reconnaissance surveys are often limited by 'line of sight' restrictions. Therefore, topography and vegetation (density and/or height) may preclude an accurate assessment of individual agricultural facilities. With this in mind, recent aerial photography and online digital imagery was used to assist in the identification and assessment of any partially or totally concealed agricultural facility.

Further, the field data and aerial photographic interpretation was supplemented with Assessment Roll, Assessment Mapping and Geographic Information System (GIS) data for the purposes of determining the area and location of property boundaries.

MDS I calculations were completed on the following assumptions:

- completed with regard to Minimum Distance Separation (MDS) Document – Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks. Publication 853, OMAFRA, 2016 and the OMAFRA MDS Minimum Distance Separation Computer Program (Version 1.0.2)
- completed on 'existing Nutrient Unit housing capacity' based on barn dimensions measured in GIS (when interviews could not be completed)
- livestock type was based on the type of livestock seen during reconnaissance surveys, or signs indicating the farm type (horse boarding, dairy, etc), or in cases where no animals or signs were noted, on the most appropriate type of livestock for the type of facility observed; and
- Type 'B' Land Use was used - Implementation Guideline 34 states:
 - "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.

A listing of the agricultural facilities and their respective uses has been provided in the agricultural investment section above. Based on the assessment listed above, MDS I calculations were completed for barns located in agricultural or rural designation areas and barns that either housed livestock or were capable of housing livestock. MDS I calculation sheets are provided in Appendix C.

Table 3 provides a listing of the agricultural facility number, the type of facility, the use, the type of livestock and the Minimum Distance Separation (MDS I) value from the barn and from the manure storage area. A description of each facility is provided above in Section 4.3.1.1.

Figures 16a-c illustrates the location of the respective agricultural facilities and the calculated MDS I arc.

On Figure 16a-c, only the MDS I arc as measured from the barn is illustrated. The MDS I arcs from the manure storage areas were not illustrated to avoid confusion. It is noted in Table 3, that not all calculated MDS I values from the manure storage are the same as for the calculated value from the barn.

It should also be noted that when completing calculations for agricultural facilities where the type of livestock could not be determined, it was assumed that the operation was beef (cow and calf), with access to a yard, and an open manure storage. This assumes a worse case (greater potential for odours than if it was assumed that horses were used as the livestock). Further, that any MDS calculation made that was based on a measurement from aerial imagery, was measured from the roof line. This measurement is generally a little larger than the size of the building due to the roof overhang. Additionally, this measurement assumes that the whole building is used to house livestock (no area removed for feed storage, tack rooms, etc). The MDS value calculated in this fashion, will produce an exaggerated or overestimated MDS distance.

Table 5 MDS Calculations

Agricultural Facility	Type of Facility	Use	Type of Livestock	Distance from Barn (m)	Distance from Manure Storage (m)
16	Machine shed	Machine shed	-	-	-
18	Barn	Livestock	Horses	176	176
19	Barn	Livestock	Horses	261	261
20	Barn	Livestock	Horses	218	218

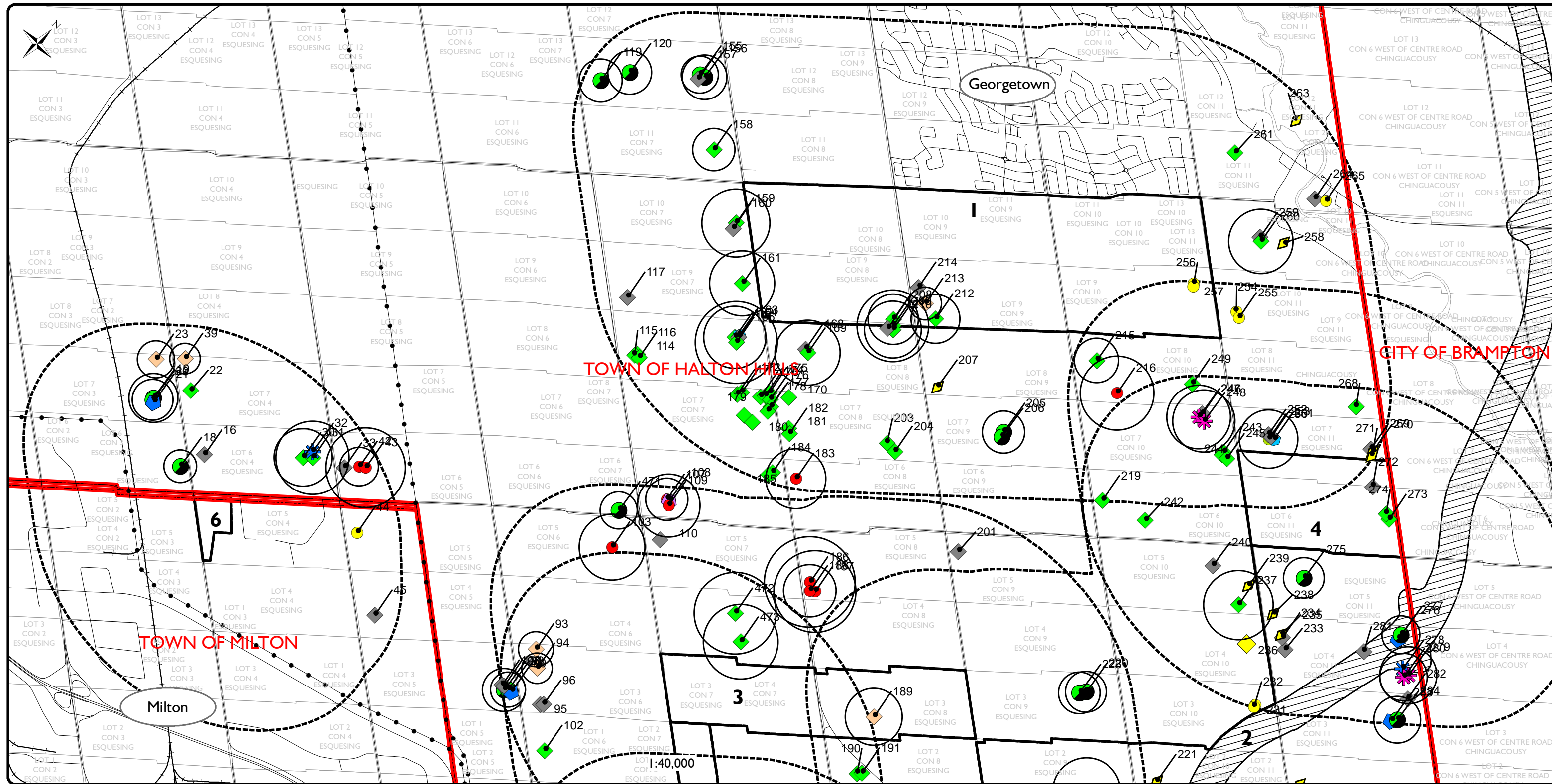
Agricultural Facility	Type of Facility	Use	Type of Livestock	Distance from Barn (m)	Distance from Manure Storage (m)
21	Riding Arena	-	-	-	-
22	Barn	Retired	-	-	-
23	Barn	Livestock	Hobby Horse	198	198
30	Barn	Retired	Beef	307	307
31	Barn	Retired	Beef	390	390
32	Storage	Hay Storage	-	-	-
33	Machine Shed	Machine Shed	-	-	-
39	Barn	Livestock	Hobby Horse	162	162
42	Barn	Livestock	Beef	208	208
43	Barn	Livestock	Beef	424	424
44	Remnant	-	-	-	-
45	Machine Shed/pole barn	Machine Shed/pole barn	-	-	-
93	Barn	Livestock	Hobby Horse	187	187
94	Barn	Livestock	Hobby Horse	165	165
95	Machine Shed	Processing/Storage	-	-	-
96	Machine Shed	Processing/Storage	-	-	-
97	Barn	Livestock	Horse	229	229
98	Barn	Livestock	Horse	187	187
99	Riding Arena	-	-	-	-
100	Machine Shed	Machine Shed	-	-	-
101	Machine Shed	Machine Shed	-	-	-
102	Barn	Retired/Remnant	-	-	-
103	Barn	Retired	Beef	352	352
107	Barn	Livestock	Beef	224	224
108	Greenhouse	Greenhouse	-	-	-
109	Barn	Livestock	Beef	337	337
110	Machine Shed	Machine Shed	-	-	-
114	Barn	Retired/Remnant	-	-	-
115	Barn	Retired/Remnant	-	-	-
116	Barn	Retired/Remnant	-	-	-
117	Machine Shed	Machine Shed	-	-	-
119	Barn	Livestock	Horse	229	229
120	Barn	Livestock	Horse	233	233
155	Barn	Livestock	Horse	198	198
156	Barn	Livestock	Horse	237	237
157	Machine Shed	Machine Shed	-	-	-
158	Barn	Retired	-	224	224
159	Barn	Retired	-	363	363
160	Machine Shed	Machine Shed	-	-	-
161	Barn	Retired	Beef	347	347
162	Barn	Retired	Beef	331	331
163	Tension Fabric	Storage	-	-	-
164	Machine Shed	Machine Shed	-	-	-
166	Barn	Retired	Beef	437	437

Agricultural Facility	Type of Facility	Use	Type of Livestock	Distance from Barn (m)	Distance from Manure Storage (m)
168	Machine Shed	Machine Shed	-	-	-
169	Barn	Retired	Beef	346	346
170	Barn	Retired	-	-	-
171	Barn	Retired/Storage	-	-	-
172	Barn	Retired/Storage	-	-	-
173	Barn	Retired/Storage	-	-	-
174	Barn	Retired/Storage	-	-	-
175	Barn	Retired/Storage	-	-	-
176	Barn	Retired/Storage	-	-	-
177	Barn	Retired/Storage	-	-	-
178	Barn	Retired/Storage	-	-	-
179	Barn	Retired/Storage	-	-	-
180	Barn	Retired/Storage	-	-	-
181	Barn	Retired	-	-	-
182	Barn	Retired	-	-	-
183	Barn	Livestock	Beef	318	318
184	Barn	Retired/Charity	-	-	-
185	Barn	Retired/Charity	-	-	-
186	Barn	Livestock	Beef	484	484
187	Barn	Livestock	Beef	435	435
188	Barn	Livestock	Beef	280	280
189	Barn	Livestock	Horse	304	304
190	Barn	Retired/Commercial	-	-	-
191	Barn	Retired/Commercial	-	-	-
201	Machine Shed	Machine Shed	-	-	-
203	Barn	Retired	-	-	-
204	Barn	Retired	-	-	-
205	Barn	Livestock	Horse	226	226
206	Riding Arena	-	-	-	-
207	Shed	Shed	-	-	-
208	Barn	Livestock	Goats	270	270
209	Barn	Livestock	Goats	381	381
210	Barn	Livestock	Goats	302	302
211	Machine Shed	Machine Shed	-	-	-
212	Barn	Retired	Beef	259	259
213	Barn	Livestock	Horse	176	176
214	Machine Shed	Machine Shed	-	-	-
215	Barn	Livestock	Beef	237	237
216	Barn	Livestock	Beef	392	392
219	Machine Shed	Machine Shed	-	-	-
220	Barn/Riding Arena	Livestock	Horse	218	218
221	Barn	Remnant	-	-	-
222	Machine Shed	Machine Shed	-	-	-
223	Barn	Livestock	Horse	222	222
224	Barn/Riding Arena	Livestock	Horse	363	363
229	Shed	Shed	-	-	-
230	Shed	Shed	-	-	-
231	Machine Shed	Remnant	-	-	-

Agricultural Facility	Type of Facility	Use	Type of Livestock	Distance from Barn (m)	Distance from Manure Storage (m)
232	Machine Shed	Remnant	-	-	-
233	Machine Shed	Machine Shed	-	-	-
234	Machine Shed	Machine Shed	-	-	-
235	Shed	Shed	-	-	-
236	Design Studio	Commercial	-	-	-
237	Barn	Retired	Beef	370	370
238	Shed	Shed	-	-	-
239	Shed	Shed	-	-	-
240	Machine Shed	Machine Shed	-	-	-
242	Barn	Remnant	-	-	-
243	Barn	Remnant	-	-	-
244	Barn	Remnant	-	-	-
245	Machine Shed	Remnant	-	-	-
246	Machine Shed	Machine Shed	-	-	-
247	Barn	Livestock	Dairy	341	473
248	Barn	Livestock	Dairy	331	465
249	Barn	Storage	-	-	-
250	Barn	Livestock	Goats	312	312
251	Tension Fabric	Storage	-	-	-
252	Machine Shed	Machine Shed	-	-	-
253	Machine Shed	Machine Shed	-	-	-
254	Barn	Remnant	-	-	-
255	Barn	Remnant	-	-	-
256	Barn	Remnant	-	-	-
257	Machine Shed	Remnant	-	-	-
258	Machine Shed	Machine Shed	-	-	-
259	Machine Shed	Machine Shed	-	-	-
260	Barn	Retired	Beef	342	342
261	Barn	Urban Area	-	-	-
263	Shed	Shed	-	-	-
264	Machine Shed	Machine Shed	-	-	-
265	Barn	Remnant	-	-	-
268	Barn	Retired	-	-	-
269	Shed	Shed	-	-	-
270	Shed	Shed	-	-	-
271	Shed	Shed	-	-	-
272	Machine Shed	Machine Shed	-	-	-
273	Barn	Croation Centre	-	-	-
274	Machine Shed	Machine Shed	-	-	-
275	Stable	Livestock	Horse	216	216
276	Riding Arena	Riding Arena	Horse	-	-
277	Barn	Livestock	Horse	201	201
278	Hay Storage	Hay Storage	-	-	-
279	Barn	Livestock	Dairy	305	305
280	Barn	Livestock	Dairy	253	253
281	Barn	Remnant	-	-	-
282	Shed	Shed	-	-	-
283	Stable/riding Arena	Stable/riding arena	Horse	248	248

Agricultural Facility	Type of Facility	Use	Type of Livestock	Distance from Barn (m)	Distance from Manure Storage (m)
284	Barn	Livestock	Horse	162	162
289	Barn	Livestock	Sheep	162	162
290	Machine Shed	Machine Shed	-	-	-
291	Machine Shed	Machine Shed	-	-	-
292	Barn	Livestock	Horse	165	165
293	Machine Shed	Machine Shed	-	-	-
294	Machine Shed	Machine Shed	-	-	-
295	Barn	Remnant	-	-	-
297	Barn	Retired	Beef	352	352
306	Shed	Shed	-	-	-
307	Shed	Shed	-	-	-
309	Shed	Shed	-	-	-
312	Barn	Retired	Beef	322	322
313	Barn	Livestock	Beef	344	344
314	Barn	Livestock	Beef	395	395
315	Barn	Commercial	-	-	-
317	Barn	Retired	Beef	241	241
318	Barn	Livestock	Hobby Horse	190	190
321	Machine Shed	Machine Shed	-	-	-
322	Barn	Livestock	Hobby Horse	162	162
323	Shed	Shed	-	-	-
333	Machine Shed	Machine Shed	-	-	-
334	Stable/riding arena	Stable/riding arena	Horse	223	223
335	Barn	Livestock	Horse	165	165
336	Run-in Shed	-	-	-	-
337	Run-in Shed	-	-	-	-
338	Run-in Shed	-	-	-	-
339	Barn	Remnant	-	-	-
340	Barn	Livestock	Beef	328	328
341	Barn	Livestock	Donkey	162	162
348	Barn	Livestock	Hobby Horse	165	165
349	Shed	Shed	-	-	-
350	Shed	Shed	-	-	-
351	Barn	Livestock	Beef	278	278
352	Tension Fabric Building	Storage	-	-	-
353	Barn	Livestock	Beef	314	314
354	Barn	Livestock	Beef	313	313
355	Barn	Livestock	Beef	257	257
356	Barn	Livestock	Beef	226	226
359	Barn	Remnant	-	-	-
360	Barn	Remnant	-	-	-
361	Machine Shed	Machine Shed	-	-	-
367	Machine Shed	Machine Shed	-	-	-
368	Barn	Livestock	Beef	344	344
376	Machine Shed	Machine Shed	-	-	-
377	Barn	Livestock	Hobby	180	180

Agricultural Facility	Type of Facility	Use	Type of Livestock	Distance from Barn (m)	Distance from Manure Storage (m)
			Horse		
378	Barn	Livestock	Beef	231	231
380	Remnant	Remnant	-	-	-
471	Barn	Livestock	Horse	198	198
472	Barn	Retired	Beef	438	438
473	Barn	Retired	Beef	399	399
507	Barn	Livestock	Horse	194	194
508	Barn	Retired	Beef	212	212
509	Barn	Retired	Beef	205	205



Legend

- Hydro Line (MNR)
- Railways (MNR)
- Roads (MNR)
- ▨ GTA West Technically Preferred Route
- Lot Lines (MNR)
- ▬ Municipal Boundary (MNR)
- ▭ Secondary Study Areas (1.5 km)

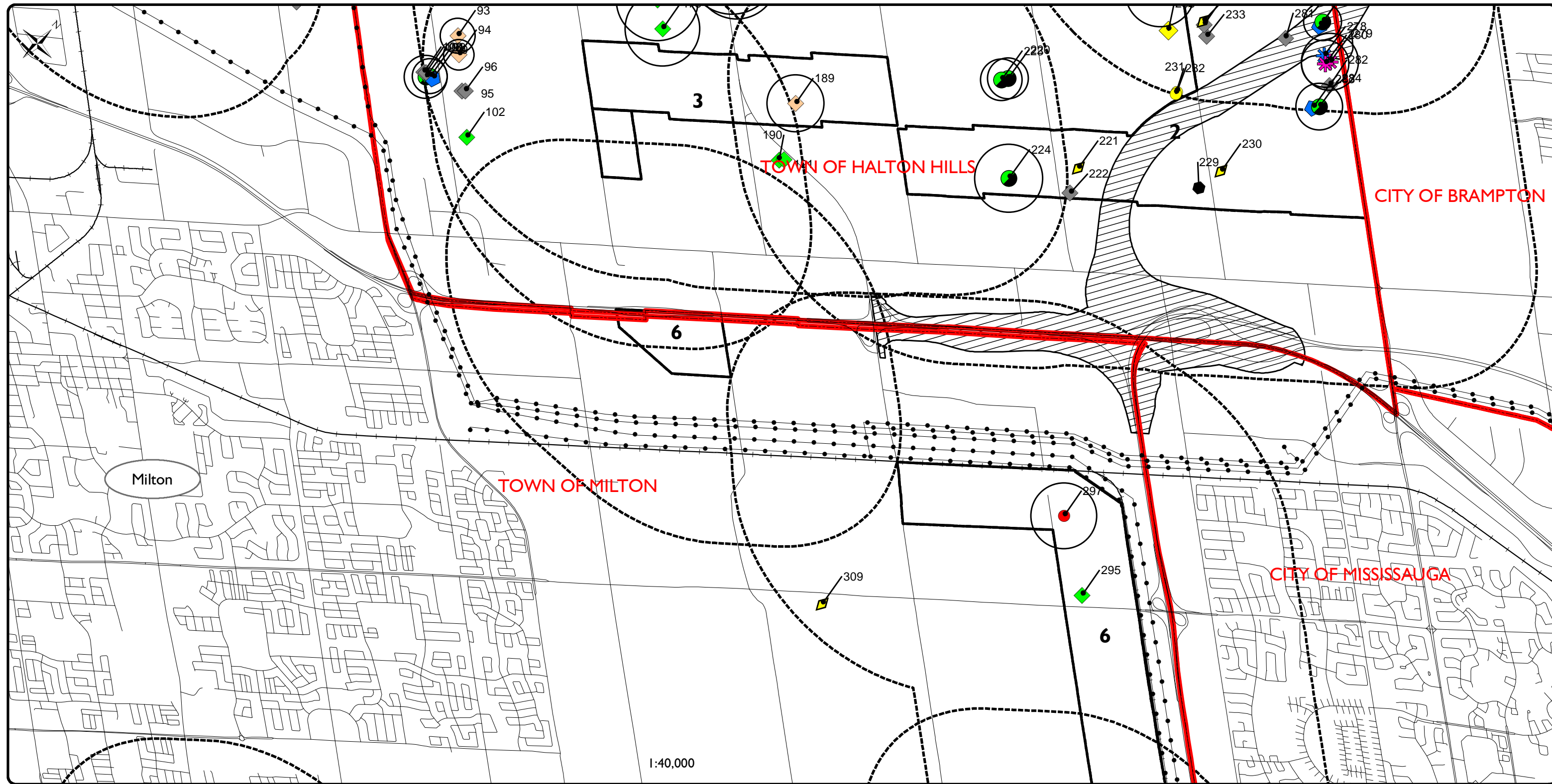
- Growth Concept**
- 1, Halton Hills, Community Area
 - 2, Halton Hills, Employment Area
 - 3, Halton Hills, Option 2
 - 4, Halton Hills, Option 1
 - 5, Milton, Community Area
 - 6, Milton, Employment Area

- Building Code**
- beef
 - commercial
 - dairy
 - goats
 - ◆ greenhouse
 - ◆ hay storage
 - horse
 - hobby horse
 - machine shed
 - ponies/donkey
 - remnant
 - riding arena
 - run in shed
 - retired
 - ◆ shed
 - sheep
 - ◆ tension fabric
 - unknown

○ MDS Arc

Figure 16a
Minimum Distance Separation (MDSI)

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 January 2022

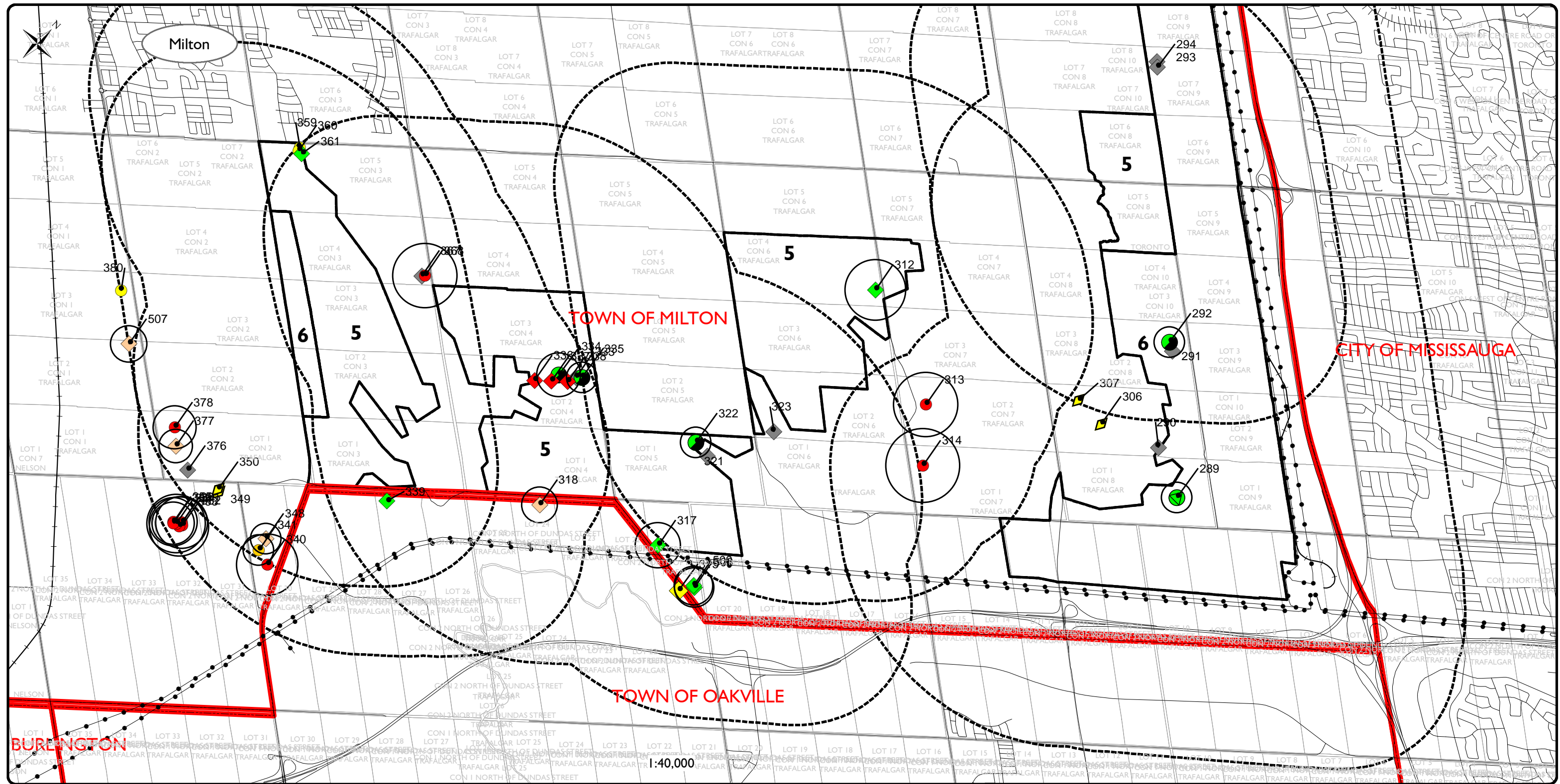


Legend

<ul style="list-style-type: none"> ●—● Hydro Line (MNRF) — Railways (MNRF) — Roads (MNRF) ▨ GTA West Technically Preferred Route ▭ Municipal Boundary (MNRF) ⋯ Secondary Study Areas (1.5 km) 	<p>Growth Concept</p> <ul style="list-style-type: none"> ▭ 1, Halton Hills, Community Area ▭ 2, Halton Hills, Employment Area ▭ 3, Halton Hills, Option 2 ▭ 4, Halton Hills, Option 1 ▭ 5, Milton, Community Area ▭ 6, Milton, Employment Area 	<p>Building Code</p> <ul style="list-style-type: none"> ● beef ▭ commercial ✱ dairy ● goats ▭ greenhouse ✱ hay storage ● horse ▭ hobby horse ▭ machine shed ● ponies/donkey ● remnant ▭ riding arena ▭ run in shed ▭ retired ▭ shed ● sheep ▭ tension fabric ● unknown 	<ul style="list-style-type: none"> ○ MDS Arc
---	---	---	---

Figure I 6b
Minimum Distance Separation (MDSI)

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 January 2022



Legend

<ul style="list-style-type: none"> ●— Hydro Line (MNRF) — Railways (MNRF) — Roads (MNRF) ▨ GTA West Technically Preferred Route □ Lot Lines (MNRF) ▬ Municipal Boundary (MNRF) ⋯ Secondary Study Areas (1.5 km) 	<p>Growth Concept</p> <ul style="list-style-type: none"> □ 1, Halton Hills, Community Area □ 2, Halton Hills, Employment Area □ 3, Halton Hills, Option 2 □ 4, Halton Hills, Option 1 □ 5, Milton, Community Area □ 6, Milton, Employment Area 	<p>Building Code</p> <ul style="list-style-type: none"> ● beef ■ commercial ✳ dairy ● goats ◆ greenhouse ✳ hay storage ● horse ■ hobby horse ■ machine shed ● ponies/donkey ● remnant ■ riding arena ■ run in shed ■ retired ◆ shed ● sheep ■ tension fabric ● unknown 	<p>○ MDS Arc</p>
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Figure I6c
Minimum Distance Separation (MDSI)
 DBH Soil Services Inc.
 January 2022

On review of the MDS I information, there are numerous MDS I arcs that extend onto the Study Areas. Further, that there are a number of MDS I arcs from potential livestock facilities that are within the Study Areas.

