

APPENDIX A

Socio-Economic Memo



SOCIO ECONOMIC REVIEW MEMO

**DUFFERIN COUNTY ROAD 109 / 2ND LINE AMARANTH ROAD
REALIGNMENT – SCHEDULE C MUNICIPAL CLASS ENVIRONMENTAL
ASSESSMENT**

Prepared For:

Dufferin County

Prepared by:



February 2024

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1.0 INTRODUCTION

This Socio-Economic Review Memo has been completed in support of the Dufferin County Road 109 / 2nd Line Amaranth Realignment Schedule 'C' Municipal Class Environmental Assessment (MCEA) study. The purpose of the study is to provide a comprehensive and environmentally sound planning process to select the preferred solution which fully addresses the current issues regarding the realignment of Dufferin County Road 109 and 2nd Line Amaranth. 2nd Line Amaranth is proposed to be realigned to form the fourth leg of the Dufferin County Road 109 and Dufferin County Road 3 intersection. This realignment could precipitate a domino effect of impacting other intersections, namely Dufferin County Road 3 and Dufferin County Road 23, which is less than 100 m south of the Dufferin County Road 109 and Dufferin County Road 3 intersection. The project will look to better understand the broader traffic impacts of the realignment and to confirm the best solution(s) for the study area.

This Socio-Economic Review Memo documents the existing land use conditions within the study area. This memo will be updated to provide a preliminary impact assessment once the preferred alternative has been selected.

1.1 Study Area

The study area is located within Township of Amaranth and Township of East Garafraxa, and is adjacent to Town of Orangeville. It includes lands surrounding the Dufferin County Road 109, 2nd Line Amaranth and Dufferin County Road 3 intersection, Dufferin County Road 23 and Dufferin County Road 3 intersection, and Dufferin County Road 11 and Dufferin County Road 3 intersection (**Figure 1-1**). The study area is currently a mixture of agricultural land and residential and industrial buildings with an area of approximately 26.3 hectares (65.1 acres).

For the purposes of this Socio-Economic Review Memo, the study area has been subdivided into Study Area 1 and Study Area 2 as illustrated in **Figure 1-1** and described in **Section 2.0**.

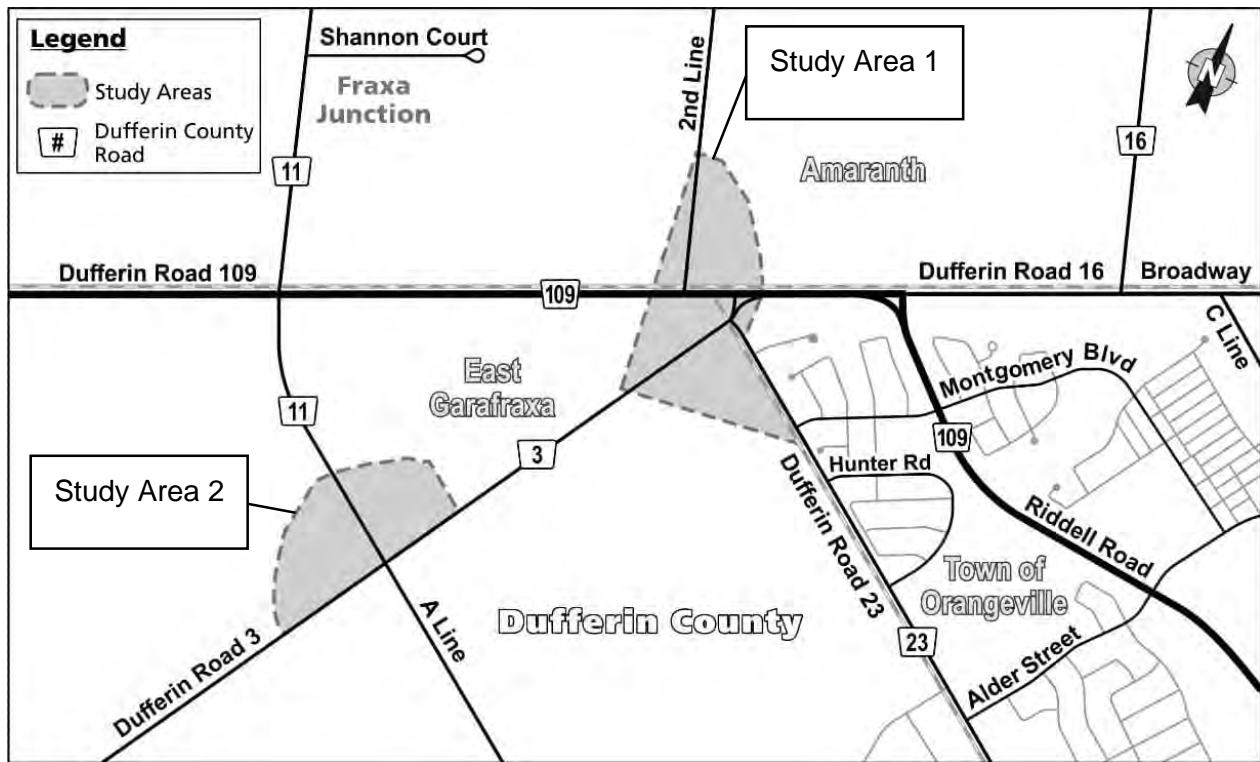


Figure 1-1: Study Area

1.2 Methodology

This memo documents data collected through a review of municipal policy, regulations and by-laws and includes information retrieved through a desktop review of Google Satellite and Streetview images. This memo will be updated to document the determination of significance of the land uses in the study area; provide an assessment of potential land use impacts associated with the proposed works; and identify mitigation measures to minimize potential impacts once the impact assessment portion of the project has been completed.

The sources that were reviewed and consulted for this memo include:

- ▶ Dufferin County Official Plan (2017);
- ▶ Town of Orangeville Official Plan (2020);
- ▶ Township of Amaranth Official Plan (2004);
- ▶ Township of East Garafraxa Official Plan (2004);
- ▶ Provincial Policy Statement (2020);
- ▶ Growth Plan for Greater Golden Horseshoe (2020);
- ▶ Province of Ontario's Greenbelt Plan (2017);
- ▶ Google Streetview (2020);
- ▶ Satellite Imagery;
- ▶ Statistics Canada Census Data (2021);
- ▶ Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (WSP, 2023)
- ▶ Stage 1 Archaeological Assessment (WSP, 2023);

- ▶ Agricultural Impact Assessment (DBH Soils, 2023); and
- ▶ Natural Environment Report (WSP, 2023).

2 EXISTING CONDITIONS

2.1 Community Profiles

The following provides a brief overview of each community located within the study area.

