

Arterial Roadway 1N Dickenson Road West to Glancaster Road

Environmental Study Report

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1 Introduction

Dickenson Limited Partnership (Dickenson) is undertaking a Draft Plan of Subdivision process for a new industrial development adjacent to the John C. Munro Hamilton International Airport (“the Airport”) within the City of Hamilton’s Airport Employment Growth District (AEGD) Secondary Plan lands. The project recently completed an Ontario Land Tribunal process, which helped establish the land use context that Arterial 1N will service.

In parallel with the Draft Plan of Subdivision process, the Municipal Class Environmental Assessment process is being completed for a road referred to as “Arterial Roadway 1N”, by CGH Transportation Inc. on behalf of Dickenson Limited Partnership (as the proponent). Arterial Roadway 1N is an east-west road that bisects Dickenson’s industrial lands.

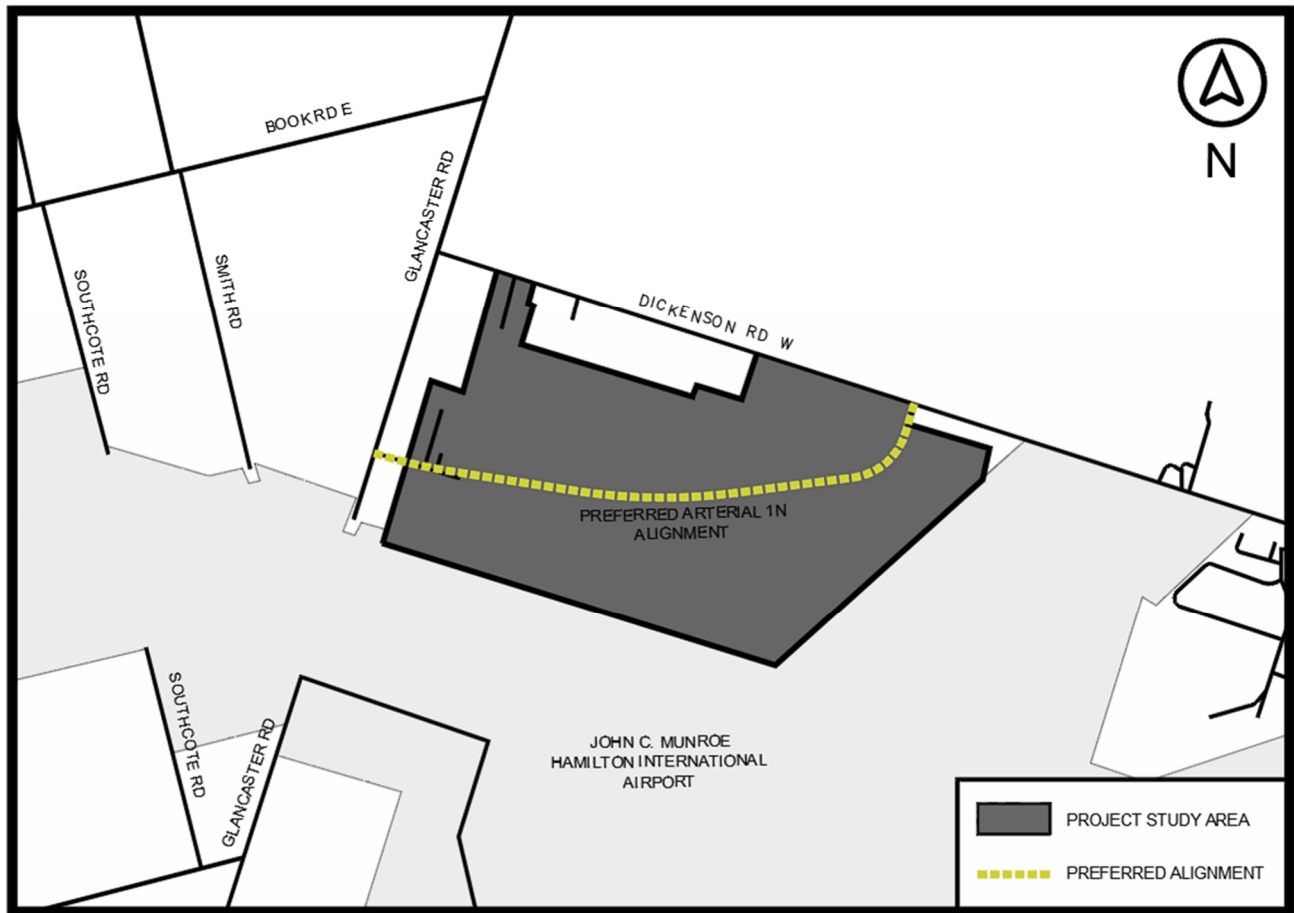
1.1 Study Area Description

The Study Area (also referred to as “subject lands”) is bordered by Dickenson Road West to the north, Glancaster Road to the west and the Airport to the east and south. In the City of Hamilton, Ontario. The Study Area for Arterial Roadway 1N is the same as the subject lands that Dickenson is undertaking the Draft Plan of Subdivision for.

The AEGD Secondary Plan establishes a unique land use and planning approach for the employment area adjacent to the Airport bound by Garner Road / Twenty Road West to the north, Upper James Street to the east, Fiddler’s Green Road to the west, and White Church Road West to the south.