Any development in the Study Areas should take the MDS I arc within the Study Areas into consideration (ie. Develop that area last or place lower intensity land uses in that area).

Further, any development in the Study Areas must take into consideration the MDS I arcs that extend into the Study Areas from the Secondary Study Areas. No development may take place within those respective arcs while the respective barns still exist.

It is recommended that prior to the future development of any of the Study Area lands, that the MDS assessment should be revisited to provide an accurate and up-to-date assessment of the agricultural facilities at that time.

4.5 FRAGMENTATION

Assessment data was evaluated to determine the characteristics and the degree of land fragmentation. It should be noted that portions of the Secondary Study Area are located within the urban boundaries of Milton, Georgetown, the City of Brampton and the City of Mississauga.

Typically, in order to evaluate land fragmentation, the most recent Assessment Roll mapping and Assessment Roll information from the respective municipalities is referenced on a property-by-property basis (for the Study Areas and the Secondary Study Areas) to determine the approximate location, shape and size of each parcel. For this AIA, the digital assessment data was not available for assessment in GIS. A visual assessment of property boundaries was made based on property boundary data that was presented in Agmaps, and from the respective online imagery and data from each municipality website.

The initial assessment of fragmentation includes a review of policy to determine if there are minimum lot sizes for agriculture.

While a minimum size for an agricultural property is not specified in the *Provincial Policy Statement* (PPS, 2020), the PPS does state in Section 2.3.3.2 that:

“In *prime agricultural areas*, all types, sizes and intensities of *agricultural uses and normal farm practices* shall be promoted and protected in accordance with provincial standards.”

A review of *Town of Halton Hills Official Plan (May 1, 2019, Consolidation)* revealed that there is no minimum lot size for an agricultural property.

A review of *Town of Halton Hills Zoning By-Law 2010-0050 (Consolidated December 2019)* indicates a minimum lot size of 4.0 hectares.

A review of *Town of Milton Official Plan (Consolidated August 2008)* revealed that there is no minimum lot size for an agricultural property. A similar review was completed on the *Halton Region Official Plan (Office Consolidation June 19, 2018)*. There is no minimum lot size for an agricultural property.

A review of *Town of Milton Comprehensive Zoning By-Law 144-2003 (Consolidation October 2019)* indicates in Section 10.1 (Table 10A), that an agricultural operation is permitted only on a lot having an area of greater than 4.0 hectares.

Statistics Canada Census of Agriculture (2011) indicates that the average farm size in Ontario was 98.7 ha (244 acres). This average size is based on the number of Census farms divided by the acreage of those Census farms (Total Farm Area). The Total Farm Area is land owned or operated by an agricultural operation and includes cropland, summer fallow, improved and unimproved pasture, woodlands and wetlands, and all other lands (including idle land, and land on which farm buildings are located) (Statistics Canada, 2017). It should be noted that the Census data average farm size is based on farmland holdings, which may include more than one parcel (property).

Census of Agriculture (2016) data indicates that the average farm size in Ontario (for Census farms) was 100.8 ha (249) acres. Again, the Census of Agriculture (2016) average farm size is based on farmland holdings, which may include more than one parcel (property). Further, the Census of Agriculture (2016) information indicates that the average farm size (for Census farms) in Halton Region is 152 acres, the average farm size for the Town of Milton is 112 acres, and the average farm size for the Town of Halton Hills is 206 acres.

Figure 17 illustrates the complexity of the land fragmentation within the Study Areas and the Secondary Study Areas.

As illustrated in Figure 17, the Halton Hills Community Area (1) was comprised of many large parcels, with two areas of numerous small parcels, resulting in fragmentation (linear development) along 10 Sideroad, east of Trafalgar Road (near the hamlet of Ashgrove) and along Eighth Line. Similar conditions exist for the Halton Hills Employment Area (2), where there are many large parcels, with linear development noted along Sixth Line, Ninth Line and Tenth Line. Further, similar conditions were noted for Halton Hills Option 1, with linear development noted along Winston Churchill Boulevard, and at Halton Hills Option 2 with smaller parcels noted along Trafalgar Road.

The degree of fragmentation is more pronounced at the Milton Employment Area where there is significant fragmentation (occurrence of smaller parcels) along Eighth Line and Lower Base Line. The degree of fragmentation at the Milton Community Area is not as pronounced, although there are smaller parcels noted near the intersection of Fourth Line and Lower Base Line.

Similar conditions exist for each Secondary Area, with an increase in the numbers of smaller parcels, often associated with the urban areas of Milton, Georgetown, City of Brampton, City of Mississauga, and the City of Oakville.

This type of fragmentation pattern is common in areas near urban boundaries and within the Greater Toronto Area (GTA).

Figure 21 Fragmentation



4.6 SOILS AND CANADA LAND INVENTORY (CLI)

A review was completed of the soils and Canada Land Inventory (CLI) data base for the Study Areas. The review was completed to determine the extent and location of the high capability soils.

The review included a download of the latest version of the soils data from the Land Information Ontario website and discussions with OMAFRA staff to determine if the downloaded data set is the latest iteration of the soils data.

Due to the continual updates to the soil survey complex datasets, it is prudent to verify or at least confirm that the soil series data and Canada Land Inventory (CLI) information within the datasets is accurate across the Region of Halton. In an effort to confirm the correctness of the soils and the Canada Land Inventory data on a soil series basis, the dbase data file that is associated with the Region of Halton soil survey complex file was exported to Microsoft Excel to run a unique symbols list based on Soil Series, topography (slope), CLI class and CLI subclass.

The unique symbols list (based on the SYMBOL1 column) provided 146 unique symbols combined with the associated slope and CLI class and CLI subclass (CLI_1 and CLI_2). The unique symbols list is provided in Appendix D. A review of this list indicated that there were some issues with a few symbols of the soils and the respective CLI class and/or subclass. The soils with issues are highlighted in yellow. A review of these soil polygon issues indicated that none of the affected soil polygons were located within the Secondary Study Area.

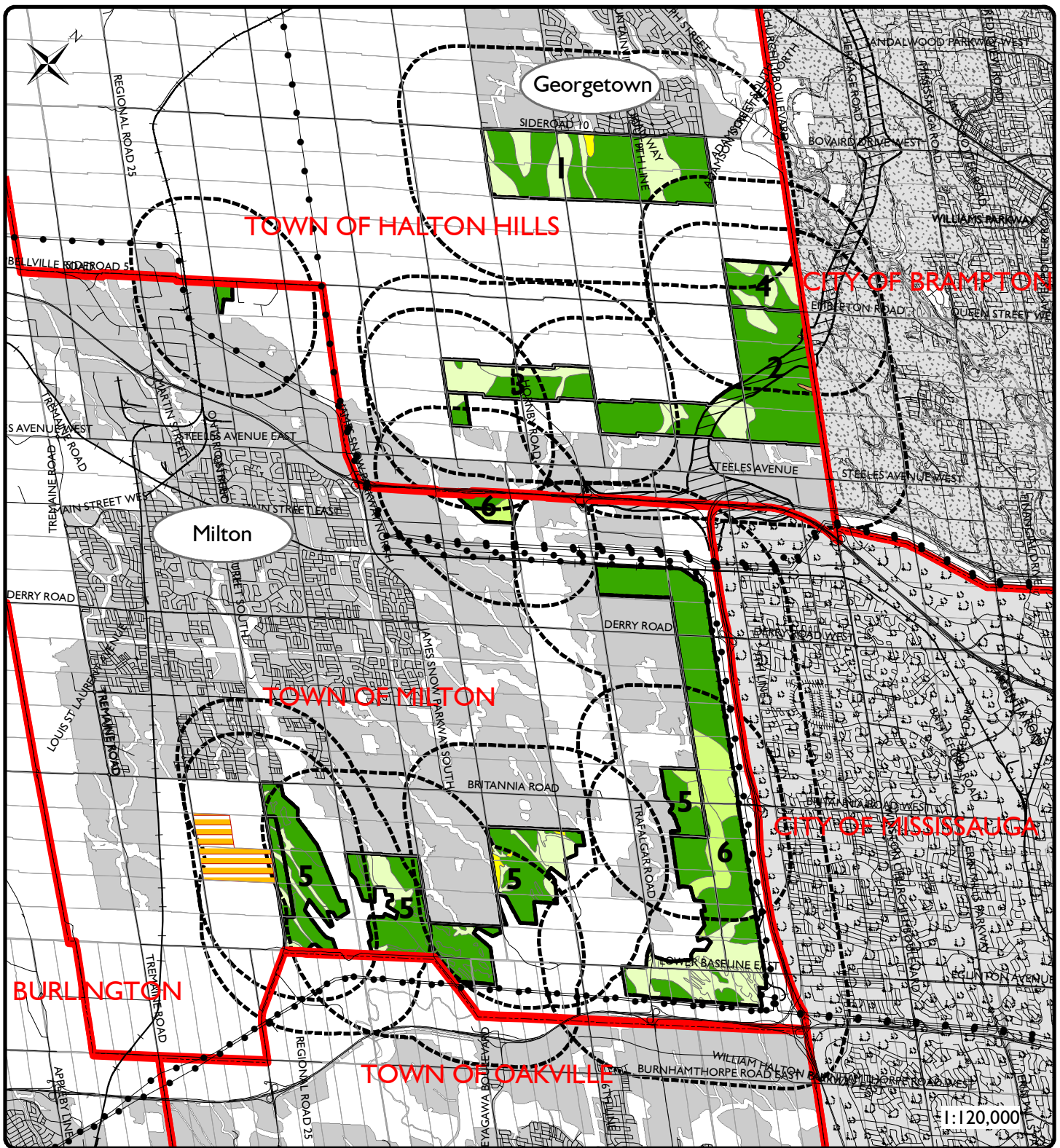
As noted in the list in Appendix D, a few symbols for a particular soil series would have two or more CLI classes listed for a mineral soil. Similar conditions were associated with the CLI subclass, where two or more CLI and CLI subclass combinations were associated with the soil series symbol. In many cases the difference between the CLI classification was related only to the subclass. Therefore, in those instances, the Canada Land Inventory (CLI) rating or classification for a particular soil did not change, only the subclass did which relates to a different limitation in the soil, but not a change in CLI class.

In other instances, the CLI Class changed. In those instances, the change in some CLI Class were related to topography. The greater the slope results in the lower the capability of the land. In those instances, the CLI Class change was appropriate.

For the purposes of this AIA, the soil and CLI data presented on Figure 18 is considered appropriate in soil code and CLI rating.

4.6.1 SOIL CAPABILITY FOR AGRICULTURE

Basic information about the soils of Ontario is made more useful by providing an interpretation of the agricultural capability of the soil for various crops. The Canada Land Inventory (CLI) system combines attributes of the soil to place the soils into a seven-class system of land use capabilities. The CLI soil capability classification system groups mineral soils according to their



Legend

●—● Hydro Line (MNRF)	--- Secondary Study Areas (1.5 km)	Canada Land Inventory (CLI)
— Railways (MNRF)	Growth Concept	■ Organic Soils
— Roads (MNRF)	□ 1, Halton Hills, Community Area	■ Class 1
▨ City of Brampton	□ 2, Halton Hills, Employment Area	■ Class 2
▩ City of Mississauga	□ 3, Halton Hills, Option 2	■ Class 3
▧ GTA West Technically Preferred Route	□ 4, Halton Hills, Option 1	■ Class 4
▨ Landfill (MNRF)	□ 5, Milton, Community Area	■ Class 5
▩ Lot Lines (MNRF)	□ 6, Milton, Employment Area	
▭ Municipal Boundary (MNRF)		
▩ Region of Halton Urban Lands		

Figure 18
Canada Land Inventory (CLI)

DBH Soil Services Inc.
 November 2021

potentialities and limitations for agricultural use. The first three classes are considered capable of sustained production of common field crops, the fourth is marginal for sustained agriculture, the fifth is capable for use of permanent pasture and hay, the sixth for wild pasture and the seventh class is for soils or landforms incapable for use for arable culture or permanent pasture.

Organic or Muck soils are not classified under this system. Disturbed Soil Areas are not rated under this system.

The Ontario Ministry of Agriculture, Food and Rural Affairs document “Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario” defines the Canada Land Inventory (CLI) classification as follows:

- “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.”

With respect to the soils and Canada Land Inventory (CLI) identified in the Study Areas, The Ontario Ministry of Agriculture, Food and Rural Affairs document “Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario” defines the Canada Land Inventory (CLI) subclassification as follows:

Subclass D – Undesirable Structure and/or Low Permeability

Subclass D denotes 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. These soils are generally more susceptible to compaction than are lighter textured soils.

Subclass F - Low Natural Fertility

Subclass F denotes soils having low fertility that is either correctable through fertility management or is difficult to correct in a feasible way. Low fertility may be due to low cation exchange capacity, low pH, presence of elements in toxic concentrations (primarily iron and aluminum), or a combination of these factors.

Subclass M – Moisture Deficiency

Subclass M denotes soils which have low moisture holding capacities and are more prone to droughtiness.

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.

Subclass W – Excess Water

The presence of excess soil moisture (other than that from inundation) may result from inadequate soil drainage, a high water table, seepage, or runoff from surrounding areas. This limitation only applies to soils classified as poorly drained or very poorly drained.

Disturbed soil areas (built up or developed areas) are considered as Not Rated within the Canada Land Inventory (CLI) classification system. Muck (organic soils) are not rated in the Canada Land Inventory (CLI) classification system.

Figure 19 – Canada Land Inventory (CLI) illustrates the OMAFRA digital soils data for the respective Study Areas. The OMAFRA soils data base has not removed or discounted soils from roads, rails, urban or developed areas, therefore, those areas with their disturbed soils are included within the soil polygon that covers the area.

Table 6 illustrates the soils data occurring in each CLI capability class, in hectares, for the respective Study Areas.

Table 6 Canada Land Inventory – Study Areas

Canada Land Inventory Class (CLI)	Halton Hills Community	Halton Hills Employment	Halton Hills Option 1	Halton Hills Option 2	Milton Community	Milton Employment
Class 1	338.2	452.6	59.0	82.0	622.9	572.1
Class 2	0.0	0.0	0.0	0.0	23.5	166.7
Class 3	171.9	93.8	58.2	87.5	144.6	217.5
Class 4	6.9	0.0	0.0	0.0	11.3	0.0
Class 5	0.0	3.3	0.0	0.0	0.0	0.0
Class 6	0.0	0.0	0.0	0.0	0.0	0.0
Class 7	0.0	0.0	0.0	0.0	0.0	0.0
Not Rated	0.4	0.0	0.0	0.0	0.0	0.0
Totals	517.3	549.6	117.2	169.5	802.3	956.3

As illustrated in Table 6, each of the respective Study Areas (growth concept options) comprised large areas of CLI class 1 – 3 soils. It should be noted that much of Halton Region below the Niagara Escarpment is comprised of CLI class 1 – 3 soils, therefore any development in that area will result in impacts on CLI class 1 – 3 soils. The proposed future development of the IGMS options will result in the loss of CLI class 1 – 3 lands as identified in the table above.

4.7 AGRICULTURAL SYSTEMS PORTAL

A review of the OMAFRA Agricultural System Portal online resource for agricultural services/agricultural network (markets, abattoirs, renderers, livestock auctions, investment, warehousing and storage, wineries and breweries) noted that each of the Study Areas and much of the Secondary Study Areas were located in the Prime Agricultural Area of the Agricultural Land Base of the Greater Golden Horseshoe. This information has been presented previously in this report on Figure 2.

A review of the online Agricultural System Portal (OMAFRA) indicated that there were few farm services or agricultural infrastructure in the Study Areas or Secondary Study Areas.

The Milton Employment area along Regional Road 25 contained the Ontario Halal Meat Packers operation, while the Town & Country Farm was noted in the Milton Employment area along

Eighth Line. No other farm services or agricultural infrastructure was identified through the Agricultural Systems Portal for the Study Areas.

Numerous farm services and agricultural infrastructure was noted in the Secondary Study Areas including the Sweetness Bakery on Britannia Road, Sylvia's Bakery on Britannia Road, Van Beek's Garden Supplies on Lower Base Line, Reunion Island Coffee Ltd on Burnhamthorpe Road West, Willis Family Fruit Farm on Britannia Road, Timm Enterprises Limited on Trafalgar Road, A&A Hasselman Plantcentre Ltd. on Trafalgar Road, Chow's Farms (Jade Gardens) on Trafalgar Road, Terra Milton Garden and Nursery on Britannia Road, Landsource Organic on Britannia Road, Harvest Goodies on Trafalgar Road, Van Dongen's Landscaping & Nurseries on Trafalgar Road, Putzer Nursery on Sixth Line, Taylor Nursery on Fifth Line, Kraft Canada on Steeles Ave, Advare Baderly Ingredients Inc on 9th Line, Maple Lodge Farms, F.A.B. Meat Products, Sunny Acres Farms, and a number of other services/agricultural infrastructure within the urban areas of Milton, Georgetown, the City of Brampton and the City of Mississauga.

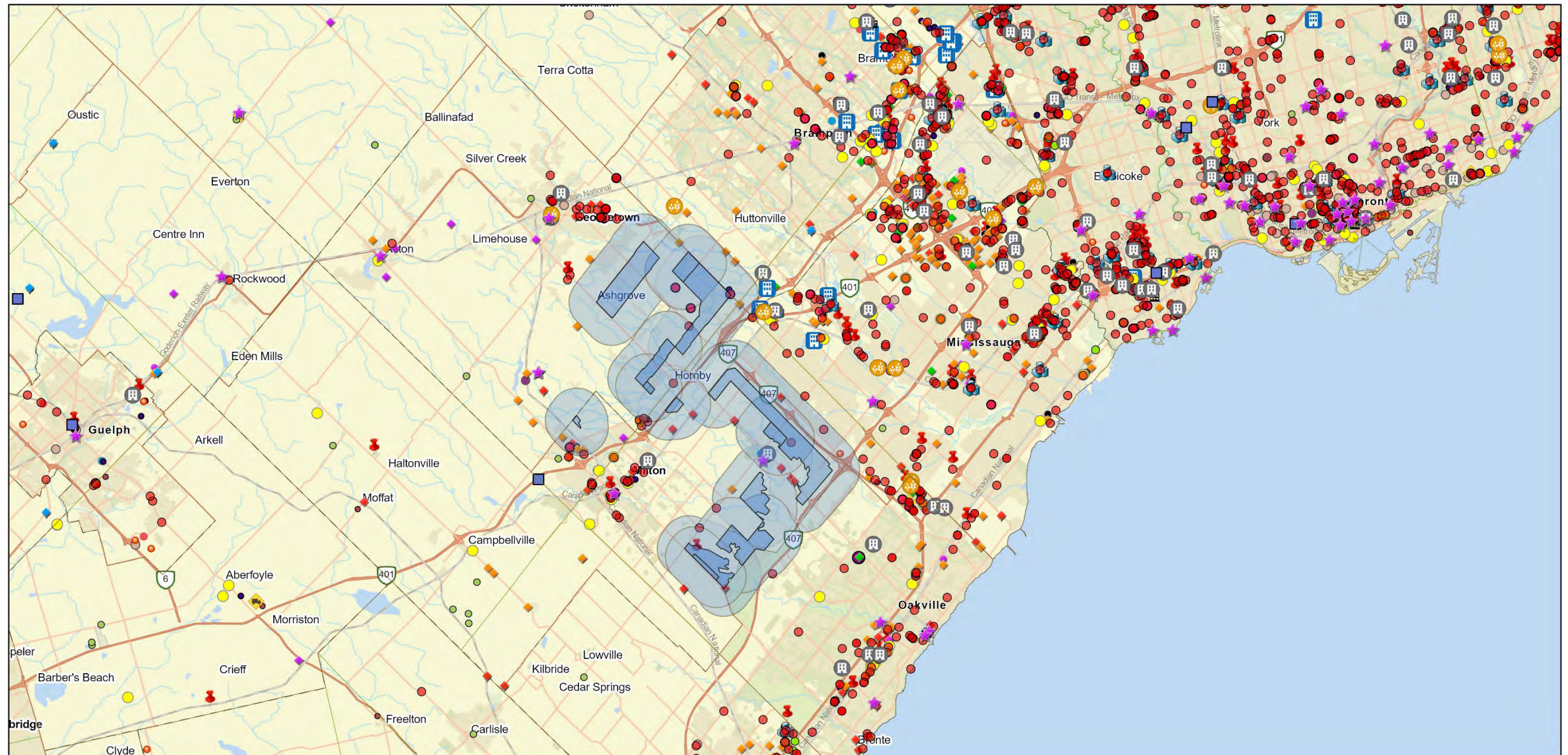
A copy of the online image has been provided in Figure 19 – Agricultural Systems Portal Mapping. This figure includes a large area (Township scale coverage) around the Study Areas and the Secondary Study Areas, for the purposes of identifying agricultural services and networks in the local community.

As illustrated in this image there are few agricultural services or agricultural infrastructure within the Study Areas. There are few agricultural services or agricultural infrastructure in the Secondary Study Areas, and there are more agricultural services and agricultural infrastructure in the urban areas of Milton, Georgetown and the Cities of Brampton or Mississauga.

The closest transportation networks (major roadway) are the Highway 407 and the Highway 401 which are both located in close proximity of the Study Areas. A major rail line was also noted running parallel to Highway 401 along the south side.

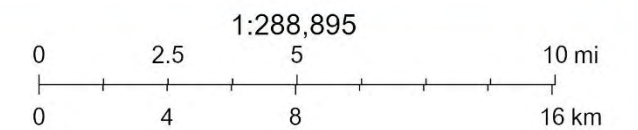
Figure 19 Agricultural Systems Mapping (OMAFRA)

Agricultural Systems Portal 2021



2021-11-25, 10:32:41 a.m.

- 2021-10-13_Draft_PreferedGrowthConcept
- Buffer Area - Buffer_of_2021-10-13_Draft_PreferedGrowthConcept
- Single and Lower Tier Municipalities (LIO)
- Upper Tier Municipalities and District (LIO)
- Geographic Township Improved (LIO)
- Farmers Markets (Farmers Markets ON)
- Food Hubs (OMAFRA)
- Grain and Oilseed Milling (ConnectON)
- Fruit and Vegetable Canning, Drying and Pickling (ConnectON)
- Maple Syrup and Products Production (ConnectON)
- Food Manufacturing (ConnectON)



Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada, Esri Canada

4.8 AGRICULTURAL CENSUS DATA

A review of the Census of Agricultural data (Census 2016, including 2006 and 2011 data) was completed to determine the agricultural characteristics of the Region of Halton and the Town of Halton Hills, and to allow comparison to the agricultural characteristics on the Study Areas and Secondary Study Areas.