Town of Orangeville

The Town of Orangeville is located at the southern edge of Dufferin County, closest to the Greater Toronto Area. It is the centre of Dufferin County's residential, commercial, and social activities and is identified as a thriving small town that aims to improve quality of life, provide jobs, housing, community facilities and business opportunities as identified in the town's Official Plan (OP).

According to the 2021 Census (Stats Can 2021), the current population is 30,167. There has been a 4.4% population increase from 2016 to 2021.

Township of Amaranth

The Township of Amaranth is located at the headwaters of the Grand River within Dufferin County and covers an area of approximate 265 km². The Township includes diverse landscape features, rivers, and wetlands and is characterised with a hamlet and an agricultural community.

According to the 2021 Census (Stats Can 2021), the current population is 4,327. There has been a 6.1% population increase from 2016 to 2021.

The Township of East Garafraxa

The Township of East Garafraxa is a rural township located west of the Town of Orangeville in Dufferin County and covers an area of approximately 166 km². The Township aims to respect natural heritage, sense of community and the land while enhancing opportunities for growth.

According to the 2021 Census (Stats Can 2021), the current population is 2,794. There has been an 8.3% population increase from 2016 to 2021.

2.2 Existing Land Uses

The existing land uses within the study areas are comprised of agricultural lands with rural residential properties. The following sections provide an overview of existing land uses within the study areas.

2.2.1 Study Area 1

Study Area 1 is located within the intersection of 2nd Line Amaranth and Dufferin Road 109 in the Township of Amaranth, Town of Orangeville and Township of East Garafraxa, as illustrated in **Figure 2-1**. The north portion of the study area is located within the Community Settlement of Farmington in the Township of Amaranth. The majority of Study Area 1 is located within the Province of Ontario's Greenbelt designated area and consists of agricultural uses. A Sikh Temple and two rural houses are located along Dufferin County Road 3 within the southwest quadrant of

the Dufferin County Road 3 and Dufferin County Road 109 intersection, with commercial properties located further west on Dufferin County Road 3 adjacent to the study area. There is a newly constructed subdivision located directly adjacent to the study area in the southeast quadrant of the Dufferin County Road 23, Dufferin County Road 3 and Dufferin County Road 109 intersection in the Town of Orangeville.

There is also a potential cultural heritage property located in the southwest quadrant of the Dufferin County Road 3 and Dufferin County Road 109 intersection, further discussed in **Section 4.0**.

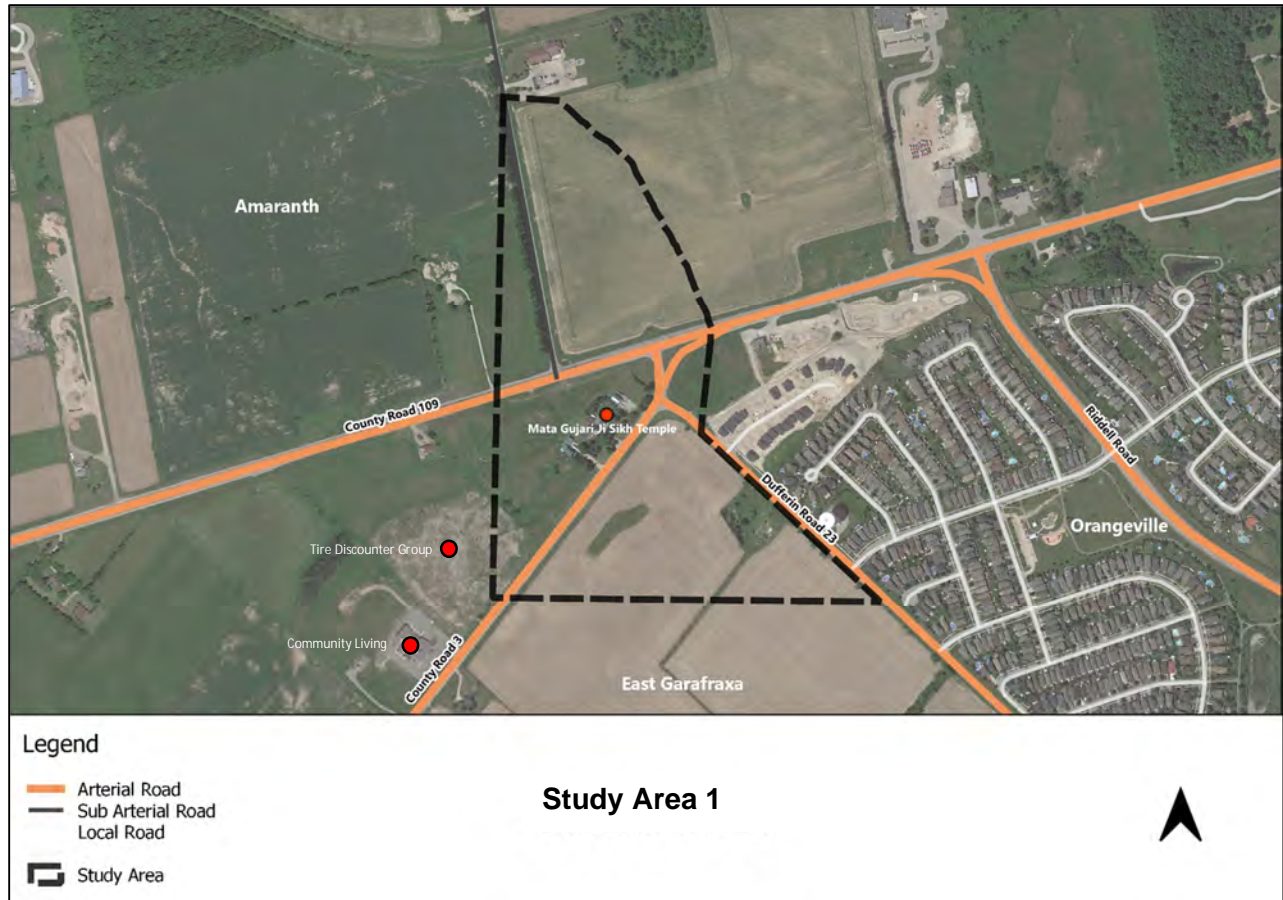


Figure 2-1: Study Area 1

2.2.2 Study Area 2

Study Area 2 is located within the intersection of Dufferin County Road 3 and 2nd Line Amaranth in the Township of East Garafraxa, as illustrated in **Figure 2-2**. The entire Study Area 2 is located within the Province of Ontario’s Greenbelt Protected Countryside designated area and consists of agricultural uses. There is one rural house located adjacent to the east limits of the study area and two rural houses located adjacent to the southwest limits of the study area.

There are also four potential cultural heritage properties located within and adjacent to the study area, further discussed in **Section 4.0**.

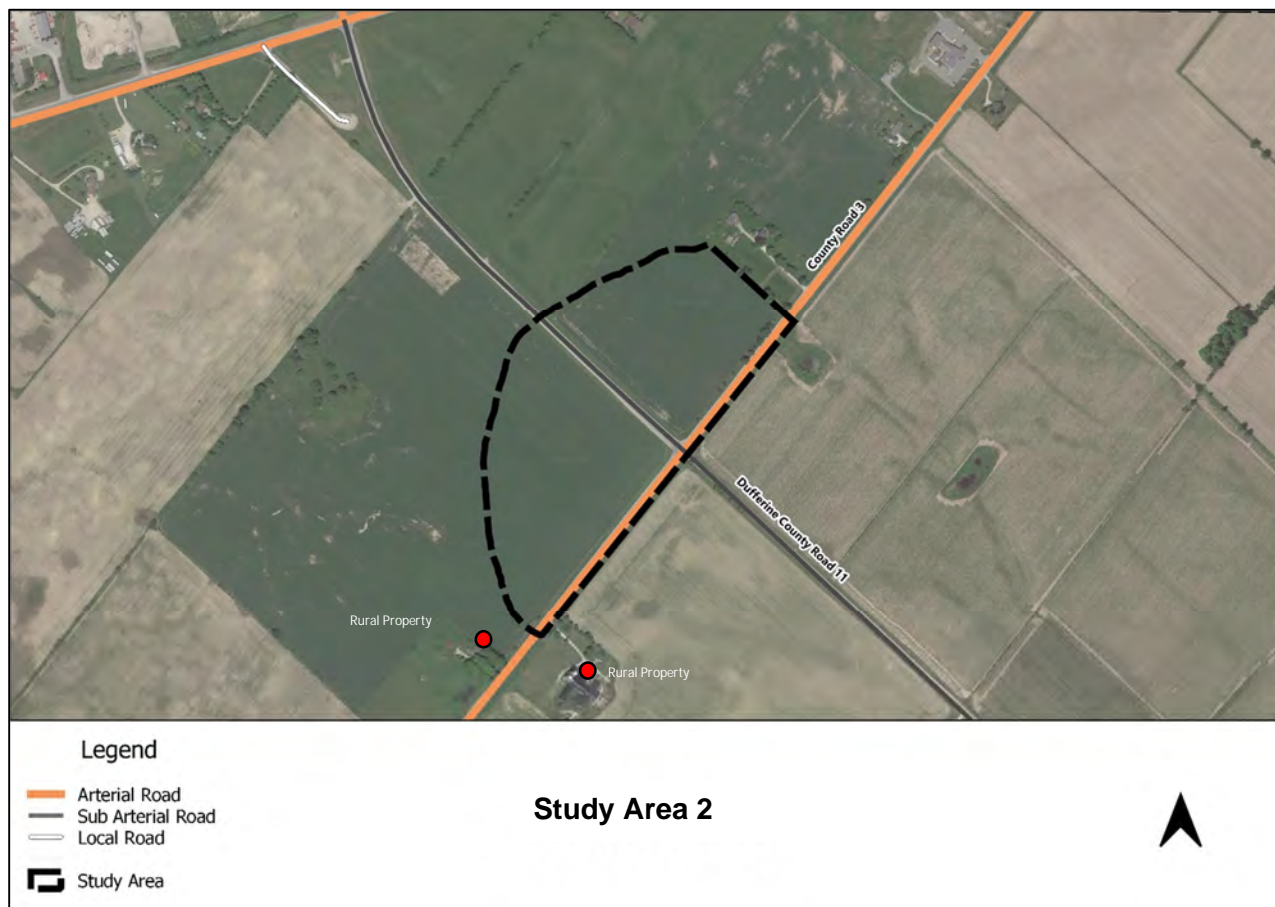


Figure 2-2: Study Area 2

3 PLANNING AND POLICY CONTEXT

The following provides an overview of the provincial, county and municipal planning and policy context within the study area.

3.1 Provincial Planning Context

3.1.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) (2020) provides policy direction on matters of provincial interest related to land use planning and development. Under Section 1.0 – *Building Strong Healthy Communities*, and Section 2.0 – *Wise Use and Management of Resources*, the PPS articulates a number of policies relevant to the proposed roadway improvements.

In general, the policies of the PPS require: the protection of agricultural lands for agricultural use, support for recreational uses, including trails; the protection of natural heritage features; and the conservation of cultural heritage and archaeological resources.

Transportation Systems

Section 1.6.7 of the PPS sets out provincial policy directions related to transportation systems. The Transportation System policies relevant to this study include:

- ▶ **Policy 1.6.7.1** – Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address projected needs.
- ▶ **Policy 1.6.7.3** – As part of a multimodal transportation system, connectivity within and among transportation systems and modes should be maintained and, where possible, improved including connections which cross jurisdictional boundaries.
- ▶ **Policy 1.6.7.4** – A land use pattern, density, and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and active transportation.

Agriculture

Section 2.3 of the PPS sets out provincial policy directions related to agriculture. The Agriculture policies relevant to this study include:

- ▶ **Policy 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.

Cultural Heritage and Archaeology

Section 2.6 of the PPS addresses Cultural Heritage and Archaeology. The policies relevant to this study include:

- ▶ **Policy 2.6.1** – Significant built heritage resources and significant cultural heritage landscapes shall be conserved.
- ▶ **Policy 2.6.2** – Development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.
- ▶ **Policy 2.6.3** – Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

3.1.2 Growth Plan for Greater Golden Horseshoe

The Greater Golden Horseshoe (GGH) Growth Plan Consolidation (2020) is a provincial planning document aimed at accommodating the growth expected in Southern Ontario over the next two decades.

Through growth management, the Plan contains policies supporting the creation of vibrant, diversified urban and rural communities and economies. The Plan contains policies relevant to the supply and quality of agricultural lands, ensuring a vibrant rural and productive agricultural economy and a secure food supply for future generations, as well as the impacts of a changing climate including creating more resilient communities and protecting areas from both natural and human-made erosion.

To ensure sustainable growth, Section 3.2.2 of the Plan addresses the transportation infrastructure required to support growth:

Transportation - General

- ▶ Transportation system planning, land use planning, and transportation investment will be co-ordinated to implement this Plan.
- ▶ The transportation system within the GGH will be planned and managed to:
 - a) provide connectivity among transportation modes for moving people and for moving goods;
 - b) offer a balance of transportation choices that reduces reliance upon the automobile and promotes transit and active transportation;
 - c) be sustainable and reduce greenhouse gas emissions by encouraging the most financially and environmentally appropriate mode for trip-making and supporting the use of zero- and low-emission vehicles;
 - d) offer multimodal access to jobs, housing, schools, cultural, and recreational opportunities, and goods and services;
 - e) accommodate agricultural vehicles and equipment, as appropriate; and
 - f) provide for the safety of system users.
- ▶ In the design, refurbishment, or reconstruction of the existing and planned street network, a complete streets approach will be adopted that ensures the needs and safety of all road users are considered and appropriately accommodated.
- ▶ Municipalities will develop and implement transportation demand management policies in official plans or other planning documents or programs to:
 - a) reduce trip distance and time;
 - b) increase the modal share of alternatives to the automobile, which may include setting modal share targets;
 - c) prioritize active transportation, transit, and goods movement over single-occupant automobiles;
 - d) expand infrastructure to support active transportation; and
 - e) consider the needs of major trip generators.