4.8.1 REGION OF HALTON

Table 7 provides Census 2016 data for agricultural land use in the Region of Halton and provides a comparison to the Provincial Census 2011 agricultural data. As indicated in the census data, the Region of Halton comprise approximately 0.56 percent of the total area of farms in Ontario (Census 2016).

Table 7 Region of Halton Census 2016 Data – Land Use

Item	Halton Regional Municipality	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Land Use, 2016 Census (acres)					
Land in crops	52,602	9,021,298	0.58	0.69	0.75
Summerfallow land	243	15,885	1.53	3.06	1.78
Tame or seeded pasture	1,850	514,168	0.36	0.36	0.41
Natural land for pasture	3,414	783,566	0.44	0.39	0.40
Christmas trees, woodland & wetland	5,789	1,542,637	0.38	0.48	0.46
All other land	4,778	470,909	1.01	0.69	0.91
Total area of farms	68,676	12,348,463	0.56	0.63	0.67

Table 7 illustrates that there has been a noticeable decrease in most agricultural land uses (with the exception of Natural land for pasture in 2011) since 2006.

Table 8 provides a more detailed inventory of agricultural lands, and it is evident from this data that the Region of Halton comprises a large land base for common field crops (corn and soybean) and forage/alfalfa crops (as based on Census farm data). Winter wheat is also a major crop within Regional Municipality of Halton.

A further review indicates that Region of Halton is a significant producer of raspberries, accounting for over 4.12 percent of the Provincial acreage in production.

Table 8 Region of Halton Census 2016 Data - Crops

Item	Halton Regional Municipality	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Major Field Crops, 2016 Census (acres)					
Winter wheat	7,643	1,080,378	0.71	0.83	0.86
Oats for grain	193	82,206	0.23	0.24	0.67

Item	Halton Regional Municipality	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Barley for grain	229	103,717	0.22	0.41	0.73
Mixed grains	243	92,837	0.26	0.35	0.31
Corn for grain	12,272	2,162,004	0.57	0.64	0.87
Corn for silage	625	295,660	0.21	0.20	0.33
Alfalfa and Alfalfa Mixture	7,172	1,119,194	0.64	0.79	0.65
Soybeans	17,409	2,783,443	0.63	0.79	0.86
Potatoes	10	34,685	0.03	0.03	-
Major Fruit Crops, 2016 Census (acres)					
Total fruit crops	424	51,192	0.83	0.99	1.35
Apples	127	15,893	0.80	1.18	1.59
Sweet Cherries	x	435	-	0.52	.32
Peaches	13	5,232	0.25	-	-
Grapes	77	18,718	0.41	0.40	0.82
Strawberries	63	2,915	2.16	2.89	3.70
Raspberries	28	680	4.12	2.77	4.16
Major Vegetable Crops, 2016 Census (acres)					
Total vegetables	642	135,420	0.47	0.53	0.66
Sweet corn	83	22,910	0.36	0.38	0.32
Tomatoes	44	15,744	0.28	0.12	0.88
Green peas	x	16,268	-	-	0.11
Green or wax beans	x	9,732	-	-	-

Table 8 also illustrates the change in production (percent) from 2011 and 2006. The Census data indicates a reduction in grain production (oats and barley grain), and a reduction in alfalfa. There was a decrease in crop production for mixed grains and corn for silage since 2006.

With respect to fruit crops, there has been a decrease in apples, sweet cherries, and strawberries, while there was an increase in the acreage used for peaches, grapes and raspberry production. There has been a net decrease in major vegetable crop production since 2011 and 2006.

Table 9 illustrates the Census 2016 data for livestock. As shown in Table 9, the Region of Halton provides a small portion of the total cattle and calves and dairy cows for the Province. When compared to the Census 2011 data, there have been decreases in most livestock inventories, with the exception of beef cows and total sheep and lambs where there have been increases.

It was also noted that the Region of Halton is a significant producer of total hens and chickens. There has been a slight increase in total hens and chicken production since 2011.

Table 9 Region of Halton Census 2016 Data - Livestock

Item	Halton Regional Municipality	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Livestock Inventories, 2016 Census (number)					
Total cattle and calves	3,209	1,623,710	0.20	0.28	0.52
Steers	385	305,514	0.13	0.23	0.80
Beef Cows	826	236,253	0.35	0.42	0.44
Dairy Cows	379	311,960	0.12	0.18	0.17
Total Pigs	139	3,534,104	-	-	0.09
Total sheep and lambs	1,583	321,495	0.49	0.36	0.52
Poultry Inventories, 2016 Census (number)					
Total hens and chickens	162,456	50,759,994	0.32	0.30	0.50
Total turkeys	x	3,772,146	-	-	-

4.8.2 HALTON HILLS TOWNSHIP

A review of Census 2016 data for the Halton Hills Township reveals that the total area in farms is 37,154 acres, as based on Census Farms, with 180 farms reporting. The majority of the farmed land is in crops with a total of 30,614 acres. The remaining lands are listed as summerfallow land, tame or seed pasture, natural land for pasture, and Christmas trees, woodlands and wetlands.

Table 10 provides Census 2016 data for agricultural land use in the Halton Hills Township and provides a comparison to the Provincial Census 2006 agricultural data. As indicated in the census data, the Halton Hills Township comprised approximately 0.30 percent of the total area of farms in Ontario (Census 2016).

Table 10 Halton Hills Township Census Data (2016)

Item	Halton Hills Township	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Land Use, 2016 Census (acres)					
Land in crops	30,614	9,021,298	0.34	0.35	0.36
Summerfallow land	144	15,885	0.91	2.42	0.78
Tame or seeded pasture	731	514,168	0.14	0.16	0.21
Natural land for pasture	1,243	783,566	0.16	0.19	0.14
Christmas trees, woodland & wetland	2,495	1,542,637	0.16	0.17	0.19
All other land	1,927	470,909	0.41	0.22	0.30
Total area of farms	37,154	12,348,463	0.30	0.30	0.31

Table 11 provides a breakdown of the major field crops in the Halton Hills Township and provides a comparison of the Town's contribution to the Provincial totals.

The Census 2016 data illustrates wheat, corn for grain and soybeans are the major field crops grown in Halton Hills Township. In comparison to the Census 2011 data there has been a decrease in oats for grain and alfalfa production. There have been increases in the production of barley and corn for grain, and potatoes. The Halton Hills Township contributes a limited amount to the provincial totals for major field crops.

A review of the Town's production of major fruit crops indicated that the Town contributes a limited amount of production in major fruit crops to the provincial totals. The major fruit crop is apples, with an overall net decrease in major fruit crop production since 2011.

Table 11 Halton Hills Township Census 2016 - Crops

Item	Halton Hills Township	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Major Field Crops, 2016 Census (acres)					
Winter wheat	x	1,080,378	-	-	-
Wheat	5,220	1,202,309	0.43	0.47	0.42
Oats for grain	x	82,206	-	0.15	0.30
Barley for grain	148	103,717	0.14	-	0.46
Mixed grains	x	92,837	-	0.26	0.25
Corn for grain	8,504	2,162,004	0.39	0.37	0.51
Corn for silage	381	295,660	0.13	0.09	0.15
Alfalfa and Alfalfa mixtures	3,337	1,119,194	0.30	0.35	0.32
Soybeans	9,438	2,783,443	0.34	0.37	0.37
Potatoes	4	34,685	0.01	-	0.00
Major Fruit Crops, 2016 Census (acres)					
Total fruit crops	121	51,192	0.24	0.35	0.24
Apples	70	15,893	0.44	0.61	0.44
Sweet Cherries	x	435	-	-	-
Peaches	x	5,232	-	-	-
Grapes	x	18,718	-	0.05	-
Strawberries	x	2,915	-	-	-
Raspberries	x	680	-	-	-
Major Vegetable Crops, 2016 Census (acres)					
Total vegetables	442	135,420	0.33	0.16	0.80
Sweet corn	x	22,910	-	0.24	0.56
Tomatoes	11	15,744	0.07	0.07	-
Green peas	1	16,268	0.01	-	-
Green or wax beans	5	9,732	0.05	-	0.03

Table 11 also provides census data for major vegetable crops. The Halton Hills Township has seen a slight increase in total vegetable crops since 2011.

Table 12 provides the Census 2016 data for livestock for the Halton Hills Township. As indicated below, the Halton Hills Township accounts for limited input to the provincial livestock or poultry inventories.

Table 12 Halton Hills Township Census 2016 - Livestock

Item	Halton Hills Township	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Livestock Inventories, 2016 Census (number)					
Total cattle and calves	1,505	1,623,710	0.09	0.15	0.18
Steers	211	305,514	0.07	0.15	0.18
Beef cows	417	236,253	0.18	0.23	0.26
Dairy cows	208	311,960	0.07	0.12	0.11
Total pigs	70	3,534,104	0.00	0.00	0.00
Total sheep and lambs	548	321,495	0.17	0.18	0.18
Poultry Inventories, 2016 Census (number)					
Total hens and chickens	1454	50,759,994	0.00	0.00	0.00
Total turkeys	14	3,772,146	0.00	0.00	0.00

Table 13 provides a side-by-side comparison of the Halton Hills Township and the Region of Halton Census 2016 data for crops. Table 13 also provides a calculation of the percent occurrence of the Halton Hills Township agricultural census data (2016, 2011, 2006) as a comparison to the Region of Halton agricultural census data (2016, 2011, 2006). As indicated in Table 13, the Halton Hills Township has seen a general increase in its contribution to the Regional field crop production. It should also be noted that there has also been a decrease in agricultural cropping in other townships, which may account for the general increase.

As illustrated in Table 13, the Corporation of the Halton Hills Township provides a large contribution to the major field crop in Region of Halton, as evidenced by values of less than greater than 40 percent of the Region totals. The Halton Hills Township contributes 55 percent of the Regional total of apples (2016 data). The Halton Hills Township contribution to the major fruit crops production in Region of Halton provides more than 28 percent of the Regional major fruit crop total (2016 data). The Halton Hills Township is a major contributor to the Regional major vegetable crop totals and has seen a general increase in the contributions since 2006.

In general terms, the Regional Municipality of Halton is a large contributor to the Provincial agricultural production of fruit crops. The Halton Hills Township is a small contributor to the Province of Ontario agricultural production but is a large contributor to the Regional Municipality of Halton apple crop production.

Table 13 Comparison of Township and Region Census Data 2016 - Crops

Item	Halton Hills Township	Halton Regional Municipality	Percent of Region of Halton 2016	Percent of Region of Halton 2011	Percent of Region of Halton 2006
Major Field Crops, 2016 Census (acres)					
Winter wheat	x	7,643	-	-	-
Wheat	5,220	7,835	66.62	61.02	54.58
Oats for grain	x	193	-	61.05	44.70
Barley for grain	148	229	64.63	-	63.43
Mixed grains	x	243	-	74.87	82.09
Corn for grain	8,504	12,272	69.30	58.56	58.46

Item	Halton Hills Township	Halton Regional Municipality	Percent of Region of Halton 2016	Percent of Region of Halton 2011	Percent of Region of Halton 2006
Corn for silage	381	625	60.96	47.21	44.10
Alfalfa and Alfalfa Mixture	3,337	7,172	46.53	43.81	49.52
Soybeans	9,438	17,409	54.21	45.99	43.09
Potatoes	4	10	40.00	-	-
Major Fruit Crops, 2016 Census (acres)					
Total fruit crops	121	424	28.54	35.18	52.21
Apples	70	127	55.12	51.34	73.52
Sweet Cherries	x	x	-	-	-
Peaches	x	13	-	-	-
Grapes	x	77	-	13.51	-
Strawberries	x	63	-	-	43.31
Raspberries	x	28	-	-	-
Major Vegetable Crops, 2016 Census (acres)					
Total vegetables	442	642	68.85	30.48	30.33
Sweet corn	x	83	-	63.92	91.2
Tomatoes	11	44	25.0	55.00	-
Green peas	1	x	-	-	-
Green or wax beans	5	x	-	-	-

Table 14 provides a comparison of the Halton Hills Township and the Region of Halton Census (2016) data for livestock inventories. As illustrated in Table 14, the Halton Hills Township contribution to the Regional Municipality of Halton total steers, beef cows, dairy cows, total pigs, total hens and chicken inventories at 54.8, 50.5, 54.9, 50.4, and 0.90 percent respectively

Table 14 Comparison of Township and Region Census Data 2016 – Livestock

Item	Halton Hills Township	Halton Regional Municipality	Percent of Region of Halton 2016	Percent of Region of Halton 2011	Percent of Region of Halton 2006
Livestock Inventories, 2016 Census (number)					
Total cattle and calves	1,505	3,209	46.90	54.45	34.96
Steers	211	385	54.81	65.76	23.24
Beef cows	417	826	50.48	53.99	58.06
Dairy cows	208	379	54.88	66.31	64.62
Total pigs	70	139	50.36	0.00	0.00
Total sheep and lambs	548	1,583	34.62	49.33	34.05
Total hens and chickens	1,454	162,456	0.90	25.95	0.00
Total turkeys	14	x	-	-	-

When comparing the Census data for livestock to the Study Areas, the Study Areas have few active livestock operations. The operations that were noted included horse, beef, dairy, and goats. There may also be smaller livestock operations that have one or two animals for personal use or consumption. These smaller operations are often hard to identify due to the use of sheds for livestock.

When comparing the Census data for livestock to the Secondary Study Areas, there are numerous hobby horse, horse, and beef operations. It should be noted that there were a

number of barns with unknown uses, or barns that could not be seen and as a result the type of use could not be determined. It should also be restated that the agricultural buildings identified were located within the agricultural and rural areas and did not include buildings that were located within the existing designated urban areas.

4.8.3 TOWN OF MILTON

A review of Census 2016 data for the Milton Township reveals that the total area in farms is 21,314 acres (Census Farms). The majority of the farmed land is in crops with a total of 14,928 acres. The remaining lands are listed as summerfallow land, tame or seeded pasture, natural land for pasture, and Christmas trees, woodlands and wetlands.

Table 15 provides Census 2016 data for agricultural land use in Milton Township and provides a comparison to the Provincial Census 2011 and 2006 agricultural data. As indicated in the census data, Milton Township comprises approximately 0.17 percent of the total area of farms in Ontario (Census 2016).

Table 15 Milton Township Census Data (2016) – Land Use

Item	Milton Township	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Land Use, 2016 Census (acres)					
Land in crops	14,928	9,021,298	0.17	0.23	0.24
Summerfallow land	X	15,885	-	0.32	0.34
Tame or seeded pasture	X	514,168	-	0.15	0.17
Natural land for pasture	1,222	783,566	0.16	0.17	0.19
Christmas trees, woodland & wetland	2,485	1,542,637	0.16	0.20	0.22
All other land	1,828	470,909	0.39	0.31	0.38
Total area of farms	21,314	12,348,463	0.17	0.22	0.23

Table 16 provides a breakdown of the major field crops in Milton Township and provides a comparison of the Townships contribution to the Provincial totals.

The Census 2016 data illustrates corn for grain, alfalfa and alfalfa mixtures(hay) and soybeans are the major field crops grown in Milton Township. In comparison to the Census 2011 data there has been a decrease in corn for grain and silage and soybean production. There have been increases in the production of oats for grain, mixed grains and alfalfa and alfalfa mixtures(hay). Milton Township contributes a limited amount to the provincial totals for major field crops.

A review of the Townships' production of major fruit crops indicated that the Township contributes a limited amount in major fruit crops to the provincial totals. The major fruit crop is strawberries. In comparison to the Census 2011 data there has been a decrease in apple and grape production. Increases have been noted in the production of strawberries and raspberries.

Table 16 Milton Township Census 2016 - Crops

Item	Milton Township	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Major Field Crops, 2016 Census (acres)					
Winter wheat	X	1,080,378	-	-	0.19
Oats for grain	109	82,206	0.13	-	0.22
Barley for grain	X	103,717	-	-	0.17
Mixed grains	133	92,837	0.14	-	-
Corn for grain	3,283	2,162,004	0.15	0.20	0.23
Corn for silage	244	295,660	0.08	0.10	0.10
Alfalfa and Alfalfa Mixtures (Hay)	3,427	1,119,194	0.31	0.22	0.22
Soybeans	4,913	2,783,443	0.18	0.29	0.31
Potatoes	X	34,685	-	-	-
Major Fruit Crops, 2016 Census (acres)					
Total fruit crops	181	51,192	0.35	0.36	0.38
Apples	29	15,893	0.18	0.20	-
Sour Cherries	X	435	-	-	-
Peaches	X	5,232	-	-	-
Grapes	25	18,718	0.13	0.33	0.45
Strawberries	60	2,915	2.06	1.61	1.84
Raspberries	24	680	3.53	0.44	-
Major Vegetable Crops, 2016 Census (acres)					
Total vegetables	180	135,420	0.13	0.35	0.44
Sweet corn	50	22,910	0.22	0.14	-
Tomatoes	31	15,744	0.20	-	0.65
Green peas	5	16,268	0.03	-	-
Green or wax beans	1	9,732	0.01	-	-

Table 16 also provides census data for major vegetable crops. Milton Township has seen a slight decrease in total vegetable crops since 2011 and from 2006.

Table 17 provides the Census 2016 data for livestock for Milton Township. As indicated below, Milton Township accounts for limited input to the provincial livestock or poultry inventories.

Table 17 Milton Township Census 2016 - Livestock

Item	Milton Township	Province	Percent of Province 2016	Percent of Province 2011	Percent of Province 2006
Livestock Inventories, 2016 Census (number)					
Total cattle and calves	1,382	1,623,710	0.09	0.11	0.14
Steers	127	305,514	0.04	0.07	-
Beef cows	282	236,253	0.12	-	-
Dairy cows	171	311,960	0.05	-	-
Total pigs	39	3,534,104	0.00	-	-
Total sheep and lambs	947	321,495	0.29	0.14	0.30
Poultry Inventories, 2016 Census (number)					
Total hens and chickens	159,864	50,759,994	0.31	0.30	0.27
Total turkeys	-	3,772,146	-	-	0.00

Table 18 provides a side-by-side comparison of Milton Township and the Region of Halton Census 2016 data for crops. Table 18 also provides a calculation of the percent occurrence of Milton Township agricultural census data (2016, 2011, 2006) as a comparison to the Region of Halton agricultural census data (2016, 2011, 2006).

As illustrated in Table 18, Milton Township provides a significant contribution to the Region of Halton for crop production of oats for grain, mixed grain and alfalfa and alfalfa mixture (hay). Milton Township contributes 42.69 percent of the total fruit crops for the Region (2016 data). The Township is a major contributor to the Regional totals for tomatoes and sweet corn.

Table 18 Comparison of Township and Region Census Data 2016 - Crops

Item	Milton Township	Halton Regional Municipality	Percent of Region of Halton 2016	Percent Region of Halton 2011	Percent of Region Halton 2006
Major Field Crops, 2016 Census (acres)					
Winter wheat	X	7,643	-	-	22.53
Oats for grain	109	193	56.47	-	33.41
Barley for grain	X	229	-	-	22.77
Mixed grains	133	243	54.73	-	-
Corn for grain	3,283	12,272	26.75	31.65	26.29
Corn for silage	244	625	39.04	52.79	29.03
Alfalfa and Alfalfa Mixture	3,427	7,172	47.78	28.81	33.05
Soybeans	4,913	17,409	28.22	36.13	36.45
Potatoes	X	10	-	-	-
Major Fruit Crops, 2016 Census (acres)					
Total fruit crops	181	424	42.69	36.52	27.79
Apples	29	127	22.83	16.58	-
Sour Cherries	X	X	-	-	-
Peaches	X	13	-	-	-
Grapes	25	77	32.47	81.08	55.03
Strawberries	60	63	95.24	55.79	49.68
Raspberries	24	28	85.71	16.00	-
Major Vegetable Crops, 2016 Census (acres)					
Total vegetables	180	642	28.03	66.76	67.03
Sweet corn	50	83	60.24	36.08	-
Tomatoes	31	44	70.45	-	74.58
Green peas	5	X	-	-	-
Green or wax beans	1	X	-	-	-

Table 19 provides a comparison of Milton Township and the Region of Halton Census (2016) data for livestock inventories. As illustrated in Table 19, Milton Township contributes a significant amount to the Regional Municipality of Halton inventories for total cattle and calves, total steers, beef cows, dairy cows, total pigs and total sheep and lambs.

A review of the 2011 and 2006 data indicates an increase in percent for total cattle and calves, steers, and total hens and chickens.

Table 19 Comparison of Township and Region Census Data 2016 – Livestock

Item	Milton Township	Halton Regional Municipality	Percent of Region of Halton 2016	Percent of Region of Halton 2011	Percent of Region of Halton 2006
Livestock Inventories, 2016 Census (number)					
Total cattle and calves	1,505	3,209	46.90	37.78	26.68
Steers	211	385	54.81	29.26	-
Beef cows	417	826	50.48	-	-
Dairy cows	208	379	54.88	-	-
Total pigs	70	139	50.36	-	-
Total sheep and lambs	548	1,583	34.62	39.62	56.42
Poultry Inventories, 2016 Census (number)					
Total hens and chickens	1,454	162,456	0.90	99.50	56.07
Total turkeys	14	x	-	-	-

In general terms, Milton Township is a small contributor to the Province of Ontario agricultural production but is a large contributor to the Regional Municipality of Halton totals for all crops and livestock.

5 RESOURCE ALLOCATION AND CONFLICT POTENTIAL

Land use planning decisions involves trade-offs among the competing demands for land. The fundamental base used for the evaluation of agricultural lands is land quality, i.e. CLI soil capability ratings. Within the rural/urban interface, there are a number of other factors which contribute to the long-term uncertainty of the economic viability of the industry and these, in turn, are reflected in the lack of investments in agricultural facilities, land and infrastructure and changes to agricultural land use patterns in these areas. Several of these factors include, but are not limited to, the presence of rural non-farm residents, land fragmentation, intrusions of non-agriculture land uses, non-resident ownership of lands and inflated land values. This section summarizes the impact of these factors on agriculture in the area.

5.1 IMPACTS, ASSESSMENT AND COMPATABILITY WITH SURROUNDING LAND USES

The identification and assessment of potential impacts is paramount to determining potential mitigation measures to either eliminate or offset the impact to the extent feasible. A review of the OMAFRA draft Agricultural Impact Assessment guidance document identified numerous potential impacts to agriculture which may include:

- Interim or permanent loss of agricultural lands
- Fragmentation, severing or land locking of agricultural lands and operations
- The loss of existing and future farming opportunities
- The loss of infrastructure, services or assets
- The loss of investments in structures and land improvements
- Disruption or loss of functional drainage systems
- Disruption or loss of irrigation systems
- Changes to soil drainage
- Changes to surface drainage
- Changes to landforms
- Changes to hydrogeological conditions
- Disruption to surrounding farm operations
- Effects of noise, vibration, dust
- Potential compatibility concerns
- Traffic concerns
- Changes to adjacent cropping due to light pollution

It should be noted that this Agricultural Impact Assessment (AIA) report should be read in conjunction with all other discipline reports in an effort to provide an adequate evaluation of the above-mentioned potential impacts that are beyond the scope of agriculture.

The agricultural character of the Study Areas and the Secondary Study Areas has been

documented in this AIA. It has been determined that the Study Areas are located in Prime Agricultural areas while the Secondary Study Areas comprise portions of active agricultural land uses (including livestock and cash crop operations), built areas (urban land uses), commercial enterprises, and rural residential use.

It has been documented that portions of the Secondary Study Areas are within the Urban designation of Halton Region (Milton and Georgetown), the City of Mississauga, the City of Oakville and the City of Brampton.

The Secondary Study Area comprise a mix of land fragmentation, including large parcels intermixed with numerous smaller parcels, creating a fragmented land base.

These types of fragmentation (and business/commercial intrusions) are a clear indication of an area impacted by non-agricultural uses. These types of uses provide an indication of lands that are in transition from an agricultural land base to a more rural environment. The large number of small parcels and commercial/industrial lands provide an indication as to the lack of long-term intentions for agriculture in those portions of the Secondary Study Areas.

With respect to the potential impacts as listed on the previous page of this report, and the proposed future development of the Study Area lands, the following provides some context as to the extent of the potential impacts.

- Interim or permanent loss of agricultural lands – there will be a permanent loss of the use of agricultural lands within the Study Areas.
- There will be no additional fragmentation of the agricultural land base, severing or landlocking of agricultural lands as a result of the proposed future development of the Study Areas.
- The loss of existing and future farming opportunities – there will be a loss of existing and future farming opportunities on the Study Area lands.
- The loss of infrastructure, services or assets – there will be some degree of loss of infrastructure, services or assets as a result of the future development of the Study Area lands.
- The loss of investments in structures and land improvements – there will be a net loss of investment in agriculture as a result of the proposed future development of the Study Area lands.
- The loss of the use of ground water wells – there exists the potential for impact from the loss of the use of ground waters well due to lack of quantity and/or quality. Due to the locations and numbers of water wells in the Study Area, it will be important to either preserve the existing wells, or properly engineer the closing/capping of any wells in the Study Area to prevent potential groundwater contamination.
- Disruption or loss of functional drainage systems – the proposed future development of the Study Area lands will result in the loss of some tile drainage; however, these areas will be potentially developed into community or employment area, that will not require agricultural tile drainage. There will be no

net loss or disruption to artificial tile drainage systems in the Secondary Study Area.