3.1.3 Greenbelt Plan

The Greenbelt Plan (2017) provides a land use planning framework that ensures a sustainable approach to managing future development and growth within the economy, environment, and society to ensure the prosperity of current and future generations. It provides additional ecological protection measures to meet long-term environmental goals that protect our resources and allow for active transportation and transit-supportive communities to offset greenhouse gas emissions.

The majority of the study area is designated as Protected Area Countryside as illustrated in **Figure 3-1**. The Greenbelt Plan recognizes that infrastructure is required to serve existing settlements and growth in southern Ontario. Section 4.2.1 of the Greenbelt Plan addresses General Infrastructure Policies for lands falling within the Protected Countryside. The location and construction of infrastructure and expansions, extensions, operations and maintenance of infrastructure in the Protected Countryside are subject to the following:

- a) Planning, design and construction practices shall minimize, wherever possible, the amount of the Greenbelt, and particularly the Natural Heritage System and Water Resource System, traversed and/or occupied by such infrastructure;
- b) Planning, design and construction practices shall minimize, wherever possible, the negative impacts on and disturbance of the existing landscape, including, but not limited to, impacts caused by light intrusion, noise and road salt;
- c) Where practicable, existing capacity and co-ordination with different infrastructure services shall be optimized so that the rural and existing character of the Protected Countryside and the overall hierarchy of areas where growth will be accommodated in the GGH established by the Greenbelt Plan and the Growth Plan are supported and reinforced;
- d) New or expanding infrastructure shall avoid key natural heritage features, key hydrologic features or key hydrologic areas unless need has been demonstrated and it has been established that there is no reasonable alternative;
- e) Where infrastructure does cross the Natural Heritage System or intrude into or result in the loss of a key natural heritage feature, key hydrologic feature or key hydrologic areas, including related landform features, planning, design and construction practices shall minimize negative impacts on and disturbance of the features or their related functions and, where reasonable, maintain or improve connectivity;
- f) New or expanding infrastructure shall avoid specialty crop areas and other prime agricultural areas in that order of priority, unless need has been demonstrated and it has been established that there is no reasonable alternative;
- g) Where infrastructure crosses prime agricultural areas, including specialty crop areas, an agricultural impact assessment or equivalent analysis as part of an environmental assessment shall be undertaken; and New waste disposal sites and facilities, and organic soil conditioning sites are prohibited in key natural heritage features, key hydrologic features and their associated vegetation protection zones.

Planning for the realignment of Dufferin County Road 109 meets the above noted policies for infrastructure development in Protected Countryside, where applicable.



Figure 3-1: Greenbelt Plan Area

3.2 County Planning Context

3.2.1 Dufferin County Official Plan

The following Dufferin County Official Plan (2017) land use designations are located within Study Area 1 and 2 as illustrated in **Figure 3-2**, **Figure 3-3**, and **Figure 3-4**:

- ▶ **Greenbelt Protected Countryside**
- ▶ **Community Settlement**
- ▶ **Agricultural Areas**
- ▶ **Sand and Gravel Resource Area**

The following provides an overview of the land use designations within the study area.

Greenbelt Protected Countryside

The majority of the study area is designated as Greenbelt Protected Countryside Areas in Schedule A of the Dufferin County Official Plan (2013) as illustrated in **Figure 3-2**. The purpose of the designation is to reflect the location of the designated Protected Countryside in the Greenbelt Plan (2017).

Community Settlement

The north portion of Study Area 1 is located within the Community Settlement area of Farmington (**Figure 3-3**). Community settlement areas include small villages and rural hamlets and include settlement areas that have historically been identified and delineated in the local municipal official plans.

Community settlement areas may continue to experience limited growth through appropriate infilling and development of vacant lands, in accordance with the County and local municipal official plans.

Agricultural Areas

The southern portion of Study Area 1 and western portion of Study Area 2 are located within Lands within the designated Agricultural Area as per Schedule B of the Dufferin County Official Plan (**Figure 3-3**). Agricultural Areas consists primarily of prime agricultural lands. Prime agricultural areas are designated in local municipal official plans in accordance with Provincial guidelines. The Dufferin County Official Plan requires that these lands be protected for agricultural uses unless appropriate justification is provided for alternative uses.

Lands designated as Agricultural Area are intended to preserve and strengthen the continued viability of the agricultural community. Agricultural Areas are to be protected from incompatible uses, while accommodating a diverse range of agricultural uses, agriculture-related uses and on-farm diversified uses.

Sand and Gravel Resource Area

The southern portion of Study Area 1 are located within a designated Sand and Gravel Resource Area as per Schedule D. The identification of significant mineral aggregate resources does not presume that all lands located within these areas are suitable for the establishment of new or expansions to existing mineral aggregate operations.