- Disruption of loss of irrigation systems – there is no loss of investment in irrigation systems.
- Changes to soil drainage – there will be no net change in soil drainage in the Secondary Study Area as a result of future development of the Study Area lands.
- Changes to surface drainage – there will be no net change in surface drainage within the Secondary Study Area as a result of future development of the Study Area lands.
- Changes to landforms – there will be no changes to landforms (with respect to agriculture) in the Secondary Study Area as a result of future development of the Study Area lands.
- Changes to hydrogeological conditions – would need to be addressed under separate cover by the hydrogeological consultant.
- Effects of noise, vibration, dust - there should be limited potential for additional noise, vibration and dust during the operations of the future development of the Study Area lands. There is a potential for noise, vibration and dust during the initial construction phase(s). It should be noted that the specific uses in the Community and/or Employment Areas have not been assigned and that there may be development (unknown at this time), which may produce dust, manufacturing noise and vibration throughout the life of their operation.
- Potential compatibility concerns – there should be limited potential for compatibility concerns with the future development of the Study Area lands and the adjacent agricultural lands as the Study Areas.
- Traffic concerns - Traffic issues should be limited in scope as this is a proposed extension of the built area that will make use of an existing and extensive road network. In the long term, the development of the Study Areas will cause in the net loss of agricultural lands resulting in there not being a need for agricultural vehicles travelling in the built areas. Further, discussions with local farm operators have indicated that the use of roundabouts in agricultural areas is inappropriate for the heavy, slow and long equipment and trailers. The raised curbing associated with roundabouts can also cause farm trailers to tip, spill loads and create safety issues with other road users.
- A traffic study may need to be completed to address potential issues in the surrounding area.
- Changes to adjacent cropping due to light pollution – there is potential for changes in cropping due to light pollution, as the proposed future development of the Study Area lands which will include urban uses. Any use of lighting should take into consideration the impact on adjacent agricultural lands.
- Disruption to surrounding farm operations – there should be no to limited disruption for surrounding/adjacent farms as the proposed future development would be an extension of the existing built areas.
- Fugitive dust, salt spray, deicing substances/compounds – There is the potential for fugitive dust, salt spray and deicing compounds to impact the adjacent agricultural areas.

5.2 TRAFFIC, TRESPASS AND VANDALISM

Specific to agriculture, increased vehicle traffic along roadways can lead to safety issues with respect to the movement of slow moving, long, wide farm machinery and, as well, interrupt or alter farm traffic flow patterns.

It will be necessary to reduce conflicts by designing roads and traffic controls to accommodate the heavy, wide, slow-moving farm equipment (e.g. wide shoulders, no curbs, reduced speed limits, and if traffic circles (roundabouts) are to be used, then they need to accommodate large slow moving farm equipment. Discussions with local farm groups have indicated that roundabouts in agricultural areas are a poor consideration due to difficulties maneuvering large tractors pulling multiple trailers through tight turns. Further, that due to the slow speed of farm equipment, roundabouts do not allow adequate time for the equipment to move with the flow of traffic. Comments from the farm groups suggest that traffic lights would better serve the farm community and farm traffic by forcing traffic to stop and allowing controlled access to the local road system.

Traffic patterns for the proposed future development of the Study Areas will result in higher traffic volumes. It is assumed that any potential future development of the Study Area lands will include the development of road systems to accommodate the increased traffic. In the short term, Agricultural farm traffic/vehicular movement may still require the local urban roads for access to fields. There will need to be considerations that the existing road network will need to continue to accommodate farm equipment traffic.

Trespassing and vandalism impacts are generally related to development within agricultural areas predominated by specialty crop operations or large livestock operations, and in areas of close proximity to urban environments.

Trespassing and vandalism are more often a concern with specialty crop operations and livestock operations. The location of the Study Area lands, woodlot areas and stream courses help to separate any potential interactions with adjacent land uses.

5.3 AGRICULTURAL INFRASTRUCTURE

The reconnaissance level land use survey did not identify any agricultural equipment dealers, seed dealers/cleaning/drying services or farm equipment maintenance service businesses within the Study Areas. Numerous agricultural services and infrastructure were noted in the Secondary Study Areas, including large investments within the existing built areas.

A review of the OMAFRA Agricultural System Portal was completed to identify the presence of any livestock assets and services (renderers, meat plants, abattoirs), refrigerated warehousing and storage, frozen food manufacturing, farm markets, wineries, or cideries within the Study

Area. None of these features was identified within the agricultural areas of the Study Areas. A large poultry processing plant (Maple Lodge Farms) and a cold storage facility (Conestoga Cold Storage) were noted in the Secondary Study Areas.

The lack of local agricultural business and infrastructure is also indicative of areas in limited or marginal agriculture activities, as these services rely on the business supplied by the local farm operators.

5.4 MITIGATION MEASURES

Mitigation measures are designed and integrated to offset any potential negative impact that may occur as the result of a development. The following provides comment and context on mitigation measures.

5.4.1 AVOIDANCE

Any change in land use within or adjacent to an identified or designated prime agricultural area will result in the potential for impacts to the adjacent agricultural area. The severity of the potential impacts is related to the type and size of the change in land use, and the degree of agricultural activities and operations in the surrounding area.

The first method of addressing potential impacts is to avoid the potential impact. In this study, the proposed future development of the Study Areas will be a permanent use within the Town of Halton Hills and the Town of Milton built area. The proposed future development of the Study Area cannot avoid the prime agricultural areas.

5.4.2 MINIMIZING IMPACTS

When avoidance is not possible, the next priority would be to minimize impacts to the extent feasible. As a result, mitigation measures should be developed to lessen any potential impacts. The minimization of impacts may be achieved during the design process and through proactive planning measures that provide for the separation of land uses.

In this instance (proposed future development of the Study Area lands), will result in the net loss of agricultural lands, therefore the minimizing of impacts will address the impacts to the adjacent designated agricultural lands within the Secondary Study Areas. Therefore, the potential methods of minimizing impacts will relate to directing activities away from the adjacent agricultural lands.

The first method of minimizing impacts deals with directing traffic away from the roads in the agricultural areas. The future development of the Study Area lands could make use of designated road systems that would direct traffic to the existing road systems, and/or redesign the existing road structure to accommodate the proposed future development traffic volumes, and to accommodate wider shoulders for farm machinery.

5.4.3 MITIGATING IMPACTS

When avoidance techniques and minimizing potential impacts to agriculture have not achieved the desired effect the next priority is to mitigate any further impact. It should be noted that this AIA and the mitigation provided, consider that the proposed development of the Study Areas is the final development in the area. That is to suggest that these mitigation measures assume that there will be permanent boundary between urban and agricultural lands, and that there will be no further development onto the adjacent agricultural lands in the future. It is understood that planning requirements are dynamic, and that at some point in the future, there may be a requirement to develop beyond the Study Area lands. This AIA does not reflect that potential future development beyond the scope of this report.

Potential mitigation measures may include:

- The creation of berms or vegetated feature between the different types and intensities of land uses to reduce the potential for trespassing and potential vandalism. These types of buffers reduce impacts by preventing trespassing and associated problems such as litter, vandalism and dogs running at large. Effective buffers between agriculture and urban uses may combine a separation of uses, vegetation/plantings and berms. Vegetated buffers should include the use of deciduous and coniferous plants, with foliage from base to crown. These types of plantings will be effective in the capture of dust and spray drift.
- The use of salt management plans to reduce the amount of salt required for de-icing (liquid de-icers, broad casting and selective broad casting).
- The use of adequate fencing between the different types of land uses to reduce the potential for trespassing and potential vandalism.
- The use of signage between the different types and intensities of land uses to indicate No Trespassing or Private Property.
- The use of plantings/vegetation as screens and buffers to reduce visual impacts and sounds.
- The use of reduced speed limits in the agricultural areas.
- Implementation of surface and/or groundwater monitoring in areas where agricultural operations make use of surface or groundwater as part of their normal farm practices.
- Limit the use of tall streetlights or use lighting that is directed down and away from agricultural lands. Limit the use of any type of lighting (high pressure sodium (HPS) lights, and LED lights are known to interfere with soybean production) that has a negative effect on agricultural lands, livestock or crops.
- The use of design elements to direct traffic away from farming areas and to ensure that existing roads are easily accessed to accommodate farm vehicles when these areas cannot be avoided.
- Create a traffic plan that identifies closures and open routes to minimize impacts to local traffic during development phases.

- Maintain local roads to allow access for the movement of oversized agricultural equipment.
- Consider potential traffic concerns related to interactions at interchange areas, where line of sight, and size of slow moving vehicles may be an issue.

It should be noted that the use of fencing, signage, berms, vegetation screening, etc as part of a mitigation effect, will require that these types of mitigation are used/created on the lands that are to be developed and not on the adjacent agricultural lands. The adjacent landowners should not incur any expense to themselves as a result of the future development of the Study Area lands.

It should also be noted that there are opportunities to local agricultural operations in the Secondary Study Areas with the future development of the Study Area lands. The future development of the Study Area lands will bring people/employees closer to the agricultural areas (particularly in the Town of Halton Hills) which will result in increased potential for expanding sales of local fruit/vegetable crops from farm markets. Further, the local horse farms may encounter an increase in boarding of horses and riders at their respective facilities.

This AIA has provided comment on the avoidance (if possible), minimizing potential impacts and mitigation measures in the instances where avoidance is not possible.

6 SUMMARY AND CONCLUSIONS

DBH Soil Services Inc was retained to complete an Agricultural Impact Assessment (AIA) for the growth concept options for the Integrated Growth Management Strategy (IGMS) for Halton Region. The IGMS growth concept options included 6 opportunities identified as:

- Halton Hills, Community Area
- Halton Hills, Employment Area
- Halton Hills, Option 1
- Halton Hills, Option 2
- Milton, Community Area
- Milton, Employment Area

The proposed future development of these lands requires the completion of an Agricultural Impact Assessment. The purpose of this AIA is to document the existing agricultural character, identify potential existing (or future) agricultural impacts, and to provide avoidance or mitigative measures as necessary to offset any potential or real impacts.

For the purpose of an Agricultural Impact Assessment (AIA) report, agricultural operations and activities are evaluated in larger areas, the Secondary Study Areas, described as a potential zone of impact extending a minimum of 1500 m (1.5 km) beyond the boundary of the Study Area. This minimum 1500 m (1.5 km) area of potential impact outside the Study Areas is used to allow for characterization of the agricultural community and the assessment of impacts adjacent both on and in the immediate vicinity of the Study Area.

In the Regional context, the Study Areas are located in such a way that 4 of the growth concept options are located in the Town of Halton Hills, while the remaining 2 growth concept options are located in the Town of Milton.

The Study Areas comprise a mix of land uses including agricultural, rural, transportation corridors, and woodlands. The Secondary Study Areas comprise a mix of land uses including urban uses, rural uses, agricultural lands, transportation corridors, and woodlands. A large portion of the Secondary Study Areas rests within the urban boundary areas of Georgetown (Halton Hills), Milton, the City of Mississauga and the City of Brampton. Portions of those areas are presently used for agriculture; however due to their location within the urban boundaries, those lands have diminished or limited long term agricultural potential.

The results of this Agricultural Impact Assessment are presented below:

- **Geographical Limits**

Portions of the Study Areas and the Secondary Study Areas are located within the Peel Plain Physiographic unit and the South Slope Physiographic unit.

The Peel Plain Physiographic unit is described as a level to undulating tract of clay soil material covering the central portions of Halton, Peel and York Regions. This area has a gradual slope toward Lake Ontario. Drainage from this area is through the Credit, Humber, Rouge and Don Rivers, each of which have cut deep valley systems.

The South Slope Physiographic Region is considered the southern slopes of the Oak Ridges Moraine ranging from the Niagara Escarpment to the Trent River. The South Slope Physiographic Region topography generally slopes down toward Lake Ontario. East of Maple the slope is smooth and drumlinized. West of Maple the surface is associated with ground moraine with limited topography. Stream courses have carved steep sided channels in the South Slope Physiographic Region.

The topography of the Study Areas is comprised of gentle to moderate sloping lands primarily used for agricultural production of common field crops. Steep sloping lands were noted in areas adjacent to stream courses.

The Study Areas and Secondary Study Areas are located near the 3100 Crop Heat Units (CHU-MI) available for corn production in Ontario. The Crop Heat Units (CHU) index was originally developed for field corn and has been in use in Ontario for 30 years. The CHU ratings are based on the total accumulated crop heat units for the frost-free growing season in each area of the province. CHU averages range between 2500 near North Bay to over 3500 near Windsor. The higher the CHU value, the longer the growing season and greater are the opportunities for growing value crops.

A review of the OMAFRA soils and Canada Land Inventory (CLI) digital data indicated that each of the respective Study Areas (growth concept options) comprised large areas of CLI class 1 – 3 soils. It should be noted that much of Halton Region below the Niagara Escarpment is comprised of CLI class 1 – 3 soils, therefore any development in that area will result in impacts on CLI class 1 – 3 soils. The proposed future development of the IGMS options will result in the loss of CLI class 1 – 3.

- **Agricultural Policy**

A review of the boundaries of the Growth Plan for the Greater Golden Horseshoe area determined that the Study Areas and portions of the Secondary Study Areas are considered as Prime Agricultural Lands.

A review of the *Halton Region Official Plan (Office Consolidation June 19, 2018)* Map 1 – Regional Structure revealed that the Study Area lands are identified as Agricultural Area while portions of the Secondary Study Areas were identified as Agricultural Area, Urban Area and Regional Natural Heritage System. Portions of the Secondary Study Area are also identified as Future Strategic Employment Areas.

The *Town of Halton Hills Official Plan (May 1, 2019, Consolidation)* was reviewed, and it was determined that the Study Areas are considered as Agricultural Areas, Greenlands A and

Greenlands B areas. The greatest portions of the Study Areas were considered as Agricultural Areas. Portions of the Secondary Study Areas have been defined as Urban Areas (Halton Hills), Agricultural Area, and Greenlands A Area.

It is also noted that portions of 3 of the Study Areas were also within the HPBATS/GTA West Corridor Protection Area. The Halton-Peel Boundary Area Transportation Study (HPBATS) was a joint study between the Region of Peel, Halton Region, the City of Brampton, the Town of Caledon and the Town of Halton Hills that had objectives of an interconnected roadway network near the Halton-Peel Boundary, easier use of public transit, carpooling and High Occupancy Vehicle (HOV) lanes, and improving the flow of inter-regional traffic.

Further, that the majority of the Study Areas within Halton Hills abut existing urban land uses and designations including Georgetown, Milton, the City of Brampton and the City of Mississauga.

The Secondary Study Areas within the Town of Halton Hills (not illustrated for clarity of describing the Study Areas), comprised Agricultural Areas, Greenlands A, Greenlands B, Urban Areas, Hamlet Areas, and Protected Countryside Areas.

A further review of Amendment 10 Schedule A17 – Future Strategic Employment Areas (no date) to the Town of Halton Hills Official Plan (May 1, 2019 Consolidation) illustrated that portions of the Study Areas within the Town of Halton Hills comprised Agricultural Areas, Greenlands A, Greenlands B, and proposed Future Strategic Employment Areas. Figure 7 illustrates a select portion of Schedule A17 with the Study Areas overlay in a solid black line.

There are no specialty crop areas defined in the Town of Halton Hills Official Plan (May 1, 2019, Consolidation) Schedule 1A – Land Use Plan. No portions of the Study Areas or Secondary Study Areas are located within a Municipality designated Specialty Crop Area.

The review of the Town of Milton Official Plan (Consolidated August 2008) determined that portions of the Study Areas are considered Agricultural Area and Greenlands A Area. Portions of the Secondary Study Areas have been defined as Urban Areas (Milton and the City of Mississauga), Agricultural Area, Halton Waste Management Site, Parkway Belt West Plan Area, and Greenlands A Area.

No lands within the Study Area or Secondary Study Area are located within any Provincially designated Specialty Crop areas or in any municipally zoned specialty crop area.

- **Agricultural Land Use**

The Study Areas land use comprised a variety of uses including built up, common field crop, forage/pasture, market garden, nursery stock, open field, orchard, planted, plowed,

pond, recreation, scrubland, small grains, unknown, and woodlands.

The Halton Hills Community Area comprises land use of approximately 7.7 percent as built up, 78.2 percent as common field crop, 1.1 percent as open field, 6.0 percent as scrubland, and 7.0 percent as woodlands.

The Halton Hills Employment Area comprises land use of approximately 10.6 percent as built up, 52.9 percent as common field crop, 6.7 percent as forage/pasture, 7.9 percent as open field, 0.1 percent as orchard, 2.2 percent as planted, 0.4 percent as pond, 5.4 percent as scrubland, 8.8 percent, as small grains, and 4.9 percent as woodlands.

The Halton Hills Option 1 Area comprises land use of approximately 15.6 percent as built up, 58.3 percent as common field crop, 7.5 percent as recreation, 2.4 percent as scrubland, 2.7 percent as unknown land use, and 13.5 percent as woodlands.

The Halton Hills Option 2 comprises land use of approximately 4.7 percent as built up, 74.3 percent as common field crop, 1.0 percent as open field, 2.7 percent as scrubland, and 17.3 percent as woodlands.

The Milton Community Area comprises land use of approximately 5.9 percent as built up, 50.0 percent as common field crop, 9.3 percent as forage/pasture, 0.1 as nursery stock, 1.1 percent as open field, 3.3 percent as plowed, 0.1 percent as pond, 19.2 percent as recreation, 2.9 percent as scrubland, 3.4 percent, as small grains, 2.5 percent as unknown land use, and 2.3 percent as woodlands.

The Milton Employment Area comprises land use of approximately 24.3 percent as built up, 34.6 percent as common field crop, 5.7 percent as forage/pasture, 6.4 percent as market garden, 1.1 as nursery stock, 6.8 percent as open field, 0.1 percent as pond, 1.8 percent as recreation, 10.7 percent as scrubland, 1.6 percent as unknown land use, and 6.9 percent as woodlands.

- **Agricultural Investment**

A total of 197 agricultural facilities or buildings were identified within the Study Areas and Secondary Study Areas. The potential future development of the Study Area lands will result in the loss of 6 agricultural facilities in the Halton Hills Community Area (1), the loss of 19 agricultural facilities in the Halton Hills Employment Area (2), the loss of 3 agricultural facilities in the Halton Hills Option 1 (3), the loss of 1 agricultural facility in the Halton Hills Option 2 (4), the Loss of 19 agricultural facilities in the Milton Community Area (5), and the loss of 9 agricultural facilities in the Milton Employment Area (6).

There will a loss of any tile drainage systems within those areas as the proposed future development occurs. These tile drainage systems are typically limited to an individual property, therefore, as the parcel is developed, the tile drainage system is removed, but does not impact adjacent properties.

There is no investment in irrigation in either the Study Areas or the Secondary Study Areas.

There is no investment in landforming for agricultural purposes in either the Study Areas or the Secondary Study Areas.

Minimum Distance Separation I (MDS I) calculations were completed for any agricultural facility that was capable of housing livestock. A review of the calculated MDS I arcs indicates that there are some portions of the Study Areas that are encumbered by an overlying MDS arc. Those portions of the Study Areas cannot be developed until such time as the respective livestock facility is removed or rendered incapable of housing livestock. There are also a few livestock facilities within the Study Areas. Those facilities have calculated MDS arcs. Those arcs should be respected and considered during the proposed future development of the Study Areas. It is also suggested that prior to the future development of the Study Areas, that the MDS be revisited to determine the extent of the livestock facilities at that time.

A review of the online Agricultural System Portal (OMAFRA) indicated that there were few farm services or agricultural infrastructure in the Study Areas or Secondary Study Areas.

The Milton Employment area along Regional Road 25 contained the Ontario Halal Meat Packers operation, while the Town & Country Farm was noted in the Milton Employment area along Eighth Line. No other farm services or agricultural infrastructure was identified through the Agricultural Systems Portal for the Study Areas.

Numerous farm services and agricultural infrastructure was noted in the Secondary Study Areas including the Sweetness Bakery on Britannia Road, Sylvia's Bakery on Britannia Road, Van Beek's Garden Supplies on Lower Base Line, Reunion Island Coffee Ltd on Burnhamthorpe Road West, Willis Family Fruit Farm on Britannia Road, Timm Enterprises Limited on Trafalgar Road, A&A Hasselman Plantcentre Ltd. on Trafalgar Road, Chow's Farms (Jade Gardens) on Trafalgar Road, Terra Milton Garden and Nursery on Britannia Road, Landsource Organic on Britannia Road, Harvest Goodies on Trafalgar Road, Van Dongen's Landscaping & Nurseries on Trafalgar Road, Putzer Nursery on Sixth Line, Taylor Nursery on Fifth Line, Kraft Canada on Steeles Ave, Advare Baderly Ingredients Inc on 9th Line, Maple Lodge Farms, F.A.B. Meat Products, Sunny Acres Farms, and a number of other services/agricultural infrastructure within the urban areas of Milton, Georgetown, the City of Brampton and the City of Mississauga.

The closest transportation network (major roadway) is Highway 401 and 401 which are located in the immediate vicinity of the Study Areas.

- **Land Fragmentation – Land fragmentation represents a major impact to the long-term viability of agriculture in the Secondary Study Areas and is typical of areas under pressure from non-agricultural land uses.**

The Secondary Study Area comprises numerous parcels of varying size. The parcel count for the Secondary Study Area indicates the presence of numerous small parcels, and fewer larger parcels. This type of fragmentation pattern is common in areas near urban boundaries and within the Greater Toronto Area (GTA).

Rural residential uses were noted as linear development along Eighth Line, Ninth Line and Tenth Line.

The foregoing represents a comprehensive Agricultural Impact Assessment with the purpose of evaluating the Study Area and Secondary Study Area to document the existing agricultural character and to determine any potential impacts to agriculture as a result of the proposed future development of the Study Area lands.

Given the geographical location of these lands, it is the conclusion of this study that the proposed future development of the Study Area lands would result in the loss of prime agricultural lands but should have minimal impact on the surrounding agricultural activities within the Secondary Study Areas in the Town of Halton Hills.

Sincerely
DBH Soil Services Inc.



Dave Hodgson, P. Ag
President

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APPENDIX A

AGRICULTURAL FACILITIES DESCRIPTIONS

Agricultural Facilities Description

Building number 16 was located at 9111 Third Line. A new residential unit, small machine shed, and larger machine shed/pole barn (building number 16) were located at this property. Online imagery suggests that building number 15 is not used for livestock and appears to be used for storage. The building was not visible during the roadside survey due to sight line conflicts. For the purposes of this AIA, this building is assumed to be a machine shed.

Building number 18 was located at 9054-9126 Third Line. A residential unit, small machine shed/pole barn, and larger pole barn (building number 18) were located at this property. Online imagery suggests that building number 18 (and possibly the smaller machine shed/pole barn) are used for livestock. The review of online imagery suggests that this is a horse operation. The building was not visible during the roadside survey due to sight line conflicts. For the purposes of this AIA, building number 18 is assumed to be used for housing horses.

Building numbers 19, 20, and 21 are part of the Gillonna Farms operation and were located at 9256 Third Line. Buildings numbered 19 and 20 appear to be horse stables (pole barns), while building number 21 appears to be an indoor riding arena. The buildings are surrounded by wooden fenced pastures and paddock areas. Two residential units are located in close proximity to these buildings. For the purposes of this AIA, these buildings are considered a horse operation.

Building number 22 was located at 9297 Third Line. A residential unit and freestanding garage were also located at this address. Building number 22 appears to be a metal roofed pole barn with extensions. There are no paddocks or pasture areas around or adjacent to this building. A review of online imagery suggests that this building is used for storage purposes. For the purposes of this AIA, this building is considered as a pole barn – retired.

Building number 23 was located at 9390 Third Line. Building number 23 is a pole barn/machine shed and included a wooden fenced pasture area on the west, south and east sides. Other wooden fenced pasture areas, with run-in shed were observed on this property. For the purposes of this AIA, this building is considered as a pole barn – hobby horse operation.

Building numbers 30, 31, and 32 are part of the Merrybrook Farm and were located at 9110 Fourth Line. Portions of this farm operation could not be seen from the roadside; therefore, an online review was completed. The online review suggested that this property included two residential units, a large machine shed with extension, a metal roofed open sided hay or equipment storage building (building 32), a bank barn with extensions (31), a pole barn with metal silo (30), a second machine shed, and additional metal roofed building. An online review identified this farm as a small operation that sells hay (<https://www.rabbitsonline.net/threads/timothy-hay-for-gta-ontario.59730/>). The

review of online imagery suggests that this operation does not have livestock (no observed feed or active manure storage). For the purposes of this AIA, the buildings of this operation is considered as retired.