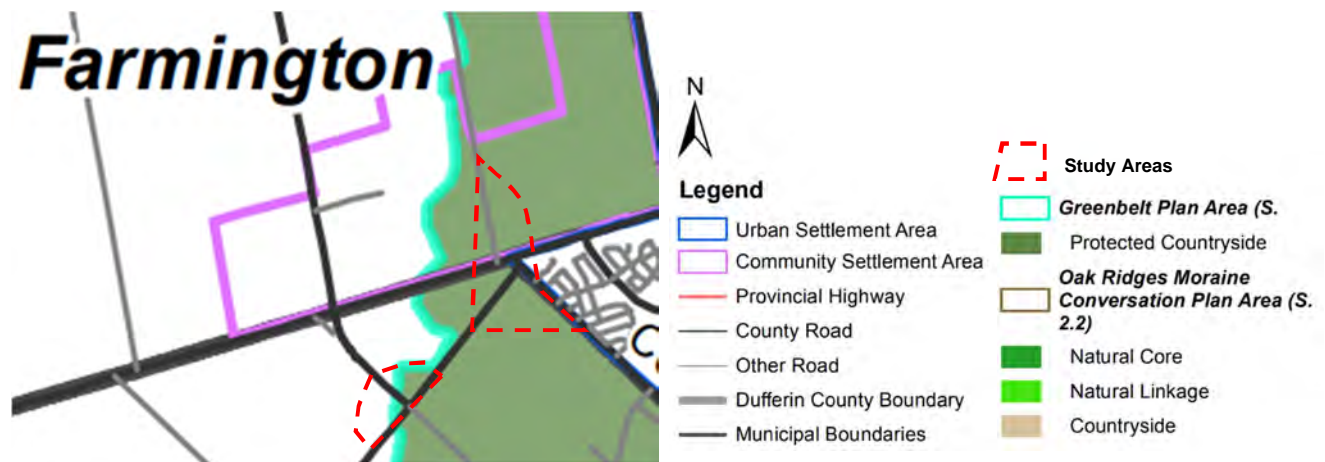


Figure 3-2: Dufferin County Official Plan - Schedule A

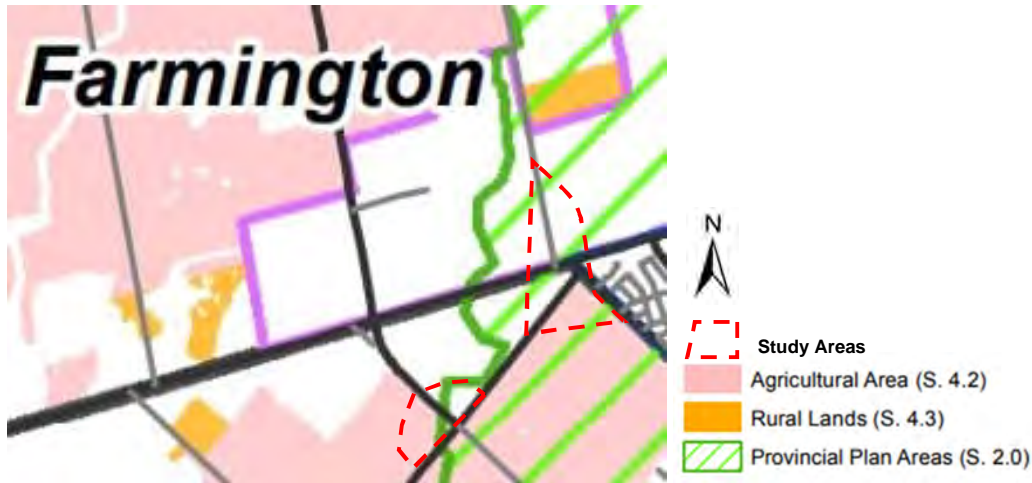


Figure 3-3: Dufferin County Official Plan, Schedule C

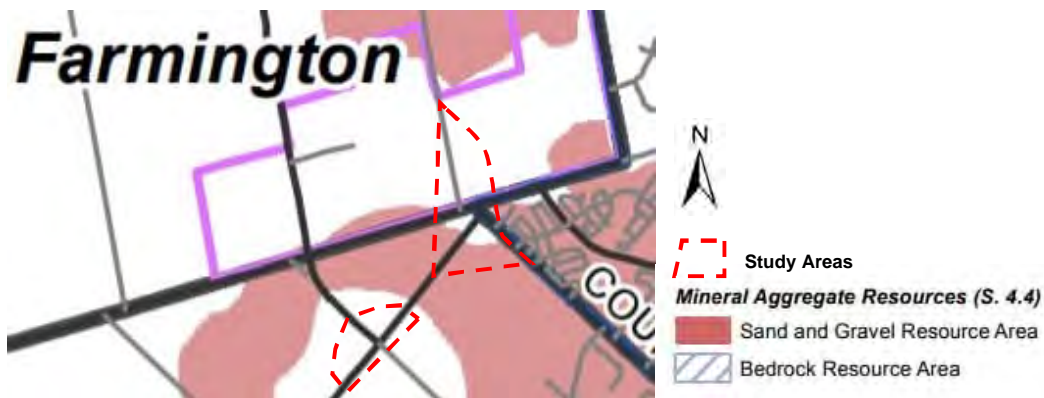


Figure 3-4: Dufferin County Official Plan, Schedule D

3.3 Municipal Planning Context

3.3.1 Town of Orangeville Official Plan

The portion of Study Area 1 located within the Town of Orangeville is designated as Service Commercial Area as per Schedule A of the Town of Orangeville Official Plan (2020) (**Figure 3-5**).

Service Commercial Areas are located along major transportation routes within the town to provide commercial uses that provide a specialized product or service. The areas cater businesses to the public traveling on the key transportation routes and the physical requirements to build the development, in terms of shape and size, are such that it cannot be accommodated in other commercial uses such as Central Business District, General Commercial, or Neighbourhood Commercial.

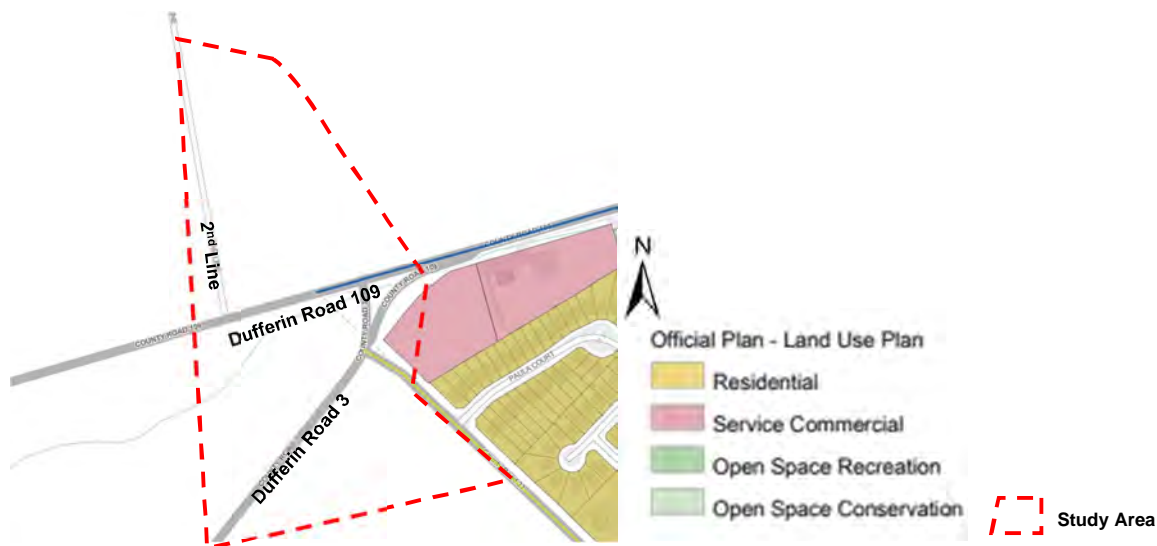


Figure 3-5: Town of Orangeville Official Plan, Schedule A

3.3.1.1 Town of Orangeville Official Plan Review

As of the writing of this memo, the Town of Orangeville is currently reviewing their Official Plan to determine if any new or updated provincial policy and legislation are either:

- ▶ Still consistently reflected by current Town OP policy, with no update needed;
- ▶ Somewhat reflected by current OP policy, but modification, including additional and/or revised policy direction would be beneficial; or
- ▶ Not captured, or conflicted by current OP policy, with new or amended policies needed for consistency.