Building numbers 33, 42 and 43 were located at 9117 Fourth Line. Building number 33 is associated with two residential units (one in disrepair) and is located close to Fourth Line. Building number 33 is a metal clad machine shed. This building appears unused. A review of online imagery indicated that there are no farm laneways that access this building. Building number 42 is a large pole barn, while building number 43 is a large pole barn with extensions. A concrete open topped silo was located adjacent to the large pole barn with extensions. A residential unit was noted closer to buildings numbered 42 and 43. This farm appears to be beef operation.

Building number 39 was located at 9395 Third Line. This farm operation included a residential unit and a pole barn with a cambrel roof. An online review identified that the barn included 4 box stalls for horses and small pasture areas(<http://tours.virtualgta.com/public/vtour/display/61314?a=1#!/>). It is assumed that this location is a hobby horse farm.

Building number 44 was located at 8671 Esquesing Line. This farm included a residential unit, machine shed/garage, a remnant machine shed, and a remnant barn (building 44).

Building number 45 was located at 8501 Esquesing Line. This farm included a residential unit and a large pole barn/building with office extension. Wooden fencing enclosed pasture areas west of the residence, and to the west, south, and east of the building. A review of online imagery suggested that the pasture lands are used, but that the building was not used for livestock (no manure storage, no feed, no observed livestock trails from the building to the fields, no fencing from the building to the fields). It is assumed that this building was used for a non-livestock purpose.

Building number 93 was located at 8605 Fifth Line. This farm included a residential unit and small pole barn with concrete yard. There was a pasture area located east and south of the pole barn. The barn was not visible from the roadside. A review of online imagery suggests that this barn is used to house livestock as manure piles were noted a short distance from the barn. For the purposes of this AIA, it is assumed that this is a hobby horse farm.

Building number 94 was located at 8543 Fifth Line. This farm included a residential unit and a small pole barn. There was pasture area located east of the pole barn. This barn was not visible from the roadside. An online review suggested that the pole barn could be used to house horses. For the purposes of this AIA, it is assumed that this is a hobby horse farm.

Building numbers 95 and 96 were located at 8409 Fifth Line. This farm was identified as Singh Farm and included a residential unit, a large metal roofed machine shed (with solar

panels), and a large metal roofed pole barn with extension. These buildings were not visible from the roadside. A review of online imagery suggests that these buildings are used for processing or storage and are not used for livestock production. For the purposes of this AIA these buildings are considered as processing and storage buildings.

Building numbers 97, 98, 99, 100 and 101 were located at 8474 Fifth Line. This farm was identified as FarmScape Equestrian (<https://farmscapeequestria.wixsite.com/farmscape>) and included a residential unit, a stable (building number 97), a bank barn with extension (building number 98), an indoor riding arena (building number 99), machine shed (building number 100), machine shed (building number 101). An online review determined that this facility is an equestrian operation, and that the barns have a total of 12 box stalls.

Building number 102 was located at 8303 Fifth Line. This farm included a residential unit and a bank barn (with extension) in poor condition (missing wall boards and end wall on the verge of collapse). No evidence of livestock was observed from the roadside or on the online imagery. This building is considered a retired and remnant barn.

Building number 103 was located at 11726 5 Side Road. This farm included a bank barn (with extension) in poor condition (missing roof panels and wall boards). There is significant debris associated with other older buildings on this property. This facility is considered as retired.

Building numbers 107, 108 and 109 were located at 12211 5 Side Road. This farm included a residential unit, a free standing garage, a bank barn (building number 109) with concrete silo (capped), plastic covered greenhouse (building number 108), and smaller pole barn/machine shed (building 107). An online review indicated that this was the DM Heavenly Farm, that sells eggs, and organic vegetables (<https://yellow.place/en/dm-heavenly-farm-georgetown-on-canada>, and <https://www.facebook.com/DMHeavenlyFarm/>). Their Facebook page also indicates that they sell Maple Syrup, chicken meat, vegetables and herbs. Beef cattle were observed in the fields during the roadside survey.

Building number 110 was located at 8931 Sixth Line. This farm included a residential unit, a free standing garage and a metal clad machine shed with extension. This appears to be part of a cash crop operation. There are no livestock associated with this operation.

Building numbers 114, 115, and 116 were located at 9471 Sixth Line. This farm included a residential unit, a machine shed, a bank barn (building number 115), a pole barn (building number 114) and another pole barn (building number 116). These buildings are in poor condition with missing roof panels and wall boards. The yard areas around the barns are overgrown, and the concrete yard area is broken and overgrown. For the purposes of this AIA, these buildings are considered as retired.

Building number 117 was located at 9657 Sixth Line. This farm included a residential unit and a machine shed. For the purposes of this AIA, this building is considered a machine shed, with no capacity to house livestock.

Building numbers 119 and 120 were located at 10285 Sixth Line. This farm included a residential unit, and two horse stables. A sign at the gate reads 'Hopefield Farm'. Historically, this property had horses, with building number 119 as a stable. Building number 120 was not visible from the roadside. A review of online imagery suggests that building number 120 was not a stable as there are no visible pastures, paddocks, livestock, feed, or manure storage in close proximity. For the purposes of this AIA, it is assumed that building number 119 is a stable and building number 120 is a hay storage/machine shed facility.

Building numbers 155, 156, and 157 were located at 10208-10284 Trafalgar Road. This farm included a residential unit, a bank barn with extensions (building number 156), a pole barn (building number 155), a large machine shed (building number 157), and a smaller machine shed. A run-in shed was also noted in a pasture area adjacent to the bank barn. Numerous pastures were noted adjacent to the pole barn and bank barn. This farm appears to be a cash crop and horse farm operation.

Building number 158 was located at 12553 10 Sideroad. This farm included a residential unit, a bank barn, and a machine shed/garage. A review of online imagery indicated that smaller sheds were located adjacent to the bank barn. The condition of the smaller sheds is unknown, although the online imagery suggests that they may be in poor condition. These buildings are not used for housing livestock and are considered as retired. This property is considered a cash crop operation.

Building numbers 159 and 160 were located at 9866 Trafalgar Road. This farm included a residential unit, a bank barn with extensions (building number 159), two concrete silos (capped), Quonset style building (building number 160) with three adjacent grain storage units, a machine shed, and a smaller shed. There are many stored vehicles in various stages of repair located on this property. The online imagery review and the roadside survey indicated that there are no livestock on the property and these buildings are considered as retired from livestock production. This farm is considered as a cash crop operation.

Building number 161 was located at 9714 Trafalgar Road. This farm included a residential unit, bank barn with extension, concrete silo (capped), and a concrete silo (open top). There are many stored vehicles in various stages of repair located on this property. The online imagery review and the roadside survey indicated that there are no livestock on the property and these buildings are considered as retired from livestock production. This farm is considered as a cash crop operation.

Building numbers 162, 163, 164, and 166 were located at 9536 Trafalgar Road. This farm included a residential unit, a pole barn with extension (building number 162), a fabric tension building (building number 163), a Quonset style building (building number

164), a bank barn with extensions (building number 166). Two concrete silos (capped), a grain bin, and a metal silo (capped) were also noted at this property. Livestock was not observed at this location, and a review of online imagery suggests that this property has not been used for livestock for years. No pasture areas, feed, active manure storage, or livestock were observed at this property. For the purposes of this AIA, this farm is considered a cash crop operation, and the buildings are considered as retired.

Building numbers 168 and 169 were located at 9527 Trafalgar Road. This farm included two residential units, two machine sheds (one of which was building number 168), a bank barn (building number 169) with extension, a concrete silo (capped), a metal silo (capped), and smaller ancillary buildings (sheds). This farm could not be seen from the roadside. A review of online imagery indicated that there was no feed, active manure storage, livestock, pasture or paddock areas. For the purposes of this AIA, this farm is considered a cash crop operation, and the buildings are considered as retired.

Building number 170 was located at 9383 Trafalgar Road. This is the only building at this location. Building number 170 appears to be a bank barn with extension. A review of the online imagery indicated that there was no feed, active manure storage, livestock, pasture or paddock areas. For the purpose of this AIA, this farm is considered a cash crop operation, and the building is considered as retired.

Building numbers 171, 172, 173, 174, 175, 176, 177, 178, 179, and 180 were located at 9348 Trafalgar Road. This farm included a residential unit, machine sheds, and numerous single story poultry barn type buildings. An online search identified this location as the Markstone Landscaping company, the International European Food company, and the CM Range Rubber Services. The buildings on this property are used for storage, rental and business interests. These buildings are non-agricultural in use and are considered as retired from agriculture. The remaining portions of the property are considered as a cash crop operation.

Buildings numbers 181 and 182 were located at 9289 Trafalgar Road. This farm included a residential unit, a bank barn (building number 181) with extensions, a free standing garage, a machine shed, a pole barn with extension (building number 182), a second machine shed, and smaller ancillary buildings. Two concrete (capped) silos, and a metal grain bin were noted in the online imagery. The review of online imagery indicated that there was no feed, active manure storage, livestock, pasture or paddock areas. For the purposes of this AIA, this farm is considered a cash crop operation, and the buildings are considered as retired.

Building number 183 was located at 13223 5 Side Road. This farm included only the bank barn with extension, and a small paddock east of the barn. Beef cattle were observed at this location at one point. An online review suggested that this barn is used for livestock, as an active manure storage and feed bales were noted. The name on the barn (Agram Farms) suggests that this property is associated with buildings 186, 187, and

188. For the purposes of this AIA, this is considered an active beef barn, with the majority of the property a cash crop operation.

Building numbers 184 and 185 were located at 9156 – 9158 Trafalgar Road. This farm included two residential units, a bank barn (building number 184) with extension, a large machine shed (building number 185), an open sided machine shed, and two free standing garages. An online search identified this property as AMMA Canada (<https://www.ammaCanada.ca/>), a registered Canadian Charity. Their website indicates that this property has 14 acres which has been organic production since 2008. This property produces vegetables, organic apples, pears and honey for local charitable organizations in the Georgetown area. A review of online imagery A review of the online imagery indicated that there was no feed, active manure storage, livestock, pasture or paddock areas. For the purpose of this AIA, this farm is considered a cash crop operation, and the buildings is considered as retired from livestock production.

Building numbers 186, 187 and 188 were located at 8837-8851 Trafalgar Road. This farm is part of the Agram Farms and included a residential unit, bank barn (building number 186) with extensions, a large machine shed with extensions (building number 187), a machine shed/office building (building 188), smaller ancillary buildings, concrete open topped silo, two metal grain bins, and ground bunkers for silage. An online search identified that Agram Farms grows beef cattle (<https://canada-listing.com/agramfarmshomeofnaturallygrown>). A review of online imagery also identified that sheep were grown at this location. This is an active livestock operation.

Building number 189 was located at 8469 Trafalgar Road. This farm included three residential units, a large pole barn with extensions, a concrete silo (uncapped), a concrete silo (capped), a metal silo, two grain bins, a machine shed, a Quonset style building, and smaller ancillary buildings. An online search for this address revealed that this property is part of the Falgarbrook Farm. A search for Falgarbrook Farm revealed that they breed sport horses (Arabian, Anglo-Arabian and Arab-Warmblood crosses) (<https://www.angelfire.com/on3/cahg/ontario.html>). A previous AIA completed by DBH Soil Services in 2016 (Town of Halton Hills Premier Gateway Phase 1B Employment Area Agricultural Impact Assessment, April 15, 2016) indicated that this property had a sign at the roadside suggesting that it had been a dairy farm but was now used for horse production. A review of online imagery suggested the use of a small pasture area immediately west of building number 189. For the purposes of this AIA, this farm will be considered a cash crop operation, with horses in the barn.

Building numbers 190 and 191 were located at 8285 Hornby Road. This farm included two residential units, a machine shed, a bank barn (building number 190) with extensions (building number 191), and a concrete silo (capped). An online search for this address revealed that this property is the location for Herat Carpets (<http://heratcarpets.com/contact-us.asp>), a carpet cleaning and repair company. A review of online imagery indicated that these buildings are not used for agricultural purposes and are considered as retired for the purposes of this AIA.

Building number 201 was located at 8951 Eighth Line. This farm included a residential unit, a machine shed (building number 201) with extension and smaller ancillary buildings (sheds). An online review of imagery suggested that the shed may be used to house small animals, as there appears to be a small fenced in area. No livestock were observed at this location.

Building numbers 203 and 204 were located at 9254 Eighth Line. This farm included two residential units, a machine shed, a bank barn with extensions (concrete silo open top), small pole barn adjacent to the residential units, with small pens/paddock areas. These buildings were not visible from the roadside. Online imagery was used for the assessment of buildings. For the purposes of this AIA, this farm is considered a cash crop operation, with possible livestock (chickens, sheep, goats, etc) for personal consumption.

Building numbers 205 and 206 were located at 9309 Eighth Line. This farm was not visible from the roadside. A review of online imagery indicated that this farm included a residential unit, free standing garage, bank barn (building 205) with extensions, machine shed and a pole barn/riding arena (building 206). For the purposes of this AIA, this is considered a horse operation and cash crop operation.

Building number 207 was located at 9421 Eighth Line. This building was located on a small lot and which included a residential unit and small pole barn/shed at the back of the property. For the purposes of this AIA, this building is considered a shed.

Building numbers 208, 209, 210, and 211 were located at 9608-9704 Eighth Line. This farm included a residential unit, bank barn (building number 208) with extension, pole barn (building 210) with extension (building 209), two machine sheds (building number 211) and smaller ancillary buildings. A search for the address online revealed that Budget Pro-Roofing and Luzza International Livestock were located at this address. No additional information was identified. A reveal of online imagery identified that the concrete yard areas are cracked and that the bank barn appears unused for livestock. Small paddock areas were identified adjacent to the pole barn. These buildings were set farther back from the road. No livestock were identified in the roadside survey. A previous review of this property suggested that the farm may be used for goats and a cash crop operation. For the purposes of this AIA, it is assumed that goats are housed at this location.

Building number 212 was located at 9655 Eighth Line. This farm included a residential unit, a pole barn (building number 212) and a machine shed with cambrel roof. These buildings are partially visible from the roadside. No livestock was observed at this location. A review of online imagery suggested that these buildings are used for storage and are not used for livestock.

Building number 213 was located at 9669 Eighth Line. This farm included a residential unit and small pole barn with cambrel roof. A review of online imagery indicated that

this building is not used for livestock, that the yard area is overgrown, and that various items are stored adjacent to it. For the purposes of this AIA, this building is considered as retired.

Building number 214 was located at 9709 Eighth Line. This property included a residential unit and small pole barn/machine shed. This building was not visible from the roadside. A review of online imager indicated that this building is in an area overgrown with woody vegetation. For the purposes of this AIA, this building is considered as a machine shed.

Building numbers 215 and 216 were located at 9415 Ninth Line. This farm is part of the PAX farm operation. Discussions with the owner indicated that there is a residential unit, a bank barn (building number 215) with extensions, a machine shed, a large pole barn (building number 216) with extensions, and a metal silo (capped). This operation is a beef cattle, cash crop, hay operation. For the purposes of this AIA, both buildings are considered as being used for beef cattle.

Building number 219 was located at 9109 Ninth Line. This farm included a residential unit and small pole barn/machine shed with extension. This building was not completely visible from the roadside. A review of online imagery suggested that there is no livestock at this location and that the building is used for storage purposes. For the purpose of this AIA, this building is considered a machine shed.

Building numbers 220 and 223 were located at 8524 Ninth Line. This farm included a residential unit, a bank barn (building number 223) with extension, a pole barn (stable) (building number 220) with indoor riding arena, and a machine shed. This farm is the Halton Equine and Canine location (<https://www.haltonequineandcanine.com/>) offering horse boarding, training and sales, plus professional dog grooming and boarding.

Building number 221 was located at 8309 Ninth Line and was considered a remnant machine shed.

Building number 222 was located at 8229 Ninth Line and was considered a machine shed.

Building number 224 was located at 8278 Ninth Line. This farm included a residential unit and pole barn (stable) with indoor riding arena. A search online for this address revealed that Top Rail Stables (<http://www.toprailstables.com/>) was identified at this location. A review of the Top Rail Stables website indicates that the stables have moved to a new location at 16406 5 Sideroad Norval (building number 275 of this AIA). The buildings at 8274 Ninth Line appear to be unused for horse, as there is no evidence of feed, pasture use, or active manure storage on the online imagery. For the purposes of this AIA, this is considered a horse operation.

Building number 229 was located at 8238 Tenth Line. This was a small parcel that included a residential unit and small shed. This is not considered an agricultural use.

Building number 230 was located at 8323 Tenth Line. This was a small parcel that included a residential unit and small shed. This is not considered an agricultural use.

Building number 231 and 232 were located at 8552 Tenth Line. This parcel included two open sided machine sheds in poor condition. For the purpose of this AIA, these buildings are considered as remnant.

Building number 233 was located at 8727 Tenth Line. This parcel included a residential unit and machine shed.

Building number 234 was located at 8751 Tenth Line. This parcel included a residential unit, and pole barn/shed with extension. No livestock were visible from the roadside. A review of online imagery suggested that the building is used for storage. For the purpose of this AIA, this building is considered as a machine shed.

Building number 235 was located at 8779 Tenth Line. This parcel included a residential unit, and pole barn/shed with extension. No livestock were visible from the roadside. A review of online imagery suggested that this building is used for storage. For the purpose of this AIA, this building is considered as a shed.

Building 236 was located 8708 Tenth Line. This parcel included a residential unit, a variety of ancillary buildings, and a bank barn with extensions. There was no evidence of livestock at this location. An online search for this address revealed that Wyatt Walkem Design is located at this address (<https://www.wyattwalkemdesign.com/>). The design studio was built within the renovated space of the family barn. This building is no longer used for agricultural purposes.

Building number 237 was located at 8846 Tenth Line. This parcel included a residential unit, and pole barn with extensions. The area around the pole was overgrown with woody vegetation. This building was not visible from the roadside and the main laneway was blocked by a locked gate. A review of online imagery indicated that the barn is not used for livestock. For the purposes of this AIA, this barn is considered as retired.

Building number 238 was located at 8813 Tenth Line. This parcel included a residential unit, and pole barn/shed with extension. No livestock were visible from the roadside. For the purpose of this AIA, this building is considered as a shed.

Building number 239 was located at 8892 Tenth Line. This parcel included a residential unit and shed (set back from the road). The shed was not visible from the roadside. A review of online imagery indicated that this was a shed. For the purpose of this AIA, this building is considered as a shed pole barn.

Building number 240 was located at 15744 5 Side Road. This parcel included a residential unit and a pole barn/machine shed set farther back from the road. This building is not visible from the roadside. A review of online imagery suggested that this building is not used for livestock. The area around the building is overgrown with woody vegetation, and there are no paddocks/pens/pasture areas. No feed or active manure piles were observed. For the purposes of this AIA, this building is considered as a machine shed.

Building number 242 was located at 15337 5 Side Road. This parcel included a residential unit, a bank barn with extension and smaller ancillary buildings. The roadside review indicated that this barn is no longer used to house livestock, and that portions of the barn are missing wall boards and roof panels. For the purposes of this AIA, this barn is considered as retired and incapable of housing livestock.

Building numbers 243, 244, and 245 are located at 9258 Tenth Line. This farm included a residential unit, a bank barn (building number 244), a pole barn (building number 243), a machine shed (building number 245). A concrete open topped silo was located west of the bank barn, while two concrete silos (capped) and a metal silo (capped) were noted east of the bank barn. These buildings are in poor shape. This farm is considered a retired dairy operation.

Building numbers 246, 247, and 248 are located at 9356 Tenth Line. This farm included a residential unit, a bank barn (building number 248), a pole barn (building number 247), a machine shed (building number 246). A metal silo was located south of the bank barn, while two concrete silos (capped) were noted south of the pole barn. Portions of this farm were not visible from the roadside. The online imagery review indicated that there were additional pole barn type buildings that may be machine sheds, feed storage, or for housing livestock. This farm is considered an active dairy operation.

Building number 249 was located at 9476 Tenth Line. This farm included a residential unit, a bank barn (building number 249) with extension and a machine shed. Discussions with the owner of PAX, indicated that the bank barn is used for storage of hay, and that there is no capability for housing livestock in its present condition. For the purposes of this AIA, this building is considered as retired from livestock and is for storage only.

Building numbers 250, 251, 252, and 253 were located at 9343 Tenth Line. This parcel included a residential unit, a machine shed (building number 253), a machine shed (building number 252) with extension, a tension fabric building (building number 251), pole barn (building number 250) with extension, two concrete silos (capped), and five metal grain bins. This farm was identified as the Rosegate Farm, with dairy goats. An online search for Rosegate Farms indicated that this operation raised goats and sheep. For the purposes of this AIA, this farm is considered a goat/sheep farm.

Building numbers 254 and 255 were located at 9681 Tenth Line. This parcel included a residential unit in poor condition, a bank barn (building number 254) in poor condition

and a pole barn (building number 255) in poor condition. For the purposes of this AIA, these buildings are considered retired and incapable of housing livestock.

Building numbers 256 and 257 were located at 9774 Tenth Line. These buildings were not visible from the roadside. An online review indicated that building number 256 was a bank barn and building number 257 was a pole barn/machine shed. A concrete silo (capped) was noted in the online imagery). These buildings appear abandoned, and the laneway to the buildings from Tenth Line was gated and locked. For the purpose of this AIA, these buildings are considered as retired and incapable of housing livestock.

Building number 258 was located at 9942 Winston Churchill Boulevard. This parcel included a residential unit and a metal roofed machine shed.

Building numbers 259 and 260 were located at 9950 Winston Churchill Boulevard. This parcel included a residential unit, a bank barn (building number 260) with extension, a machine shed (building number 259), and smaller ancillary buildings. These buildings were not visible from the roadside. A review of online imagery suggested that these buildings are used for storage purposes only. There was no visual evidence of livestock at this location (no feed, no active manure storage, no livestock, no pens/paddocks/pastures). For the purposes of this AIA, these buildings are considered as retired.

Building number 261 was located at 16469 10 Side Road. This parcel included a residential unit, machine shed and bank barn (building number 261) with extension. A review of online resources indicated that these buildings are located within the urban area of Georgetown.

Building number 263 is located north of Norval at 10184 Winston Churchill Boulevard. This parcel included two residential units, a remnant barn, a small plastic covered structure, and a shed (building number 263). A review of online imagery indicated that this building is a shed and that there are no livestock present at this location.

Building number 264 is located within Norval at 11 Louisa Street. This parcel included a residential unit, a number of sheds, and a machine shed (building 264). A review of online imagery indicated that this building is a machine shed and that there are no livestock at this location.

Building number 265 was located across the road from building 264. Building 265 is a remnant barn.

Building number 268 was located at 9420-9446 Winston Churchill Boulevard and was identified as Brandalea Farms. This parcel included two residential units, a bank barn (building 268) with extensions, two machine sheds, a tension fabric structure, two smaller pole barns, and smaller ancillary buildings. Also noted were three concrete silos (capped) and a metal grain bin. Two outdoor, uncovered, liquid manure tanks/pits were

also noted. This used to be a beef feedlot and cash crop operation (<http://sirepub.halton.ca/cache/2/4zx30p2uxhh0jqrkf2m5w0vq/235900112202211382428.PDF>). A review of online imagery suggests that this operation no longer operates as a beef feedlot (no evidence of livestock, feed, active manure storage). For the purposes of this AIA, these buildings are considered as retired from livestock.

Building numbers 269 and 270 were located at 9296 Winston Churchill Boulevard. This parcel included a residential unit, a machine shed (building number 270) and a small pole barn/machine shed (building number 269). A review of online imagery indicated that building 269 was a shed that appears to be used for storage. There is no evidence of livestock at this property. For the purposes of this AIA, these buildings are considered as sheds.

Building number 271 is located at 9294 Winston Churchill Boulevard. This parcel included a residential unit, a free standing garage, and a small shed. There is no evidence of livestock at this property. For the purposes of this AIA, this building is considered a shed.

Building number 272, 273, and 274 were located at 9118 Winston Churchill Boulevard. This parcel is associated with the Croation Franciscan Fathers as part of the Croation Centre and included a residential unit, a church and the following buildings. Building number 272 is a machine shed, while building number 273 is a bank barn, and building number 274 is another machine shed. None of these buildings is used to house livestock.

Building number 275 is located at 16406 5 Side Road. This parcel included a residential unit, stables and indoor riding arena. This is the Top Rail Stables Inc. location (<http://www.toprailstables.com/>). This is an active horse farm operation.

Building numbers 276 and 277 are located at 8768 Winston Churchill Boulevard. This parcel included a residential unit, machine shed, bank barn (building number 277) with extensions, and indoor riding arena (building number 276). This property is part of the Freestyle Farm (<https://www.facebook.com/freestylefarms/>) Equine Boarding and Riding Lessons. This is an active horse farm operation.

Building numbers 278, 279, and 280 are located at 8656-8688 Winston Churchill Boulevard. This parcel included a residential unit, a machine shed, a bank barn (building number 279) with extensions, a pole barn (building number 280), a large metal clad hay storage building (building number 278), smaller ancillary buildings, three concrete silos (two capped, one open top), one metal silo, and a metal grain bin. This is an active dairy operation and is part of the Laidlaw Holsteins Farm.

Building number 281 was located at 8748 Winston Churchill Boulevard. This parcel included a residential unit, and a metal clad pole barn with extensions. The pole barn was overgrown with woody vegetation and was missing roof panels. For the purposes of this AIA, this building is considered as retired.

Building number 282 was located at 8602 Winston Churchill Boulevard. This parcel included a residential unit, a metal clad storage building, and a smaller building of unknown use. An online search for the address revealed that this address is the location for Load Star Express Ltd. There was no evidence of livestock at this location. For the purposes of this AIA, this building is considered as a shed.

Building numbers 283 and 284 were located at 8504 Winston Churchill Boulevard. An online search for this address revealed (<https://myhomebuysell.com/mls/listings/8504-winston-churchill-blvd-halton-hills-ontario-l0p-1k0-20642128/>) that this parcel included a residential unit, two barns (with a total of 35 horse stalls), an indoor riding arena, and smaller ancillary buildings. Building number 283 was a stable and riding arena, and building number 284 was a bank barn. For the purposes of this AIA, these buildings are considered part of an active horse farm operation.

Building number 289 was located at 1285 Lower Base Line East. This parcel included a residential unit, a remnant barn with extension, a remnant pole barn with extension, and a second pole barn with extensions (building 289). Small paddock areas were observed on online imagery, suggesting that this farm may include livestock with the cash crop operation. The review of online imagery failed to identify the type of livestock. For the purposes of this AIA, this building is considered an active livestock operation.

Building number 290 was located at 5212 Eighth Line. This parcel included a residential unit, small pole barn/shed, and smaller ancillary buildings. This building was not visible from the roadside. A review of online imagery suggests that this is a machine or storage shed.

Building number 291 was located at 5414 Eighth Line. This parcel included a residential unit, a garage, and a pole barn/machine shed. A review of online imagery indicated that there is no evidence of livestock and that this building appears to be used for storage purposes.

Building number 292 was located at 5430-5454 Eighth Line. This parcel included a residential unit, machine shed, numerous greenhouses, run-in sheds, and a small pole barn. The pole barn was not visible from the roadside. A review of online imagery suggested that this barn is used to house horses.

Building numbers 293 and 294 were located at 6277-6299 Eighth Line. This parcel included two residential units, and two pole barn type buildings that are used for storage purposes. An online search for this address revealed that De Manna Tree Removal Services are listed at this address. These buildings are not used for agriculture.

Building number 295 was located at 14201 Derry Road. This parcel included a residential unit, a free standing garage, a bank barn with extension, and a concrete silo

open topped. The bank barn is overgrown with woody vegetation. This building is considered as being in poor condition and incapable of housing livestock.

Building number 297 was located at 7211 Eighth Line. This parcel included a residential unit, a free standing garage, a machine shed, a bank barn with concrete open topped silo, and a larger machine shed to the east. There were no livestock associated with this building, and no evidence of livestock. For the purposes of this AIA, this facility is considered as retired from livestock use.

Building number 306 was located at 5233A-5233 Trafalgar Road. This parcel included a residential unit and small shed farther back from the roadside.

Building number 307 was located at 5283 Trafalgar Road. This parcel included a residential unit and shed that was set farther back from the roadside.

Building number 309 was located at 12470 Derry Road. This parcel included a residential unit, and four sheds. The buildings are used for storage.

Building number 312 was located at 5520 Sixth Line. This parcel included a residential unit, a machine shed, and a bank barn. The buildings were overgrown with woody vegetation. There is no evidence of livestock at this location. For the purposes of this AIA, these buildings are considered as retired from livestock use.

Building number 313 was located at 5279 Sixth Line. This parcel included only the pole barn. This building was surrounded with metal debris. A review of online imagery indicated that there was a small manure pile north of the building. No livestock or evidence of livestock was observed during the roadside survey.

Building number 314 was located at 5121 Sixth Line. This parcel included a residential unit, a bank barn (building number 314) with extension and concrete silo (open top), a small machine shed, a large machine shed, and smaller ancillary buildings. Beef cattle were observed at this location. An online search of this address revealed that Nu-Tech Lath and Plaster, and Nu-Tech Coatings and Wall System companies were located here.

Building number 315 was located at 4278 Fourth Line. This parcel included residential unit, a bank barn with extension, a pole barn with extension, and two metal grain bins. Numerous trucks were parked around the buildings. The trucks had the name Girodat Farms on the doors. There are no livestock or any evidence of livestock at this location. For the purposes of this AIA, these buildings are considered as storage and have no capacity to house livestock.

Building number 317 was located at 4331 Fourth Line. This parcel included a residential unit, a machine shed, and a pole barn. The concrete yard around the machine shed and pole barn (building 317) was cracked and in disrepair. No livestock or evidence of livestock was observed at this location. For the purposes of this AIA, these buildings are considered as retired.

Building number 318 was located at 1556 Lower Base Line. This parcel included a residential unit and a bank barn. The barn was not visible from the roadside. A review of online imagery suggested that the barn is used for storage. There is no evidence of livestock at this location. For the purposes of this AIA, this barn is considered as part of a hobby horse operation.

Building numbers 321 and 322 were located at 1148 Lower Base Line. This parcel included a residential unit, a Quonset style shed (building number 322), a small pole barn, a large machine shed (building number 321), and smaller ancillary buildings. Horses were observed in the small paddock in front of the Quonset. These buildings are considered as a part of a hobby horse and cash crop operation.

Building number 323 was located at 5153 Fifth Line. This location is a small parcel that included a residential unit and a shed. There are no livestock or any evidence of livestock at this location. For the purposes of this AIA, these buildings are considered as storage and have no capacity to house livestock.

Building numbers 333, 334, 335, 336, 337, and 338 were located at 5274 Fourth Line. This location included a residential unit, a bank barn (building number 335) with extensions, a stable/riding arena (building number 334), a machine shed (building number 333), and a number of run-in sheds (buildings numbered 336, 337 and 338). These buildings are part of the Sam-Son Farm (<https://samsonfarm.com/>), a Canadian thoroughbred breeding and racing operation. Discussions with the farm manager indicated that this farm is in the process of being closed.

Building number 339 was located at 2252 Lower Base Line. The buildings at this location were not visible from the roadside. A review of online imagery indicated that there was a residential unit, a machine shed, and a pole barn. The condition of these buildings could not be determined. There are no livestock or any evidence of livestock at this location. For the purposes of this AIA, these buildings are considered as storage and have no capacity to house livestock.

Building number 340 was located at 4349 Henderson Road. This parcel included a residential unit, a pole barn with extensions, and numerous smaller ancillary buildings. No livestock were visible at the time of the roadside survey. A review of online imagery suggested that there were sheep and beef cattle at this location.

Building number 341 was located at 4379 Henderson Road. This parcel included a residential unit, small pole barn and a few run-in sheds. Ponies/Donkeys were noted at this location.

Building number 348 was located at 4393 Henderson Road. This parcel included a residential unit, and small pole barn with extensions. No livestock were visible at the

time of the roadside survey. A review of online imagery suggested that there may be small livestock (for personal use) at this location. The type of livestock is unknown.

Building numbers 349 and 350 were located at 2638 Lower Base Line. This parcel included a residential unit, two sheds (building numbers 349 and 350), and a machine shed. There are no livestock or any evidence of livestock at this location. For the purposes of this AIA, these buildings are considered as storage and have no capacity to house livestock.

Building numbers 351, 352, 353, 354, 355, and 356 were located at 2738 Lower Base Line. This parcel included a residential unit, a pole barn (building number 351), a fabric tension building (building number 352), a pole barn (building number 353) with extensions, a pole barn (building number 354) with extensions, a pole barn (building number 355) with cambrel roof, a pole barn (building number 356), and smaller ancillary buildings. No livestock were visible at the time of the roadside survey. A review of online imagery suggested that there were beef cattle at this location.

Building numbers 359, 360, and 361 were located at 8240 Britannia Road. This parcel included a residential unit, and three machine sheds (one of the machine sheds was building number 361). Buildings numbered 359 and 360 were in the process of being demolished at the time of the roadside surveys. For the purposes of this AIA, these remaining buildings are considered as storage and have no capacity to house livestock.

Building numbers 367 and 368 were located at 1944 Thompson Road. This parcel included a residential unit, a machine shed (building number 367), and a small pole barn (building number 368). No livestock were visible at the time of the roadside survey. A review of online imagery suggested that there were beef cattle at this location.

Building number 376 was located at 2701 Lower Base Line. This parcel included a residential unit and a machine shed/pole barn. For the purposes of this AIA, this building is considered as storage and has no capacity to house livestock.

Building number 377 was located at 5061 First Line. This parcel included a residential unit, a small pole barn (building number 377) with extensions, two sheds, and smaller ancillary buildings. An online listing for this property indicated a 2600 sq. ft. barn "with fenced in fields along with electric fence for livestock, separate area for chickens, sheep and turkeys." No livestock were seen at the time of the roadside survey. For the purposes of this AIA, this barn will be considered an active hobby horse operation.

Building number 378 was located at 5121 First Line. This parcel included a residential unit, a large machine shed, small pole barn (building number 378), and smaller ancillary buildings. No livestock were seen at the time of the roadside survey. For the purposes of this AIA, this barn will be considered an active beef operation.

Building number 380 was located at 5420 First Line. At the time of the roadside survey there were no buildings at this location.

Building number 471 was located at 11857 5 Side Road. This parcel included a pole barn with extensions and a run-in shed. This building is set up as a horse operation. For the purposes of this AIA, this barn is considered an active horse barn.

Building number 472 was located at 8788 Trafalgar Road. This parcel included a residential unit, a bank barn with extensions, a concrete silo (capped), a machine shed, and smaller ancillary buildings. A search for this address online revealed that this location is part of the QuadTraining company (<https://www.quadtraining.ca/>), a rider safety training business. A roadside sign indicated that this property was part of the Ridgebrook Farm. No livestock were seen at the time of the roadside survey. For the purposes of this AIA, this barn will be considered a cash crop operation.

Building number 473 was located at 8646 Trafalgar Road. This parcel included a residential unit, a machine shed, a fabric tension building, a bank barn with extensions (building number 473), three metal silos, and smaller ancillary buildings. No livestock were seen at the time of the roadside survey. For the purposes of this AIA, this barn will be considered a cash crop operation.

Building number 507 was located at 5316 First Line. This parcel included a residential unit, and pole barn. The front field is surrounded by a wooden rail fence, while a pasture area behind was contained with electric fence. No livestock was observed at this location. An online search for this address revealed that this is the location of Sunrise Acres a horse and training facility.

Building numbers 508 and 509 were located at 4279 Fourth Line. This parcel included a residential unit, a free standing garage, a pole barn (building number 509), and pole barn with cambrel roof (building number 508). No livestock were seen at the time of the roadside survey. For the purposes of this AIA, this barn will be considered retired.

APPENDIX B

AGRICULTURAL FACILITIES PHOTOGRAPHS



Agricultural Facility 16



Agricultural Facility 18



Agricultural Facilities 19, 20 and 21



Agricultural Facility 22



Agricultural Facility 23



Agricultural Facilities 30, 31 and 32



Agricultural Facility 33



Agricultural Facility 39



Agricultural Facilities 42 and 43



Agricultural Facility 44



Agricultural Facility 45



Agricultural Facility 93



Agricultural Facility 94



Agricultural Facilities 95 and 96



Agricultural Facilities 97, 98, 99, 100 and 101



Agricultural Facility 102



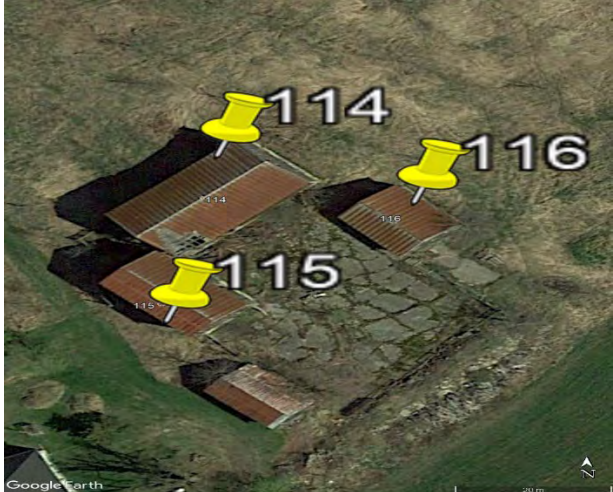
Agricultural Facility 103



Agricultural Facilities 107, 108 and 109



Agricultural Facility 110



Agricultural Facilities 114, 115, and 116



Agricultural Facility 117



Agricultural Facilities 119 and 120



Agricultural Facilities 155, 156 and 157



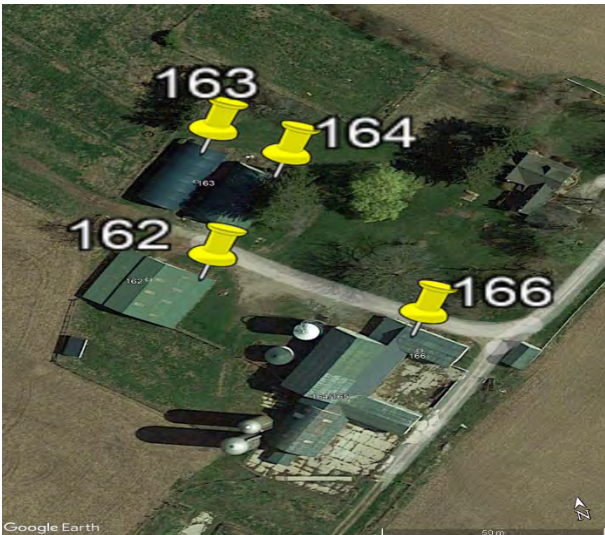
Agricultural Facility 158



Agricultural Facilities 159 and 160



Agricultural Facility 161



Agricultural Facilities 162, 163, 164 and 166



Agricultural Facilities 168 and 169



Agricultural Facility 170



Agricultural Facilities 171 - 180



Agricultural Facilities 181 and 182



Agricultural Facility 183



Agricultural Facilities 184 and 185



Agricultural Facilities 186, 187 and 188



Agricultural Facility 189



Agricultural Facilities 190 and 191



Agricultural Facility 201



Agricultural Facility 202



Agricultural Facilities 203 and 204



Agricultural Facilities 205 and 206



Agricultural Facility 207



Agricultural Facilities 208, 209, 210 and 211



Agricultural Facility 212



Agricultural Facility 213



Agricultural Facility 214



Agricultural Facility 215



Agricultural Facility 216



Agricultural Facility 219



Agricultural Facilities 220 and 223



Agricultural Facility 221



Agricultural Facility 222



Agricultural Facility 224



Agricultural Facility 229



Agricultural Facility 230



Agricultural Facilities 231 and 232



Agricultural Facility 233



Agricultural Facilities 234 and 235



Agricultural Facility 236



Agricultural Facility 237

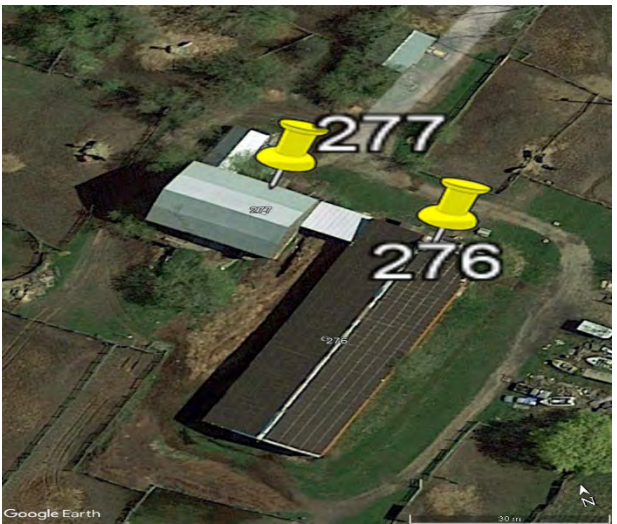


Agricultural Facility 239



















Agricultural Facility 338



Agricultural Facility 339



Agricultural Facility 340



Agricultural Facility 341



Agricultural Facility 348



Agricultural Facilities 349 and 350



Agricultural Facilities 351 - 356



Agricultural Facilities 359, 360 and 361



Agricultural Facilities 367 and 368



Agricultural Facility 369



Agricultural Facility 376



Agricultural Facility 377



Agricultural Facility 378



Agricultural Facility 471



Agricultural Facility 472



Agricultural Facility 473



Agricultural Facility 507



Agricultural Facility 508

APPENDIX C

MINIMUM DISTANCE SEPARATION (MDS I) SHEETS

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Description: Halton Region Growth Management Strategy

Application Date: Friday, January 14, 2022

Municipal File Number:


Proposed Application: New or expanding settlement area boundary
Type B Land Use

Applicant Contact Information

Region of Halton
Region of Halton

Location of Subject Lands

Regional Municipality of Halton, Town of Halton Hills
TRAFALGAR

Roll Number: 2415 

Calculation Name: 103

Description: beef

Farm Contact Information


2233686 Ontario Inc.
2233686 Ontario Inc
11726 5 Side Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 6, Lot: 5
Roll Number: 241507000238101

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	110	110.0	511 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 110.0

Potential Design Capacity (NU): 110.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X 326.46	X 0.7	X 2.2	= 352 m (1155 ft)	(actual distance from livestock barn)
					TBD
					(actual distance from manure storage)
					352 m (1155 ft)
					TBD

Calculation Name: 107

Description: beef operation

Farm Contact Information

Finchley (5 Side Road) Inc
Finchley (5 Side Road) Inc
12211 5 Side Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 6
Roll Number: 241507000138700


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	24	24.0	111 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 24.0

Potential Design Capacity (NU): 24.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (actual distance from livestock barn)			
0.7	X	208	X	0.7	X	2.2	=	224 m (736 ft)	TBD

Storage Base Distance 'S'
(minimum distance from manure storage) (actual distance from manure storage)
224 m (736 ft) **TBD**

Calculation Name: 109

Description: beef operation

Farm Contact Information


Finchley (5 Side Road) Inc
Finchley (5 Side Road) Inc
12211 5 Side Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 6
Roll Number: 241507000123700

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	97	97.0	451 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 97.0

Potential Design Capacity (NU): 97.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (actual distance from livestock barn)			
0.7	X	313.07	X	0.7	X	2.2	=	337 m (1107 ft)	TBD

Storage Base Distance 'S'
(minimum distance from manure storage) (actual distance from manure storage)
337 m (1107 ft) **TBD**

Calculation Name: 119

Description: horse farm

Farm Contact Information

Stanley Dodson
10285 Sixth Line
Halton Hills, ON, Canada L7G 4S5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 1
Roll Number: 241507000330400


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	26	26.0	604 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 26.0

Potential Design Capacity (NU): 26.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	212	X	229 m (750 ft)	TBD
		0.7	X	2.2	
				=	
				229 m (750 ft)	TBD
				229 m (750 ft)	TBD

Calculation Name: 120

Description: horse operation

Farm Contact Information


Stanley Dodson
10285 Sixth Line
Halton Hills, ON, Canada L7G 4S6

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 12
Roll Number: 241507000330400

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	28	28.0	650 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 28.0

Potential Design Capacity (NU): 28.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	216	X	233 m (764 ft)	TBD
		0.7	X	2.2	
				=	
				233 m (764 ft)	TBD
				233 m (764 ft)	TBD

Calculation Name: 155

Description: horse operation

Farm Contact Information

Douglas Wanless
10208-10284 Trafalgar Road
Halton Hills, ON, Canada L7G 4S5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 12
Roll Number: 241507000330100


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	15	15.0	348 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 15.0

Potential Design Capacity (NU): 15.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	183.33	X	0.7	X
				2.2	
				=	
				198 m (648 ft)	TBD
					TBD

Calculation Name: 156

Description: horse operation

Farm Contact Information


Douglas Wanless
10208-10284 Trafalgar Road
Halton Hills, ON, Canada L7G 4S5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 12
Roll Number: 241507000330100

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	30	30.0	697 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 30.0

Potential Design Capacity (NU): 30.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	220	X	0.7	X
				2.2	
				=	
				237 m (778 ft)	TBD
					TBD

Calculation Name: 158

Description:

Farm Contact Information

William Robert Hewson
12553 10 Side Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 11
Roll Number: 241507000330300


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	24	24.0	111 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 24.0

Potential Design Capacity (NU): 24.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	208	X	224 m (736 ft)	224 m (736 ft)
					TBD

Calculation Name: 159

Description:

Farm Contact Information


Optimal Planning Solutions
9866 Trafalgar Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 10
Roll Number: 241507000127000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	120	120.0	557 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 120.0

Potential Design Capacity (NU): 120.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	336.55	X	363 m (1190 ft)	363 m (1190 ft)
					TBD

Calculation Name: 161

Description:

Farm Contact Information

Verwest Investments Inc
9714 Trafalgar Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 9
Roll Number: 241507000127201


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	106	106.0	492 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 106.0

Potential Design Capacity (NU): 106.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	322.25	X	0.7 X 2.2 =	347 m (1140 ft)
					TBD
					347 m (1140 ft)
					TBD

Calculation Name: 162

Description:

Farm Contact Information


Mathew Putica
9536 Trafalgar Road
Halton Hills, ON, Canada L9T 2Y1

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 8
Roll Number: 241507000127300

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	90	90.0	418 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 90.0

Potential Design Capacity (NU): 90.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	306.81	X	0.7 X 2.2 =	331 m (1085 ft)
					TBD
					331 m (1085 ft)
					TBD

Calculation Name: 166

Description:

Farm Contact Information

Mathew Putica
9536 Trafalgar Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 7, Lot: 8
Roll Number: 241507000127300


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	204	204.0	948 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 204.0

Potential Design Capacity (NU): 204.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	405.24	X		437 m (1433 ft)	TBD

	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
	437 m (1433 ft)	TBD

Calculation Name: 169

Description:

Farm Contact Information


Walker Wood Limited
9527 Trafalgar Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 8
Roll Number: 241507000126300

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	105	105.0	488 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 105.0

Potential Design Capacity (NU): 105.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	321.19	X		346 m (1136 ft)	TBD

	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
	346 m (1136 ft)	TBD

Calculation Name: 18

Description: horse

Farm Contact Information

Anita Sprenger
9054-9126 Third Line
Halton Hills, ON, Canada L9T 2X9

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 3, Lot: 6
Roll Number: 241507000213000


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	9	9.0	209 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 9.0

Potential Design Capacity (NU): 9.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	163.33	X	0.7	X
				2.2	
				=	
				176 m (578 ft)	TBD
					TBD

Calculation Name: 183

Description: beef operation

Farm Contact Information


Pitsford Hills Inc
Pitsford Hills Inc
13223 5 Side Road
Halton Hills, ON, Canada L4W 1P1

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 6
Roll Number: 241507000125800

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	77	77.0	358 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 77.0

Potential Design Capacity (NU): 77.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	295.19	X	0.7	X
				2.2	
				=	
				318 m (1044 ft)	TBD
					TBD

Calculation Name: 186

Description: beef farm

Farm Contact Information

Pitsford Hill Inc
Pitsford Hill Inc
8837-8861 Trafalgar Road
Halton Hills, ON, Canada L4W 1P1

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 5
Roll Number: 241507000125700


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	273	273.0	1,268 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 273.0

Potential Design Capacity (NU): 273.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (actual distance from livestock barn)
0.7	X 448.74	X 0.7	X 2.2	=	484 m (1587 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	Storage Base Distance 'S' (actual distance from manure storage)
484 m (1587 ft)	TBD

Calculation Name: 187

Description: beef operation

Farm Contact Information


Pitsford Hill Inc
Pitsfoed Hill Inc
8837-8861 Trafalgar Road
Halton Hills, ON, Canada L4W 1P1

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 5
Roll Number: 241507000125700

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	201	201.0	934 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 201.0

Potential Design Capacity (NU): 201.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (actual distance from livestock barn)
0.7	X 403.14	X 0.7	X 2.2	=	435 m (1426 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	Storage Base Distance 'S' (actual distance from manure storage)
435 m (1426 ft)	TBD

Calculation Name: 188

Description: beef operation

Farm Contact Information

Pitsford Hills Inc
Pitsford Hills Inc
8837-8861 Trafalgar Road
Halton Hills, ON, Canada L4W 1P1

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 5
Roll Number: 241507000125700


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	50	50.0	232 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 50.0

Potential Design Capacity (NU): 50.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	260	X	280 m (920 ft)	280 m (920 ft)
		0.7	X	=	TBD
		2.2			TBD

Calculation Name: 189

Description: Horse operation

Farm Contact Information


Timothy Kunica
8469 Trafalgar Road
Halton Hills, ON, Canada L9T 4Z1

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 3
Roll Number: 241507000125000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	62	62.0	1,440 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 62.0

Potential Design Capacity (NU): 62.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	281.79	X	304 m (997 ft)	304 m (997 ft)
		0.7	X	=	TBD
		2.2			TBD

Calculation Name: 19

Description: Gillonna Farms

Farm Contact Information

Gillonna Farms
Gillonna Farms
9256 Third Line
Halton Hills, ON, Canada L9T 2X9

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 3, Lot: 7
Roll Number: 241507000212200