3.3.2 Township of Amaranth Official Plan

The portion of Study Area 1 located within the Township of Amaranth is located within the Farmington settlement area and is designated as Employment Area as per Schedule A-3 of the Township of Amaranth's Official Plan (2004) (**Figure 3-6**).

The objective of the Employment Area is to provide employment opportunities for economic growth. The areas aims to focus on large-scale commercial, industrial and insititutional uses in such a way that they complement the land use in the adjacent areas.

The permitted uses in the Employment Area include manufacturing and assembly, clean processing and reclaiming, warehousing and materials storage, including contractor's yards, transportation terminals, and other similar facilities associated with buildings and structures accessory sales outlets and other uses such as offices and cafeterias that are smaller in scale than, and located on the same lot as the primary industrial use to which they are incidental. Free-standing business oriented sales, service and office operations such as vehicle, machinery and equipment sales, service and/or leasing operations, printing, telecommunication and/or electronic data processing facilities, and vehicle fuel retailing operations, restaurant facilities, hotels and motels, institutional uses such as schools, places of worship, daycare facilities and administrative offices.

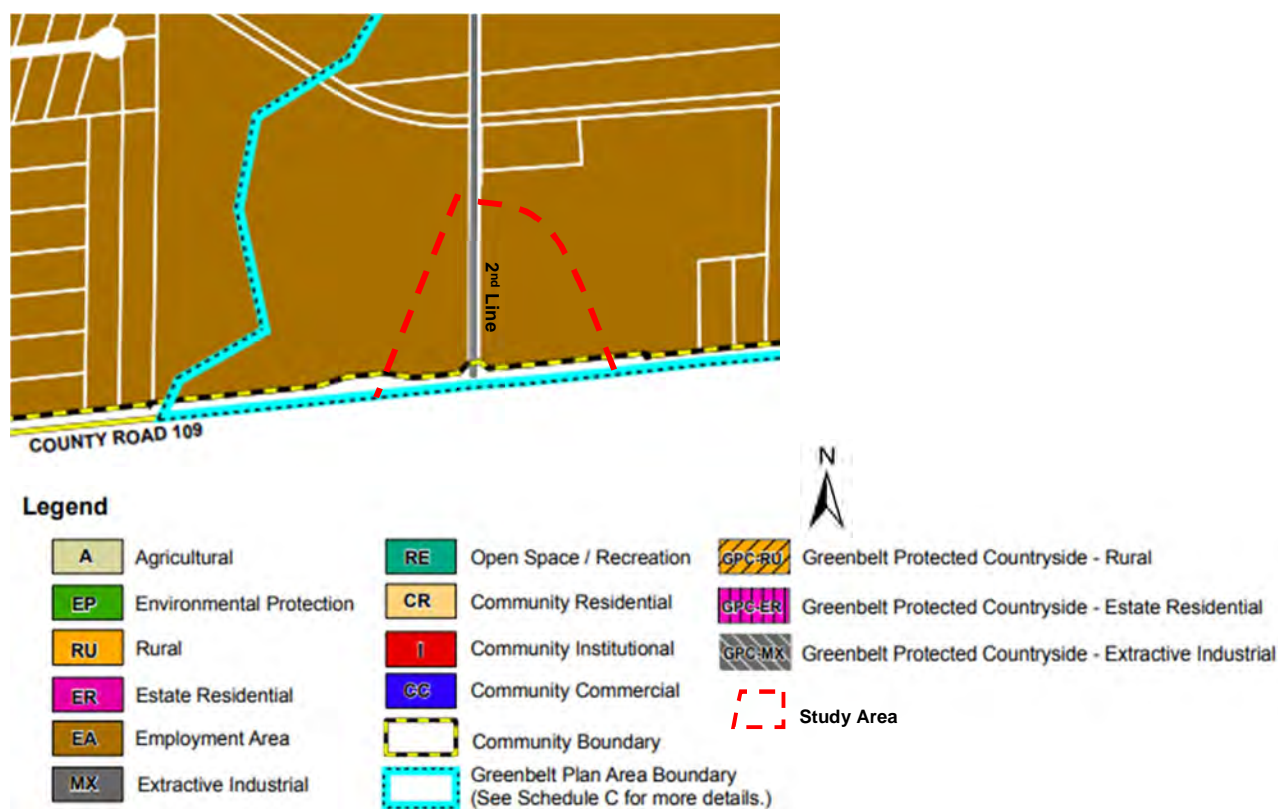


Figure 3-6: Township of Amaranth Official Plan, Schedule A-3

3.3.3 Township of East Garafraxa Official Plan

The following Township of East Garafraxa (2004) land use designations are located within Study area 1 and Study Area 2 as illustrated in **Figure 3-7** and **Figure 3-8**:

- ▶ **Agricultural Areas**
- ▶ **Employment Areas**
- ▶ **High Potential Aggregate Resources**
- ▶ **Areas More Vulnerable to Contamination**

The following provides an overview of the land use designations within the study area.

Agriculture

The portion of Study Area 1 south of Dufferin County Road 3 and western portion of Study Area 2 are designated as Agricultural areas as per Schedule A of the Township of East Garafraxa Official Plan (**Figure 3-7**). The objective of Agriculture areas is to promote all forms of agriculture and safeguard farmlands from adverse impacts of the changing market conditions.

The permitted use in the Agricultural designation consists of developing land, building and structures that can be used for growing crops, raising livestock, poultry farm, horticulture, aquaculture and maple syrup production. The Agricultural land use designation also allows development of one single detached residential dwelling unit, home occupations, small scale agriculture home industries, commercial and industries serving agricultural operations, forest,

wildlife and fish management, public transportation and public facilities for agricultural purposes, farm-oriented tourist businesses and wayside pits and quarries.

Employment Area

The portion of Study Area 1 north of Dufferin County Road 3 and the east portion of Study Area 2 are designated as Employment areas as per Schedule A of the Township of East Garafaxa Official Plan (**Figure 3-7**). The Employment Areas are aimed for developing large scale industrial, commercial, and institutional development. The objective of Employment Areas is to provide opportunities for employment and economic growth. Employment areas focus on directing large scale commercial, industrial and institutional areas to specific areas in township where the land uses will benefit from access to roadways and become compatible to adjacent land uses.

High Potential Aggregate Resources

The southwest portion of Study Area 1 is designated as High Potential Aggregate Resources as per Schedule B of the Township of East Garafaxa Official Plan (**Figure 3-8**). As per the Official Plan, new development proposed in or adjacent to high potential aggregate deposits shall not preclude or hinder the establishment of new operations or access to the resources.

Areas More Vulnerable to Contamination

The northern portion of Study Area 1 and east limits of Study Area 2 are located within Areas More Vulnerable to Contamination as per Schedule B of the Township of East Garafaxa Official Plan (**Figure 3-8**). All applications for major development proposals such as subdivisions or commercial, industrial or institutional shall be accompanied by a Water Resource Management (WRM) Report within these areas. The WRM Report shall be prepared by a qualified professional to the satisfaction of the Township and Conservation Authority and other agencies as may be required. The WRM Report shall address the potential impacts and cumulative impacts on surface and ground water quality and quantity.



Figure 3-7: Township of East Garafaxa Official Plan, Schedule A

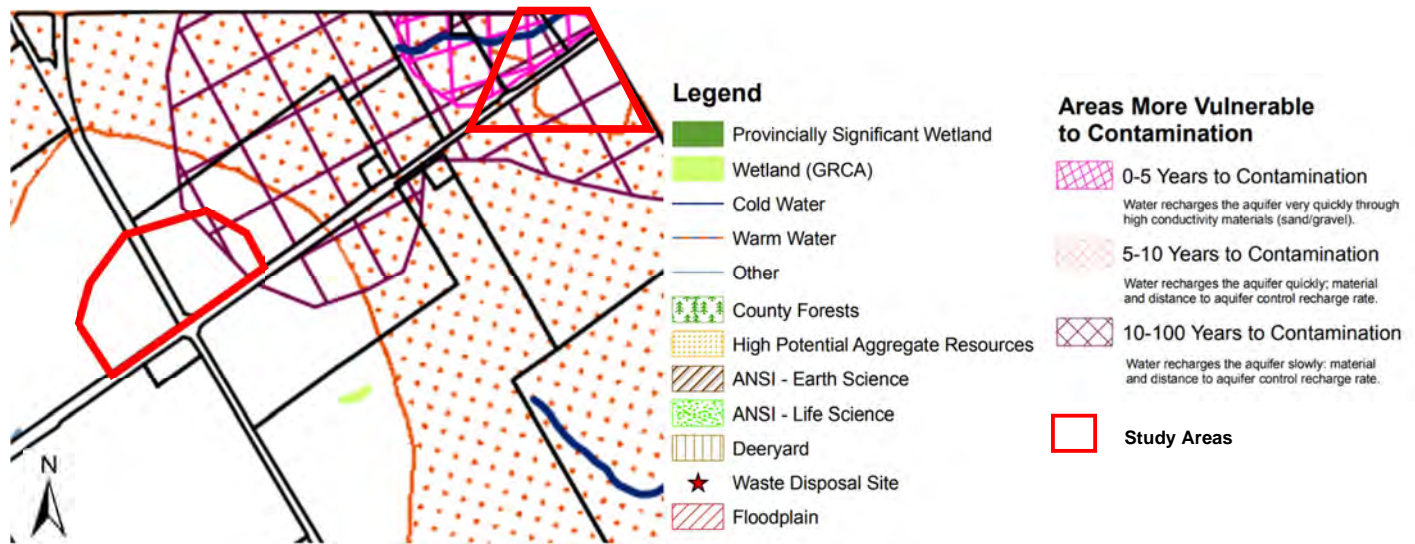


Figure 3-8: Township of East Garafaxa Official Plan, Schedule B

4 CULTURAL HERITAGE

4.1 Indigenous Communities

The study is within the Haldimand Proclamation of 1784 and two of the Williams Treaties of 1818: Treaty 18, the Nottawasaga Purchase, and Treaty 19, the Ajetance treaty.

4.2 Built Heritage and Cultural Heritage Landscapes

Five potential Cultural Heritage Landscapes (CHLs) have been identified within the study area, as documented in the the Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (Cultural Heritage Report) (WSP, 2023). One CHL is located within Study Area 1 and four CHLs are located within or directly adjacent to Study Area 2. The following provides a general description of the CHLs within the Study Areas.

Study Area 1

The following potential CHLs were identified within Study Area 1:

- ▶ CHL5: The property contains one barn and one driveshed, they are both clad in vertical barnboard and end gable roofs. The heritage recognition was identified during field review.

Study Area 2

The following potential CHLs were identified within Study Area 2:

- ▶ CHL1: The property includes a two-and-a-half storey brick house with a projecting front bay and a combination of segmentally arched and round-headed windows. The heritage recognition was identified during field review.

- ▶ CHL2: The property is accessed by a straight driveway, lined with mature trees. A one-and-a-half storey house and a complex of barns and silos are set back from Orangeville-Fergus Road approximately 90 metres. The heritage recognition was identified during field review.
- ▶ CHL3: The residence on the property is a vernacular structure with Gothic Revival influence. The one-and-a-half storey house has an L-shaped plan, is clad in dichromatic brickwork. The heritage recognition was identified during field review.
- ▶ CHL6: Tree-lined driveway leading to a barn with a gable roof. A one-and-a-half storey red brick house is set back approximately 110 metres from Dutch Lane. The heritage recognition was identified during field review.

5 ARCHAEOLOGY

A Stage 1 Archaeological Assessment (WSP, 2023) was completed as part of the study and determined that the majority of the land outside of the roadways and associated right-of-way retain archaeological potential.

Further Stage 2 archaeological assessment is recommended to assess the areas that have archaeological potential to be impacted by the preferred alternative. The Stage 2 archaeological assessment will be further carried out during the Detail Design phase and will be completed prior to construction.

6 FUTURE DEVELOPMENT

6.1.1 Development Applications

The following provides a summary of the current active development applications within and / or adjacent to Study Area 1 and 2.

780 Broadway

The proposed development includes a mixed-use development comprising of four three-storey townhouse blocks containing a total of 54 dwelling units, as well as a single-storey commercial building containing approximately 920.55 square metres of commercial floor space. The development is located 75 m from Study Area 1.

7 ASSESSMENT OF LAND USE IMPACTS

The recommended plan includes the following modifications to the following existing roads, as shown in **Figure 7-1**:

- 2nd Line Amaranth will be realigned to form the fourth leg of the Dufferin County Road 109 and Dufferin County Road 3 intersection. The intersection will be converted from stop-controlled to a four-way signalized intersection.
- The existing Dufferin County Road 109 will be widened to four lanes (two in each direction) with right- and left-turn lanes eastbound and westbound.