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	41	41.0	952 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 41.0

Potential Design Capacity (NU): 41.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)	
0.7	X	242	X	2.2	=	
					261 m (856 ft)	TBD
					Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
					261 m (856 ft)	TBD

Calculation Name: 20

Description: Gillonna Farms

Farm Contact Information


Gillonna Farms
Gillonna Farms
9256 Third Line
Halton Hills, ON, Canada L9T 2X9

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 3, Lot: 7
Roll Number: 241507000212200

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	21	21.0	488 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 21.0

Potential Design Capacity (NU): 21.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)	
0.7	X	202	X	2.2	=	
					218 m (714 ft)	TBD
					Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
					218 m (714 ft)	TBD

Calculation Name: 205

Description: horse operation

Farm Contact Information

Snobelen Land and Livestock
9309 Eighth Line
Halton Hills, ON, Canada L7G 4S5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 9, Lot: 7
Roll Number: 241507000119700


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	25	25.0	581 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 25.0

Potential Design Capacity (NU): 25.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	210	X	226 m (743 ft)	TBD
		0.7	X	2.2	
=					
				226 m (743 ft)	TBD

Calculation Name: 206

Description: horse operation

Farm Contact Information


Snobelen Land and Livestock
9309 Eighth Line
Halton Hills, ON, Canada L7G 4S5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 9, Lot: 7
Roll Number: 241507000119700

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	40	40.0	929 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 40.0

Potential Design Capacity (NU): 40.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	240	X	259 m (849 ft)	TBD
		0.7	X	2.2	
=					
				259 m (849 ft)	TBD

Calculation Name: 208

Description: Luzza International Livestock

Farm Contact Information

Halton Hills Investment
9608-9704 Eighth Line
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 9
Roll Number: 241507000121800


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Goats, Does & bucks (for meat; includes unweaned offspring)	362	45.3	504 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 45.3

Potential Design Capacity (NU): 45.3

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	250.5	X		270 m (886 ft)	TBD

	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
	270 m (886 ft)	TBD

Calculation Name: 209

Description: Luzzza International Livestock

Farm Contact Information


Halton Hills Investment
9608-9704 Eighth Line
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 8
Roll Number: 241507000121800

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Goats, Does & bucks (for meat; includes unweaned offspring)	1,102	137.8	1,536 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 137.8

Potential Design Capacity (NU): 137.8

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	353.2	X		381 m (1249 ft)	TBD

	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
	381 m (1249 ft)	TBD

Calculation Name: 210

Description: Luzzza International Livestock

Farm Contact Information

Halton Hills Investment
9608-9704 Eighth Line
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 8, Lot: 8
Roll Number: 241507000121800


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Goats, Does & bucks (for meat; includes unweaned offspring)	485	60.6	676 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 60.6

Potential Design Capacity (NU): 60.6

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X 280.56	X 0.7	X 2.2	=	302 m (992 ft)	302 m (992 ft)
						TBD


Calculation Name: 213
Description: hobby horse

Farm Contact Information
Nabel Atrach
9669 Eighth Line
Halton Hills, ON, Canada L7G 4S5

Location of existing livestock facility or anaerobic digester
Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 9, Lot: 8
Roll Number: 241507000120100

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	9	9.0	209 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 9.0

Potential Design Capacity (NU): 9.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X 163.33	X 0.7	X 2.2	=	176 m (578 ft)	176 m (578 ft)
						TBD

Calculation Name: 215
Description: VIA PAX ET Ltd

Farm Contact Information
Donald Rowntree
VIA PAX ET Ltd
12921 5 Side Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester
Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 10, Lot: 8
Roll Number: 241507000108100


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	30	30.0	139 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 30.0

Potential Design Capacity (NU): 30.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	220	X	237 m (778 ft)	237 m (778 ft)
		0.7	X	2.2	
				=	
					TBD
					TBD

Calculation Name: 216

Description: Via PAX ET Ltd

Farm Contact Information


Donald Roundtree
VIA PAX ET Ltd
12921 5 Side Road
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 10, Lot: 8
Roll Number: 241507000108010

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	150	150.0	697 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 150.0

Potential Design Capacity (NU): 150.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	363.89	X	392 m (1287 ft)	392 m (1287 ft)
		0.7	X	2.2	
				=	
					TBD
					TBD

Calculation Name: 220

Description: horse operation

Farm Contact Information

James Edwin Robinson
8524 Ninth Line
Halton Hills, ON, Canada L0P 1K0

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 9, Lot: 3
Roll Number: 241507000114000


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	21	21.0	488 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 21.0

Potential Design Capacity (NU): 21.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)	
0.7	X	202	X	2.2	=	
					218 m (714 ft)	TBD
					Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
					218 m (714 ft)	TBD

Calculation Name: 223

Description: Halton Equine and Canine

Farm Contact Information


James Edwin Robinson
8524 Ninth Line
Halton Hills, ON, Canada L0P 1K0

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 9, Lot: 3
Roll Number: 241507000114000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	23	23.0	534 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 23.0

Potential Design Capacity (NU): 23.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)	
0.7	X	206	X	2.2	=	
					222 m (729 ft)	TBD
					Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
					222 m (729 ft)	TBD

Calculation Name: 224

Description: April 2014 Empty Facility

Farm Contact Information

Ayrecrest Holdings Inc.
8278 Ninth Line
Halton Hills, ON, Canada L0P 1K0

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 9, Lot: 2
Roll Number: 241507000114700


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	40	40.0	929 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 40.0

Potential Design Capacity (NU): 40.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 240	X 0.7	X 2.2	= 259 m (849 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
259 m (849 ft)	TBD

Calculation Name: 23

Description: hobby horse

Farm Contact Information


Kristy Prouse
9390 Third Line
Halton Hills, ON, Canada L9T 2X9

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 3, Lot: 7
Roll Number: 241507000212210

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	15	15.0	348 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 15.0

Potential Design Capacity (NU): 15.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 183.33	X 0.7	X 2.2	= 198 m (648 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
198 m (648 ft)	TBD

Calculation Name: 237

Description:

Farm Contact Information

Michael Kucan
8846 Tenth Line
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 10, Lot: 5
Roll Number: 241507000108800


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	127	127.0	590 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 127.0

Potential Design Capacity (NU): 127.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	343.3	X	0.7 X 2.2 = 370 m (1214 ft)	(actual distance from livestock barn)
					TBD
					(actual distance from manure storage)
					370 m (1214 ft)
					TBD

Calculation Name: 247

Description: dairy operation

Farm Contact Information


Annie Minota Wilson
9356 Tenth Line
Halton Hills, ON, Canada L0P 1K0

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 10, Lot: 7
Roll Number: 241507000108101

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Liquid	Dairy, Milking-age Cows (dry or milking) Large Frame (545 - 658 kg) (eg. Holsteins), 3 Row Free Stall	41	58.6	400 m ²

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

Existing Manure Storage: H1. Liquid, outside, no cover, sloped-sided storage

Design Capacity (NU): 58.6

Potential Design Capacity (NU): 58.6

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	277.14	X	0.8 X 2.2 = 341 m (1120 ft)	(actual distance from livestock barn)
					TBD
					(actual distance from manure storage)
					473 m (1552 ft)
					TBD

Calculation Name: 248

Description: dairy operation

Farm Contact Information

Annie Minota Wilson
9356 Tenth Line
Halton Hills, ON, Canada L0P 1K0

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 10, Lot: 7
Roll Number: 241507000108101


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Liquid	Dairy, Milking-age Cows (dry or milking) Large Frame (545 - 658 kg) (eg. Holsteins), 3 Row Free Stall	38	54.3	371 m ²

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

Existing Manure Storage: H1. Liquid, outside, no cover, sloped-sided storage

Design Capacity (NU): 54.3

Potential Design Capacity (NU): 54.3

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	268.57	X	0.8	X
				2.2	=
				331 m (1086 ft)	TBD
				Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
				465 m (1525 ft)	TBD

Calculation Name: 250

Description: Rosegate Farms

Farm Contact Information


Neil Clayton Monkman
9343 Tenth Line
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 7
Roll Number: 241507000107700

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Goats, Does & bucks (for dairy; includes unweaned offspring)	567	70.9	1,054 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 70.9

Potential Design Capacity (NU): 70.9

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	289.72	X	0.7	X
				2.2	=
				312 m (1025 ft)	TBD
				Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
				312 m (1025 ft)	TBD

Calculation Name: 252

Description: Rosegate Farms

Farm Contact Information

Neil Clayton Monkman
Rosegate Farms
9343 Tenth Line
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 7
Roll Number: 241507000107700


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Goats, Does & bucks (for dairy; includes unweaned offspring)	166	20.8	308 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 20.8

Potential Design Capacity (NU): 20.8

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	201.5	X	217 m (713 ft)	217 m (713 ft)
		0.7	X	2.2	
				=	
					TBD
					TBD

Calculation Name: 253

Description: part of a large beef operation

Farm Contact Information


Rasem Al-Jabari
2738 Lower Base Line
Milton, ON, Canada L9T 2X5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 32
Roll Number: 240909005010000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	73	73.0	339 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 73.0

Potential Design Capacity (NU): 73.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	291.62	X	314 m (1031 ft)	314 m (1031 ft)
		0.7	X	2.2	
				=	
					TBD
					TBD

Calculation Name: 253

Description: Rosegate Farms

Farm Contact Information

Neil Clayton Monkman
9343 Tenth Line
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 7
Roll Number: 241507000107700


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Goats, Does & bucks (for dairy; includes unweaned offspring)	128	16.0	238 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 16.0

Potential Design Capacity (NU): 16.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X 186.66	X 0.7	X 2.2	= 201 m (660 ft)	(actual distance from livestock barn)
					TBD
					(actual distance from manure storage)
					201 m (660 ft)
					TBD

Calculation Name: 260

Description:

Farm Contact Information


1005218 Ontario Limited
9950 Winston Churchill Boulevard
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 10
Roll Number: 241507000101100

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	101	101.0	469 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 101.0

Potential Design Capacity (NU): 101.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X 316.85	X 0.7	X 2.2	= 342 m (1121 ft)	(actual distance from livestock barn)
					TBD
					(actual distance from manure storage)
					342 m (1121 ft)
					TBD

Calculation Name: 275

Description: Top Rail Stables

Farm Contact Information

Katherine Di Genova
Top Rail Stables
16406 5 Side Road
Halton Hills, ON, Canada L0P 1K0

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 5
Roll Number: 241507000140040


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	20	20.0	465 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 20.0

Potential Design Capacity (NU): 20.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	199.99	X	0.7	X
				2.2	=
				216 m (707 ft)	TBD
				Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
				216 m (707 ft)	TBD

Calculation Name: 277

Description: horse operation

Farm Contact Information


1554610 Ontario Inc.
9656-8688 Winston Churchill Boulevard
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 4
Roll Number: 241507000104600

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	16	16.0	372 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 16.0

Potential Design Capacity (NU): 16.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	186.66	X	0.7	X
				2.2	=
				201 m (660 ft)	TBD
				Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
				201 m (660 ft)	TBD

Calculation Name: 279

Description: Laidlaw Holsteins

Farm Contact Information

Laidlaw Holsteins
8656 Winston Churchill Boulevard
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 4
Roll Number: 241507000104900


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Dairy, Milking-age Cows (dry or milking) Large Frame (545 - 658 kg) (eg. Holsteins), Bedded Pack	44	62.9	613 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 62.9

Potential Design Capacity (NU): 62.9

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	282.55	X	0.7	X
				2.2	=
				305 m (999 ft)	TBD
				Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
				305 m (999 ft)	TBD

Calculation Name: 280

Description: Laidlaw Holsteins

Farm Contact Information


Laidlaw Holsteins
8656-8688 Winston Churchill Boulevard
Halton Hills, ON, Canada L0P 1K0

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 4
Roll Number: 241507000104900

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Dairy, Milking-age Cows (dry or milking) Large Frame (545 - 658 kg) (eg. Holsteins), Bedded Pack	26	37.1	362 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 37.1

Potential Design Capacity (NU): 37.1

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	234.29	X	0.7	X
				2.2	=
				253 m (829 ft)	TBD
				Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
				253 m (829 ft)	TBD

Calculation Name: 284

Description: horse operation

Farm Contact Information

One Value Limited
8504 Winston Churchill Boulevard
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
ESQUESING, Concession: 11, Lot: 3
Roll Number: 241507000105200


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	35	35.0	813 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 35.0

Potential Design Capacity (NU): 35.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)	
0.7	X	230	X	2.2	=	
					248 m (813 ft)	TBD
					Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
					248 m (813 ft)	TBD

Calculation Name: 289

Description: April 2014 - Operating Facility

Farm Contact Information


Tony Martus
1277 East Lower Base Line Road
Milton, ON, Canada L0P 1E0
Phone #1: 905-230-4202

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 8, Lot: 1
Roll Number: 2409090078700000000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Sheep, Ewes & rams (for meat lambs; includes unweaned offspring & replacements), Outside Access	40	5.0	56 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 5.0

Potential Design Capacity (NU): 5.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)	
0.7	X	150	X	2.2	=	
					162 m (531 ft)	TBD
					Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
					162 m (531 ft)	TBD

Calculation Name: 292

Description: small barn

Farm Contact Information

Flabo Farm Limited
Flabo Farm Limited
5430-5454 Eighth Line
Milton, ON, Canada L9E 1A6

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 8, Lot: 3
Roll Number: 240909007004900


The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	6	6.0	139 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 6.0

Potential Design Capacity (NU): 6.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	153.33	X	0.7	X
				2.2	=
				165 m (542 ft)	TBD
				Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
				165 m (542 ft)	TBD

Calculation Name: 297

Description: data from previous AIA Study 2019

Farm Contact Information


Marianna Horvat
7211 Eighth Line
Milton, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 9, Lot: 12
Roll Number: 240909008003200

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Unoccupied Livestock Barn, -	342 m ²	17.1	342 m ²


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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 17.1

Potential Design Capacity (NU): 17.1

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
1.0	X	190.33	X	0.7	X
				2.2	=
				293 m (962 ft)	TBD
				Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
				293 m (962 ft)	TBD

 The calculated setback is based on assumptions for an unoccupied barn or unused storage that may not reflect the actual design capacity.

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc


Calculation Name: 30
Description: Merrybrook Farm

Farm Contact Information
 William Robert Merry
 Merrybrook Farm
 9110 Fourth Line
 Halton Hills, ON, Canada L9T 2X9

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 4, Lot: 7
 Roll Number: 241507000209000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	65	65.0	302 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 65.0

Potential Design Capacity (NU): 65.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	284.47	X	0.7	X
				2.2	=
				307 m (1006 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
307 m (1006 ft)	TBD


Calculation Name: 31
Description: Merrybrook Farms

Farm Contact Information
 William Robert Merry
 9110 Fourth Line
 Halton Hills, ON, Canada L9T 2X9

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 4, Lot: 6
 Roll Number: 241507000209000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	148	148.0	687 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 148.0

Potential Design Capacity (NU): 148.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	362.19	X	0.7	X
				2.2	=
				390 m (1281 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
390 m (1281 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 312

Description:

Farm Contact Information


Ronald John Willis
5520 Sixth Line
Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 6, Lot: 4
Roll Number: 240909007015001

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	81	81.0	376 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 81.0

Potential Design Capacity (NU): 81.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	F' (actual distance from livestock barn)	S (actual distance from manure storage)		
0.7	X	298.77	X	0.7	X	2.2	=	322 m (1057 ft)	TBD
Storage Base Distance 'S'								322 m (1057 ft)	TBD

Calculation Name: 313

Description: Beef operation on small parcel

Farm Contact Information


Elizabeth Louise Retzer
5259 Sixth Line
Milton, ON, Canada L0P 1E0

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 7, Lot: 2
Roll Number: 240909007013601

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	103	103.0	478 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 103.0

Potential Design Capacity (NU): 103.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	F' (actual distance from livestock barn)	S (actual distance from manure storage)		
0.7	X	319.03	X	0.7	X	2.2	=	344 m (1128 ft)	TBD
Storage Base Distance 'S'								344 m (1128 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 314
Description: beef operation

Farm Contact Information


William Cecil Robinson
 5121 Sixth Line
 Milton, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
 TRAFALGAR, Concession: 7, Lot: 1
 Roll Number: 240909007013300

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	153	153.0	711 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 153.0

Potential Design Capacity (NU): 153.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 366.42	X 0.7	X 2.2	=	395 m (1296 ft)	TBD

=	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
=	395 m (1296 ft)	TBD

Calculation Name: 317
Description:

Farm Contact Information


Marian John Broniek
 4331 Fourth Line
 Milton, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
 TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 22
 Roll Number: 240909004008500

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	32	32.0	149 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 32.0

Potential Design Capacity (NU): 32.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 224	X 0.7	X 2.2	=	241 m (792 ft)	TBD

=	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
=	241 m (792 ft)	TBD


Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc


Calculation Name: 318
Description: small barn on small parcel

Farm Contact Information
 Odette Medeiros
 1556 Lower Base Line
 Milton, ON, Canada L9R 2X5

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Milton
 TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 24
 Roll Number: 240101004012300 

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	13	13.0	302 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 13.0

Potential Design Capacity (NU): 13.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 176.66	X 0.7	X 2.2	= 190 m (625 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
190 m (625 ft)	TBD


Calculation Name: 322
Description: small barn

Farm Contact Information
 CedarLand Finance Inc
 1148 Lower Base Line
 Milton, ON, Canada L4K 1Y2

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Milton
 TRAFALGAR, Concession: 5, Lot: 1
 Roll Number: 240909004011800

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	3	3.0	70 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 3.0

Potential Design Capacity (NU): 3.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 150	X 0.7	X 2.2	= 162 m (531 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
162 m (531 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 334

Description: Sam-Son Farms

Farm Contact Information

David Whitford
Sam-Son Farms
5274 Fourth Line
Milton, ON, Canada L9E 0G9

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 4, Lot: 2
Roll Number: 240909006004000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	28	28.0	650 m ²

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 28.0

Potential Design Capacity (NU): 28.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from livestock barn)	(actual distance from manure storage)		
0.7	X	216	X	0.7	X	2.2	=	233 m (764 ft)	TBD
								233 m (764 ft)	TBD

Calculation Name: 335

Description: Sam-Son Farms

Farm Contact Information

David Whitford
Sam-Son Farms
5274 Fourth Line
Milton, ON, Canada L9E 0G9

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 4, Lot: 2
Roll Number: 240909006004000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring) [Livestock barn is currently unoccupied]	6	6.0	139 m ²

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 6.0

Potential Design Capacity (NU): 6.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from livestock barn)	(actual distance from manure storage)		
0.7	X	153.33	X	0.7	X	2.2	=	165 m (542 ft)	TBD
								165 m (542 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 340

Description: small barn on small parcel

Farm Contact Information


Antonio Rodrigues
4349 Henderson Road
Milton, ON, Canada L9E 0K2

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 30
Roll Number: 240909005007000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	87	87.0	404 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 87.0

Potential Design Capacity (NU): 87.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 304.13	X 0.7	X 2.2	=	328 m (1076 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
328 m (1076 ft)	TBD

Calculation Name: 341

Description: small barn on small parcel

Farm Contact Information


Ilse Dorothea Lina Neumann
4379 Henderson Road
Milton, ON, Canada L9E 0K2

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 30
Roll Number: 240909005007200

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Donkeys, Jacks, jennies, mules, hinnies (includes unweaned foals)	4	2.0	Unavailable

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 2.0

Potential Design Capacity (NU): 2.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 150	X 0.7	X 2.2	=	162 m (531 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
162 m (531 ft)	TBD


Calculation Name: 348
Description: small pole barn on small lot

Farm Contact Information
 Antoinetta Scrocco
 4393 Henderson Road
 Milton, ON, Canada L9E 0K5

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Milton
 TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 30
 Roll Number: 240909005007300

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring) [Livestock barn is currently unoccupied]	6	6.0	139 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 6.0

Potential Design Capacity (NU): 6.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	153.33	X	0.7	X
				2.2	=
				165 m (542 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
165 m (542 ft)	TBD


Calculation Name: 351
Description: larger beef farm

Farm Contact Information
 Rasem Al-Jabari
 2738 Lower Base Line
 Milton, ON, Canada L9T 2X5

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Milton
 TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 32
 Roll Number: 240909005010100

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	49	49.0	228 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 49.0

Potential Design Capacity (NU): 49.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	258	X	0.7	X
				2.2	=
				278 m (912 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
278 m (912 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 354

Description: part of a large beef operation

Farm Contact Information


Rasem Al-Jabari
2758 Lower Base Line
Milton, ON, Canada L9T 2X5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 32
Roll Number: 240909005010300

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	72	72.0	334 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 72.0

Potential Design Capacity (NU): 72.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	290.72	X	0.7	X
		2.2	=	313 m (1028 ft)	TBD
				313 m (1028 ft)	TBD

Calculation Name: 355

Description: part of a large beef operation

Farm Contact Information


Rasem Al-Jabari
2758 Lower Base Line
Milton, ON, Canada L9T 2X5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 32
Roll Number: 240909005010300

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	39	39.0	181 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 39.0

Potential Design Capacity (NU): 39.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	238	X	0.7	X
		2.2	=	257 m (842 ft)	TBD
				257 m (842 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 356

Description: part of a large beef operation

Farm Contact Information


Rasem Al-Jabari
2758 Lower Base Line
Milton, ON, Canada L9T 2X5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 32
Roll Number: 240909005010300

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	25	25.0	116 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 25.0

Potential Design Capacity (NU): 25.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	210	X	0.7	X
		2.2	=	226 m (743 ft)	TBD
				226 m (743 ft)	TBD

Calculation Name: 368

Description: small barn on small parcel

Farm Contact Information


Ruth Gilles
1944 Thompson Road
Milton, ON, Canada L9E 0L3

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 3, Lot: 4
Roll Number: 240909006009050

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	103	103.0	478 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 103.0

Potential Design Capacity (NU): 103.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	319.03	X	0.7	X
		2.2	=	344 m (1128 ft)	TBD
				344 m (1128 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 377

Description: small pole barn online listing indicates a 2600 sq ft barn

Farm Contact Information


Stipe Loncar
5061 First Line
Milton, ON, Canada L9T 2X5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2, Lot: 1
Roll Number: 240909006001000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	10	10.0	232 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 10.0

Potential Design Capacity (NU): 10.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	F' (actual distance from livestock barn)	S (actual distance from manure storage)		
0.7	X	166.66	X	0.7	X	2.2	=	180 m (589 ft)	TBD
								180 m (589 ft)	TBD

Calculation Name: 378

Description: Small pole barn

Farm Contact Information


First Line Windmill
5121 First Line
Milton, ON, Canada L9T 2X5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2, Lot: 1
Roll Number: 240909006001800

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	27	27.0	125 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 27.0

Potential Design Capacity (NU): 27.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	F' (actual distance from livestock barn)	S (actual distance from manure storage)		
0.7	X	214	X	0.7	X	2.2	=	231 m (757 ft)	TBD
								231 m (757 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc


Calculation Name: 39
Description: hobby horse

Farm Contact Information
 Liam Christopher Finan
 9395 Third Line
 Halton Hills, ON, Canada L9T 2X9

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 4, Lot: 7
 Roll Number: 241507000211510

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	4	4.0	93 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 4.0

Potential Design Capacity (NU): 4.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from livestock barn)	(actual distance from manure storage)		
0.7	X	150	X	0.7	X	2.2	=	162 m (531 ft)	TBD
								162 m (531 ft)	TBD


Calculation Name: 42
Description: beef

Farm Contact Information
 Halton Hills Trust
 Halton Hills Trust
 9117 Fourth Line
 Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 5, Lot: 6
 Roll Number: 241507000207700

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	18	18.0	84 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 18.0

Potential Design Capacity (NU): 18.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from livestock barn)	(actual distance from manure storage)		
0.7	X	193.33	X	0.7	X	2.2	=	208 m (684 ft)	TBD
								208 m (684 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 43
Description: beef

Farm Contact Information


Halton Hills Trust
 9117 Fourth Line
 Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 5, Lot: 6
 Roll Number: 241507000207700

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	187	187.0	869 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 187.0

Potential Design Capacity (NU): 187.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	F' (actual distance from livestock barn)	S' (actual distance from manure storage)		
0.7	X	393.08	X	0.7	X	2.2	=	424 m (1390 ft)	TBD
Storage Base Distance 'S'								424 m (1390 ft)	TBD

Calculation Name: 471
Description: horse operation

Farm Contact Information


Di-Mech Estate Properties Inc
 11867 5 Side Road
 Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 6, Lot: 6
 Roll Number: 241507000231100

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	15	15.0	348 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 15.0

Potential Design Capacity (NU): 15.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)	F' (actual distance from livestock barn)	S' (actual distance from manure storage)		
0.7	X	183.33	X	0.7	X	2.2	=	198 m (648 ft)	TBD
Storage Base Distance 'S'								198 m (648 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc


Calculation Name: 472
Description: retired barn - assume beef

Farm Contact Information
 Anatolia Capital Corporation
 8788 Trafalgar Road
 Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 7, Lot: 4
 Roll Number: 241507000128100