- The existing Dufferin County Road 3 will be realigned to remove the channelized northbound right turn lane and to improve the intersection geometry;
- Dufferin County Road 23 will be realigned further south of the existing Dufferin County Road 23 to ensure the intersection of Dufferin County Road 3 and Dufferin County Road 23 does not conflict with the proposed four-legged intersection. In addition, realignment of Dufferin County Road 23 provides adequate left turn storage and taper for vehicles turning left from Dufferin County Road 3 onto Dufferin County Road 23
- As a result of realigning Dufferin County Road 23 to the south, the existing Paula Court will be extended further south to maintain a T-intersection with Dufferin County Road 23.

Table 7-1 provides the impact assessment for the recommended plan.

Recommended mitigation measures are provided in **Section 8.0**.



Figure 7-1. Recommended Plan

Table 7-1: Impact Assessment

Land Use	Existing Conditions	Potential Impact
Agriculture	<ul style="list-style-type: none"> ▶ The recommended plan is located within the Province of Ontario’s Greenbelt Protected Countryside designated area and consists of agricultural uses. 	<ul style="list-style-type: none"> ▶ Potential for significant impacts to agricultural uses that abut the recommended plan. ▶ Construction activities have the potential to create traffic delays and interfere with access to residences, farms and farm-related businesses in the study area.
Residential (Rural)	<ul style="list-style-type: none"> ▶ Five rural houses are located along Dufferin County Road 3. There is also a newly constructed subdivision directly east of the study area in the Town of Orangeville. 	<ul style="list-style-type: none"> ▶ There are property buy outs but not displacement of buildings on those properties and no property access impacts. ▶ Construction may temporarily disturb residences through noise, dust, use of equipment and traffic impacts.
Commercial and Industrial	<ul style="list-style-type: none"> ▶ A commercial property, Tire Discounter Group, is located west on Dufferin County Road 3, just outside of Study Area 1 	<ul style="list-style-type: none"> ▶ Construction may temporarily impact Commercial and Industrial uses adjacent to the proposed road works through noise, dust, use of equipment and traffic impacts.
Cultural Heritage and Archaeology	<ul style="list-style-type: none"> ▶ The study area is located within the Haldimand Proclamation of 1784 and two of the Williams Treaties of 1818: Treaty 18, the Nottawasaga Purchase, and Treaty 19, the Ajetance treaty ▶ CHL 1, CHL 2, CHL 3, CHL 5, CHL 6 are located within the study area. ▶ The majority of the land outside of the roadways and associated right-of-way retain archaeological potential within the study area. 	<ul style="list-style-type: none"> ▶ No impact on CHL 1, CHL 2, CHL 3, and CHL 6 ▶ Potential direct impact on CHL 5 (Study Area 1 may result in a direct impact to the potential CHL).
Institutions and Community Facilities	<ul style="list-style-type: none"> ▶ Mata Gujari ji Sikh Temple and Community Living, located are along Dufferin County Road 3 within the study area. 	<ul style="list-style-type: none"> ▶ Construction may temporarily impact Institution and Community Facility uses adjacent to the proposed road works through noise, dust,use of equipment and traffic impacts.

Natural Features	▶ The majority of the study area is designated as Greenbelt Protected Countryside Areas.	▶ There are minor impacts to vegetation, wildlife, soil, drainage, and groundwater.
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8 RECOMMENDED MITIGATION MEASURES

Based on the background information gathered over the course of the EA study, the land use impacts associated with the proposed preferred alternative have been assessed and are summarized in **Table 8-1**. The identified mitigation measures will be documented in the ESR.

Table 8-1: Recommended Mitigation Measures

Land Use	Potential Impact	Recommended Mitigation Measures
Agriculture	<ul style="list-style-type: none"> ▶ Potential for significant impacts to agricultural uses that abut the recommended plan. ▶ Construction activities have the potential to create traffic delays and interfere with access to residences, farms and farm-related businesses in the study area 	<ul style="list-style-type: none"> ▶ Impacts on agriculture uses shall be minimized. ▶ Incorporate the mitigation recommendations from the Agricultural Impact Assessment that has been undertaken separately as part of this Class EA study. ▶ Continue consultation with property owners during detailed design.
Residential (Rural)	<ul style="list-style-type: none"> ▶ The recommended plan involves property buy outs but not displacement of buildings on those properties and no property access impacts. ▶ Construction may temporarily disturb residences adjacent to the proposed road works through noise, dust, use of equipment and traffic impacts. 	<ul style="list-style-type: none"> ▶ Impacts to property shall be minimized. ▶ Advanced notice will be provided to property owners to notify them of construction start and any disruptions to existing accesses, as well as construction contractors and/or County’s contact information. Access to all properties will be maintained. ▶ The County will continue consultation with impacted property owners during detail design. ▶ Construction will be completed in accordance with the Municipal Noise By-laws and their standard construction measures for noise. ▶ Emissions from construction operations will be managed through best management practices for construction operations and monitoring and mitigation requirements will be considered.
Commercial and Industrial	<ul style="list-style-type: none"> ▶ Construction may temporarily impact Commercial and Industrial uses adjacent to the proposed road works through noise, dust and use of equipment. 	<ul style="list-style-type: none"> ▶ Access will be maintained to properties during construction. ▶ Construction will be completed in accordance with the Municipal Noise By-laws and their standard construction measures for noise. ▶ Emissions from construction operations will be managed through best management practices for construction operations and monitoring and mitigation requirements will be considered.

Cultural Heritage and Archaeology	<ul style="list-style-type: none"> ▶ No impact on CHL 1, CHL 2, CHL 3, and CHL 6. ▶ Potential direct impact on CHL 5 (Study Area 1 may result in a direct impact to the potential CHL). 	<ul style="list-style-type: none"> ▶ Incorporate the mitigation recommendations from the Stage 1 Archaeological Assessment that has been undertaken separately as part of this Class EA study. ▶ Incorporate the mitigation recommendations from the Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment that has been undertaken separately as part of this Class EA study.
Institutions and Community Facilities	<ul style="list-style-type: none"> ▶ Construction may temporarily impact Institution and Community Facility uses adjacent to the proposed road works through noise, dust and use of equipment. 	<ul style="list-style-type: none"> ▶ Access will be maintained to properties during construction. ▶ Construction will be completed in accordance with the Municipal Noise By-laws and their standard construction measures for noise. ▶ Emissions from construction operations will be managed through best management practices for construction operations and monitoring and mitigation requirements will be considered.
Natural Features	<ul style="list-style-type: none"> ▶ Minor impacts to vegetation, wildlife, soil, drainage, and groundwater. 	<ul style="list-style-type: none"> ▶ Vegetation clearing and grubbing will be minimized to the extent possible. ▶ Incorporate the mitigation recommendations from the Natural Environment Report that has been undertaken separately as part of this Class EA study.