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	205	205.0	952 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 205.0

Potential Design Capacity (NU): 205.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 405.93	X 0.7	X 2.2	=	438 m (1436 ft)	TBD

=	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
=	438 m (1436 ft)	TBD


Calculation Name: 473
Description: retired - assume beef

Farm Contact Information
 Tukahafez Investments Incorporated
 8646 Trafalgar Road
 Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 7, Lot: 4
 Roll Number: 241507000128150

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	158	158.0	734 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 158.0

Potential Design Capacity (NU): 158.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 370.57	X 0.7	X 2.2	=	399 m (1311 ft)	TBD

=	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
=	399 m (1311 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 507

Description: Sunrise Acres horse farm

Farm Contact Information


Octavio De Sousa
5316 First Line
Milton, ON, Canada L9T 2X5

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 1, Lot: 2
Roll Number: 240909006002300

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	14	14.0	325 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 14.0

Potential Design Capacity (NU): 14.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 180	X 0.7	X 2.2		194 m (637 ft)	TBD

	=	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
		194 m (637 ft)	TBD

Calculation Name: 508

Description:

Farm Contact Information


Walter Premuzic
4279 Fourth Line
Milton, ON, Canada

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 21
Roll Number: 240909004008200

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	19	19.0	88 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 19.0

Potential Design Capacity (NU): 19.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 196.66	X 0.7	X 2.2		212 m (696 ft)	TBD

	=	Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
		212 m (696 ft)	TBD

Calculation Name: 93

Description:
Farm Contact Information


 Otilla Prazers
 8605 Fifth Line
 Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester

 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 6, Lot: 3
 Roll Number: 241507000203200

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	12	12.0	279 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 12.0

Potential Design Capacity (NU): 12.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)	
0.7	X 173.33	X 0.7	X 2.2	=	187 m (613 ft)	TBD	
						Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
						187 m (613 ft)	TBD

Calculation Name: 94

Description: horse

Farm Contact Information


 Araceli Rosario Flores Diaz
 8543 Fifth Line
 Halton Hills, ON, Canada L7G 4S6

Location of existing livestock facility or anaerobic digester

 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 6, Lot: 3
 Roll Number: 2415070002032910000

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	6	6.0	139 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 6.0

Potential Design Capacity (NU): 6.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)	
0.7	X 153.33	X 0.7	X 2.2	=	165 m (542 ft)	TBD	
						Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
						165 m (542 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc


Calculation Name: 97
Description: Farmscape Equestrian

Farm Contact Information
 North American East Seed
 8474 Fifth Line
 Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 5, Lot: 3
 Roll Number: 241507000205600

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	26	26.0	604 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 26.0

Potential Design Capacity (NU): 26.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 212	X 0.7	X 2.2	=	229 m (750 ft)	TBD
					Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
					229 m (750 ft)	TBD


Calculation Name: 98
Description: Farmscape Equestrian

Farm Contact Information
 North American East Asia Seed
 Farmscape Equestrian
 8474 Fifth Line
 Halton Hills, ON, Canada

Location of existing livestock facility or anaerobic digester
 Regional Municipality of Halton, Town of Halton Hills
 ESQUESING, Concession: 5, Lot: 3
 Roll Number: 241507000205600

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	12	12.0	279 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 12.0

Potential Design Capacity (NU): 12.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	=	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 173.33	X 0.7	X 2.2	=	187 m (613 ft)	TBD
					Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
					187 m (613 ft)	TBD

Minimum Distance Separation I

Halton IGMS

Prepared By: Dave Hodgson, President, DBH Soil Services Inc

Calculation Name: 509

Description: retired - assume beef

Farm Contact Information


Walter Premuzic
4279 Fourth Line
Milton, ON, Canada L9E 0G7

Location of existing livestock facility or anaerobic digester

Regional Municipality of Halton, Town of Milton
TRAFALGAR, Concession: 2 NORTH OF DUNDAS STREET, Lot: 21
Roll Number: 240909004008200

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	17	17.0	79 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 17.0

Potential Design Capacity (NU): 17.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X 189.99	X 0.7	X 2.2	= 205 m (672 ft)	TBD

Storage Base Distance 'S' (minimum distance from manure storage)	(actual distance from manure storage)
205 m (672 ft)	TBD

Preparer Information

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DBH Soil Services Inc
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Fax: 519-578-5039
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Signature of Preparer: _____ Date: _____
Dave Hodgson, President

NOTE TO THE USER:

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

APPENDIX D

Unique Soil Symbols and Canada Land Inventory (CLI) List

soilcode	slope	cli	clisub1	clisub2
10	N	5	I	
11	N	7	T	
12	15 - 30	7	R	T
13	N	7	R	
B.L.	N	5	I	
Ba	2 - 5	2	F	
Ba	0 - 0.5	2	F	
Ba	0.5 - 2	2	F	
Be	2 - 5	2	F	
Be	0.5 - 2	2	F	
Bl	2 - 5	2	F	
Bl	0.5 - 2	2	F	
Br	5 - 9	5	R	
Bs	2 - 5	4	F	R
Bu	2 - 5	2	F	M
Bu	5 - 9	3	T	
Bu	9 - 15	4	T	
Cd	0 - 0.5	2	W	
Cd	0.5 - 2	2	W	
Ch	2 - 5	1		
Ch	5 - 9	1		
Ch	0 - 0.5	1		
Ch	0.5 - 2	1		
Ch	15 - 30	1		
Ci	2 - 5	1		
Ck	2 - 5	2	F	
Cl	2 - 5	1		
Co	2 - 5	2	W	
Co	0 - 0.5	2	W	
Co	0.5 - 2	2	W	
Cs	0 - 0.5	4	R	W
Cs	0.5 - 2	4	R	W
Dk	2 - 5	4	F	M
Dk	5 - 9	4	S	T
Dk	9 - 15	4	S	T
Dk	0 - 0.5	4	F	M
Dk	0.5 - 2	4	F	M
Dk	15 - 30	6	T	S
Dk	30 - 45	6	T	S
DI	2 - 5	3	S	P

soilcode	slope	cli	clisub1	clisub2
Dl	5 - 9	3	S	P
Dl	5 - 9	3	M	F
Dl	9 - 15	4	S	T
Dl	9 - 15	5	P	I
Dl	0 - 0.5	3	S	P
Dl	15 - 30	5	T	
Dr	5 - 9	6	R	P
Ds	5 - 9	6	R	P
Du	9 - 15	4	S	T
Fl	2 - 5	6	R	
Fl	5 - 9	6	R	
Fl	9 - 15	6	R	
Fl	0 - 0.5	6	R	
Fl	0.5 - 2	6	R	
Fn	2 - 5	2	F	M
Fn	5 - 9	2	S	T
Fn	5 - 9	3	T	I
Fn	9 - 15	4	T	
Fn	0 - 0.5	2	F	M
Fo	2 - 5	2	F	M
Fo	5 - 9	3	S	T
Fo	9 - 15	4	S	T
Fo	0.5 - 2	2	F	M
Fo	15 - 30	5	T	
Fo	30 - 45	6	T	
Fp	9 - 15	4	R	T
Fr	5 - 9	7	R	
Fs	0.5 - 2	5	R	
Gf	9 - 15	4	W	
Gf	0.5 - 2	4	W	
Gi	2 - 5	2	F	M
Gi	5 - 9	2	S	T
Gi	5 - 9	3	T	I
Gi	9 - 15	4	T	
Gi	0.5 - 2	2	F	M
Gi	15 - 30	5	T	
Gl	2 - 5	1		
Gl	5 - 9	3	T	
Gl	9 - 15	4	T	
Gl	15 - 30	5	T	

soilcode	slope	cli	clisub1	clisub2
Gp	2 - 5	5	R	
Gr	0 - 0.5	5	W	
Gr	0.5 - 2	5	W	
Gs	2 - 5	3	R	
Gs	5 - 9	3	R	T
Gu	2 - 5	1		
Gu	5 - 9	3	T	
Gu	9 - 15	4	T	
Jc	2 - 5	3	D	W
Jc	0.5 - 2	3	D	W
Kl	2 - 5	4	P	W
Kl	5 - 9	4	P	W
Kl	0.5 - 2	4	P	W
Lc	5 - 9	3	E	T
Lc	9 - 15	4	T	
Lc	0 - 0.5	2	D	
Lc	15 - 30	5	T	
Lc	30 - 45	5	D	
Li	2 - 5	5	P	W
Li	5 - 9	5	P	W
Li	0.5 - 2	5	P	W
Ll	2 - 5	1		
Ll	0.5 - 2	1		
Lo	2 - 5	1		
M	0 - 0.5	0		
Ma	0 - 0.5	7	I	
Ml	2 - 5	4	D	W
Ml	0 - 0.5	4	D	W
Ms	0 - 0.5	0		
Oi	5 - 9	3	T	
Oi	9 - 15	4	T	
Oi	15 - 30	5	T	
Ol	2 - 5	1		
Ol	5 - 9	3	T	
Ol	9 - 15	4	T	
Ol	15 - 30	5	T	
On	2 - 5	1		
On	5 - 9	3	T	
On	9 - 15	1		
On	9 - 15	4	T	

soilcode	slope	cli	clisub1	clisub2
On	0 - 0.5	1		
On	0.5 - 2	1		
On	15 - 30	5	T	
On	30 - 45	6	T	
Or	0 - 0.5	5	P	
P	0 - 0.5	0		
Pl	2 - 5	2	W	
Pl	0 - 0.5	2	W	
Pl	0.5 - 2	2	W	
PT	N	0		
QY	N	0		
Sp	2 - 5	2	F	M
Sp	5 - 9	2	T	
Sp	9 - 15	3	T	
Tc	2 - 5	3	D	
Tc	5 - 9	3	D	T
Tc	0 - 0.5	3	D	
Tr	9 - 15	4	T	
Tr	15 - 30	5	T	
Tu	2 - 5	1		
Tu	0 - 0.5	1		
Tu	0.5 - 2	1		
UL	N	0		
Vi	2 - 5	2	F	
Wi	0.5 - 2	2	F	
ZZ	N	W		

APPENDIX E

DAVE HODGSON CURRICULUM VITAE



DAVID B. HODGSON, B.Sc., P. Ag.
PRESIDENT – Senior Pedologist/Agrologist

- EDUCATION**
- B.Sc. (Agriculture), 1983-1987; University of Guelph, Major in Soil Science
 - Agricultural Engineering, 1982-1983; University of Guelph.
 - Materials Science Technology, 1981-1982; Northern Alberta Institute of Technology (NAIT), Edmonton, Alberta.

AREAS OF PROFESSIONAL EXPERIENCE

2000 to Present **Senior Pedologist/President. DBH Soil Services Inc., Kitchener, Ontario.**
Mr. Hodgson provides expertise in the investigation, assessment and resource evaluation of agricultural operations/facilities and soil materials. Dave is directly responsible for the field and office operations of DBH Soil Services and for providing advanced problem solving skills as required on an individual client/project basis. Dave is skilled at assessing soil and agricultural resources, determining potential impacts and is responsible for providing the analysis of and recommendations for the remediation of impacts to soil/agricultural/environmental systems in both rural and urban environments.

1992 to 2000 **Pedologist/Project Scientist. Ecologistics Limited, Waterloo, Ontario.**
As pedologist (soil scientist), Mr. Hodgson provided expertise in the morphological, chemical and physical characterization of insitu soils. As such, Mr. Hodgson was involved in a variety of environmental assessment, waste management, agricultural research and site/route selection studies.
Dave was directly responsible for compiling, analysis and management of the environmental resource information. Dave is skilled at evaluating the resource information utilizing Geographic Information System (GIS) applications.

Dave was also involved the firms Environmental Audit and Remediation Division in the capacity of: asbestos identification; an inspector for the remediation of a pesticide contaminated site; and an investigator for Phase I and Phase II Audits.

SELECT PROJECT EXPERIENCE

Environmental Assessment Studies

- Agricultural Component of the Bradford Bypass (Highway 400 to 404 link) 2021 – ongoing.
- Agricultural Component of the Green for Life (GFL) Environmental, Moose Creek, Eastern Ontario Waste Handling Facility (EOWHF) Expansion, 2020 – 2021.
- Agricultural Component of the Greater Toronto Area West (GTAW) Highway Corridor Assessment, 2019 – ongoing.
- Peer Review of the Walker Environmental Group (WEG) Inc. Southwestern Landfill Proposal, Ingersoll, 2013 – 2021.
- Agricultural Component for the High-Speed Rail Kitchener to London –Terms of Reference, 2018,
- Agricultural Component of the Mount Nemo Heritage District Conservation Study – City of Burlington, 2014 – 2015.
- Agricultural Component of the Greater Toronto Area West (GTAW) Highway Corridor Assessment – Phase 2, 2014 – 2016.
- Peer Review of the Agricultural Component of the Walker Group Landfill – Ingersoll, 2013 – 2015.
- Agricultural Component of the Highway 407 East Extension Design and Build Phase, 2012 – 2013.
- Agricultural Component of the Beechwood Road Environmental Centre (Landfill/Recycling) – Napanee,



2012 – 2013.

- Agricultural Component of the Clean Harbors Hazardous Waste Landfill Lambton County 2009 – 2015.
- Agricultural Component of the Highway 401 widening Cambridge to Halton Region 2009 – 2012.
- Agricultural Component of the Upper York Sanitary Sewer Study, York Region, 2009 – 2013.
- Agricultural Component of the Greater Toronto Area West Corridor Environmental Assessment Study 2007 – 2013 (Phase I).
- Agricultural Component of the Niagara to GTA Planning and Environmental Assessment Study, 2007 – 2013.
- Agricultural Component of the Highway 401 widening, Chatham, 2006 - 2007.
- Agricultural Component of the Trafalgar Road study, Halton Region, 2005.
- Agricultural Component of the Highway 404 Extension North, 2004.
- Agricultural Component of the Highway 404 – 400 Bradford Bypass, 2004.
- Agricultural Component of the Highway 407 East Extension, 2002 – 2010.

Agricultural Impact Studies

- Bradford Bypass Highway 400- 404 Link, Agricultural Impact Assessment, 2021 – ongoing.
- Wilfrid Laurier Milton Campus, Agricultural Impact Assessment, 2021 – ongoing.
- Town of Lincoln Road Realignment, Agricultural Impact Assessment, 2021 – ongoing.
- Britannia Secondary Plan, Agricultural Impact Assessment, Milton, 2021 – ongoing.
- Petersburg Sand Pit, Agricultural Impact Assessment, 2021 – ongoing.
- Milton, CRH Quarry Expansion, Agricultural Impact Assessment, 2020 – ongoing.
- Grimsby, Specialty Crop Area Redesignation, Agricultural Impact Assessment, 2020-ongoing.
- Halton Hills, Premier Gateway Phase 2 Employment Lands Secondary Plan, Agricultural Impact Assessment, 2020 - 2021.
- Milton Education Village Secondary Plan, Agricultural Impact Assessment, 2020 - 2021.
- Woodstock, Pattullo Avenue Realignment, Agricultural Impact Assessment, 2020 - 2021.
- Smithville, West Lincoln Master Community Plan, Agricultural Impact Assessment, AECOM, 2019 – On-going.
- Kirby Road Agricultural Impact Assessment, HDR, Vaughan, 2019 – 2021.
- Elfrida Lands, City of Hamilton, Agricultural Impact Assessment Update, WSP, 2019 – 2021.
- Dorsay Development – Durham Region High Level Agricultural Assessment, 2019.
- Stoney Creek Landfill AIA Update – GHD, 2019.
- Town of Wilmot, Agricultural Impact Assessment (AIA) Aggregate Pit Study (Hallman Pit), 2018, On-going.
- Courtice Area South East Secondary Plan (Clarington) Agricultural Impact Assessment (AIA), 2019,
- Town of Halton Hills, Minimum Distance Separation (MDS I), August 2018,
- Cedar Creek Pit/Alps Pit (North Dumfries), Agricultural Impact Assessment (AIA), 2018 – On-going,
- Belle Aire Road (Simcoe County) Agricultural Impact Assessment (AIA) Study, 2019,
- Vinemount Quarry Extension (Niagara) Agricultural Impact Assessment (AIA) Study, December 2017.
- Grimsby – Agricultural Impact Assessment Opinion, November 2017.
- City of Hamilton, Urban Core Developments – Agricultural Capability Assessment, February 2017.
- Township of North Dumfries – Minimum Distance Separation (MDS I), February 2017.
- Township of Erin, County of Wellington – Minimum Distance Separation I (MDS I Study), 2016.
- Halton Hills Employment Area Secondary Plan, Halton, 2015 - 2016.
- Peer Review of Agricultural Impact Assessment, Oro-Medonte Township, 2015.
- Greenwood Construction Aggregate Pit, Mono Township, 2014 - 2015.
- Innisfil Mapleview Developments, Town of Innisfil – Minimum Distance Separation (MDS I), 2014.
- Loyalist Township – Minimum Distance Separation (MDS I & 2), 2014.
- Rivera Fine Homes, Caledon – Minimum Distance Separation (MDS I), 2014.
- Town of Milton PanAm Velodrome – Minimum Distance Separation (MDS) 2012 – 2013.

Soil Surveys/Soil Evaluations

- Soil Sampling, City of Kitchener, 2021 – 2022.



- Soybean Cyst Nematode Soil Sampling, Enbridge, 2021.
- Soil Survey and Canada Land Inventory Evaluation, Max Becker Enterprises, City of Kitchener, 2021
- Soil Survey and Canada Land Inventory Evaluation, Max Beck Enterprises, City of Kitchener, 2021 – 2022.
- Soil Survey and Canada Land Inventory Evaluation, Burlington, Nelson Quarry, 2020-2021.
- City of Kitchener, City Wide Soil Studies, 2020-ongoing.
- Soil Survey, Fallowfield Drive, City of Kitchener Development Manual Study, 2020 - ongoing.
- Soil Survey, Williamsburg Estates, City of Kitchener Development Manual Study, 2020 - 2021.
- Soil Survey, South Estates, City of Kitchener Development Manual Study, 2020 - 2021.
- Soil Survey and Canada Land Inventory Evaluation, Burlington, Nelson Quarry, 2019.
- Soil Survey and Canada Land Inventory Evaluation, Maryhill Pit, 2019.
- Soil Survey and Canada Land Inventory Evaluation, Glen Morris Pit, Lafarge Canada, 2018,
- Soil Survey and Canada Land Inventory Evaluation, Brantford Pit Extension, Lafarge Canada, 2018,
- Soil Survey and Canada Land Inventory Evaluation, Pinkney Pit Extension, Lafarge Canada, May 2018,
- Soil evaluation and opinion, King-Vaughan Road, March 2018,
- Soil Sampling, Upper Medway Watershed, Agriculture and Agri-Food Canada. December 2017 – June 2018.
- Soil Survey and Canada Land Inventory Evaluation, Hillsburgh Pit Extension, SBM St Marys, December 2017.
- Soil Survey and Canada Land Inventory Evaluation, Erin South Pit Extension, Halton Crushed Stone, December 2017.
- City of Kitchener, City Wide Urban Soil Assessments, 2016 – On-going.
- Soil Survey and Canada Land Inventory Evaluation, Solar Feed-In Tariff (FIT) Program Study, 2016.
 - Bruce County (15 sites)
 - Grey County (4 sites)
- Soil Survey and Canada Land Inventory Evaluation, Wasaga Beach area, County of Simcoe, 2016.
- Soil Survey and Canada Land Inventory Evaluation Study, MHBC Bradford, Simcoe County, 2016.
- Soil Survey and Canada Land Inventory Evaluation, Solar Feed-In Tariff (FIT Program Study), Carbon Foot Print Offsetters, Durham Region, 2015.
- Soil Survey and Canada Land Inventory Evaluation, Solar Feed-In Tariff (FIT Program Study), Abundant Solar Energy (12 Sites – Peterborough, Madoc, Havelock, Belleville), 2015.
- Soil Survey and Canada Land Inventory Evaluation, Solar Feed-In Tariff (FIT Program Study), City of Hamilton, 2015.

Municipal Comprehensive Review Studies (MCR)

- Simcoe County, 2020 - ongoing.
- Northumberland County, 2020 - ongoing.
- Halton Region, 2019 - ongoing.

Land Evaluation and Area Review Studies (LEAR)

- Mapping Audit Northumberland County. Comparison of Regional and Provincial Prime Agricultural Area Mapping – 2021 - ongoing.
- Mapping Audit Simcoe County. Comparison of Regional and Provincial Prime Agricultural Area Mapping – 2021 - ongoing.
- Mapping Audit Halton Region. Comparison of Regional and Provincial Prime Agricultural Area Mapping – 2019 - ongoing.
- Land Evaluation and Area Review – Soils Component, in Association with AgPlan Ltd, Kanata/Munster. December 2017 – July 2018.
- Land Evaluation and Area Review – Soils Component, Prince Edward County, 2016 – 2017.
- Land Evaluation and Area Review – Soils Component, Peel Region, 2013 - 2014.
- Land Evaluation and Area Review, Minto Communities, Ottawa, 2012 – 2013.
- GIS and LE component of Land Evaluation and Area Review, York Region 2008 – 2009.
- Land Evaluation and Area Review, Mattamy Homes, City of Ottawa – Orleans, 2008 – 2009.
- GIS for Manitoba Environmental Goods and Services (EG&S) Study. 2007 – 2008.



- GIS and LE component of Land Evaluation and Area Review, Halton Region 2007 - 2008.
- GIS and LE component of Land Evaluation and Area Review, City of Hamilton, 2003 – 2005.

Expert Witness

- Local Planning Appeal Tribunal (LPAT) Hearing, Greenwood Aggregates Limited, Violet Hill Pit Application, 2020.
- Ontario Municipal Board (OMB) Hearing, Burl's Creek Event Grounds 2018-2019.
- Town of Mono Council Meeting, Greenwood Aggregates Violet Hill Pit, January 2018.
- Ontario Municipal Board (OMB) Hearing, Burl's Creek Event Grounds, Simcoe County, 2015 – 2016.
- Ontario Municipal Board (OMB) Hearing, Town of Woolwich, Gravel Pit, 2012 – 2013.
- Ontario Municipal Board (OMB) Hearing, Mattamy Homes – City of Ottawa, 2011 – 2012.
- Ontario Municipal Board (OMB) Hearing, Town of Colgan, Simcoe County, 2010.
- Presentation to Planning Staff on behalf of Mr. MacLaren, City of Ottawa, 2005.
- Ontario Municipal Board (OMB) Hearing, Flamborough Severance, 2002.
- Preparation for an Ontario Municipal Board Hearing, Flamborough Golf Course, 2001.
- Ontario Municipal Board (OMB) Hearing, Stratford RV Resort and Campground – Wetland Delineation Assessment, 2000.
- Ontario Municipal Board (OMB) Hearing, Watcha Farms, Grey County, Agricultural Impact Assessment – Land Use Zoning Change, 1999-2000.
- Ontario Municipal Board (OMB) Hearing, Town of St. Vincent Agricultural Impact Assessment – Land Use Zoning Change, 1999 – 2000.
- Halton Agricultural Advisory Committee (HAAC), Halton Joint Venture Golf Course Proposal - Agricultural Impact Assessment for Zoning Change, 1999-2000
- Halton Agricultural Advisory Committee (HAAC), Sixteen Mile Creek Golf Course Proposal – Agricultural Impact Assessment for Zoning Change, 1999.
- Ontario Municipal Board (OMB) Hearing, Town of Flamborough, Environs Agricultural Impact Assessment for Zoning Change – Golf Course Proposal, 1999.
- Ontario Municipal Board (OMB) Hearing, Stratford RV Resort and Campground – Agricultural Impact Assessment, 1998.

Monitoring Studies

- Union Gas/Enbridge Gas 20" Gas Pipeline Construction Monitoring – Kingsville – 2019 - 2020.
- Union Gas/Enbridge Gas – Gas Pipeline Construction Monitoring for Tree Clearing. Kingsville Project. February/March 2019.
- CAEPLA – Union Gas 36" Gas Pipeline Construction Monitoring and Post Construction Clean Up – Agricultural Monitoring Panhandle Project. 2017 – 2018.
- CAEPLA – Union Gas 36" Gas Pipeline Construction Clearing Panhandle Project (Dawn Station to Dover Station) – Agricultural Monitoring, 2017 (Feb-March).
- City of Kitchener, Soil Sampling and data set analysis, 2017 – On-going.
- GAPLO – Union Gas 48" Gas Pipeline (Hamilton Station to Milton) Construction Soil and Agricultural Monitoring, 2016 – 2017.
- GAPLO – Union Gas 48" Gas Pipeline (Hamilton –Milton) Clearing – Agricultural Monitoring, 2016.

Publications

D.E. Stephenson and D.B. Hodgson, 1996. Root Zone Moisture Gradients Adjacent to a Cedar Swamp in Southern Ontario. In Malamoottil, G., B.G. Warner and E.A. McBean., *Wetlands Environmental Gradients, Boundaries, and Buffers*, Wetlands Research Centre, University of Waterloo. Pp. 298.