Within the Study Area, the 2024 update of the Transportation Master Plan (TMP) proposes a new arterial road (Arterial Roadway 1N) that connects to Dickenson Road West and Glancaster Road, south of Dickenson Road. Arterial Roadway 1N alignment connects Dickenson Road West and Glancaster Road and services the land adjacent to the Airport.

Figure 1: Study Area



2 Phase 1: Problem/ Opportunity Statement

Phase 1 of the Municipal Class EA process defines the starting point for any Class EA as the “Problem/Opportunity Statement.” For Arterial Roadway 1N this was outlined by Phase 1 in the AEGD TMP Update – June 2024 which was intended to address problems and seize opportunities as follows:

- Market demand for lot size and changes in form of development has changed since the roadway network was last approved trending to larger parcels with a warehousing focus.
- Road functional classification definitions in the AEGD TMP related to arterial and collector roads are inconsistent with those in the Urban Hamilton Official Plan.
- The need to mitigate known and anticipated impacts of the future road network on natural and cultural heritage resources, existing land uses including utilities (e.g. the airport, Hydro One corridors, and HSR) at network level.
- Update the transportation blueprint for the study area to improve opportunities for all transportation modes, emphasize the importance of natural heritage systems and existing residential communities through its implementation, and build in resiliency to address a changing climate.

The Problem/Opportunity specific for Arterial Roadway 1N is as follows:

To identify an arterial road alignment linking Dickenson Road West and Glancaster Road that will increase the developable block sizes and align with market demands associated with the Airport Employment Growth District.

3 Planning and Policy Context

3.1 City of Hamilton Policies and Plans

3.1.1 City of Hamilton Official Plan

The current AEGD Secondary Plan, including maps and appendices, form part of Volume 2 of the City of Hamilton's Urban Hamilton Official Plan.

3.1.2 City of Hamilton AEGD Secondary Plan

The AEGD Secondary Plan governs the growth and development for a 1,204-ha area surrounding the Airport. This Secondary Plan provides a set of development and design principles and standards to guide the phasing, land use, transportation network, and infrastructure requirements for all future land developments in the AEGD area. The intent of the AEGD Secondary Plan is to create a future major business park area that will leverage its proximity and direct access to the Airport to create future employment and growth opportunities for the City of Hamilton. The design guidelines and standards put forth in the AEGD Secondary Plan will be the design basis for all developed lands presented in this report.

The AEGD Secondary Plan was approved by Council on October 13, 2010, and came into effect on February 3, 2015, after a decision from the Ontario Municipal Board (OMB).

An update to the Secondary Plan is underway to ensure that the Secondary Plan policies and maps reflect the approved Transportation Master Plan (TMP). This will ensure that land use decisions are consistent with the TMP and that the development of the Transportation Network for the area proceeds in accordance with the TMP.

To prepare the update, the City is reviewing relevant policies and maps in the Urban and Rural Hamilton Official Plans and the AEGD Secondary Plan. It is understood that a concurrent review of updates needed for the area's Natural Heritage System (NHS) mapping will also occur as part of the project. Updates will be implemented by an amendment to the City's Official Plan, which must be approved by Council.

The Conceptual Transit Network Map in the AEGD Secondary Plan shows potential future transit routes along Dickenson Road West, Glancaster Road and Arterial Road 1N.

3.1.3 City of Hamilton AEGD Transportation Master Plan

One of the related plans which support the Secondary Plan is the AEGD TMP. The AEGD TMP was originally completed in 2011, and an implementation update was subsequently completed in 2016 to reflect the OMB decision for the Secondary Plan.

Best practices and standards for roads have changed over time and are not the same now as when the original TMP was created. As a result, a subsequent update to the TMP was undertaken to reflect updated information and assumptions. The subsequent update was approved by Council on November 8, 2023.

The most current AEGD TMP Update – June 2024 outlines several roadway improvements within the AEGD TMP's study area. These roadway improvements are currently in their respective preliminary planning phases as they

require completion of environmental assessments and further study. As a result, the exact timings, final configurations, and precise alignments of these improvement projects are unknown at this time.

The AEGD TMP Update – June 2024 followed Approach #1 in the Municipal Engineers Association’s Municipal Class Environmental Assessment (EA) process. This means that the roads identified in the revised road network as Schedule B or C projects would be required to complete Phases 2 to 4 of the Class EA process. The revised road network for the AEGD TMP is provided in the figure below with Arterial Roadway 1N shown as a “Minor arterial road – 4 lanes” that was identified to be a high priority, Schedule C project. High priority projects are intended to be implemented by 2031. The conceptual cross-section developed for this road is provided in the figure below.

Some additional key roadway improvements that are within the Study Area for Arterial Roadway 1N included Dickenson Road West and Glancaster Road.

Dickenson Road West

Dickenson Road West is an east-west City of Hamilton minor arterial road within the Study Area. Dickenson Road West is anticipated to be widened between Upper James Street and Glancaster Road and extended from Glancaster Road to Smith Road. The AEGD TMP Update – June 2024 recommends a 45-metre ROW along Dickenson Road West be protected to allow for four travel lanes along the roadway as well as active transportation facilities.

Based on the AEGD TMP Update (June 2024) the City of Hamilton initiated the Schedule C, Municipal Class EA for Dickenson Road West between Upper James Street and Glancaster Road in 2024.

Glancaster Road

Glancaster Road is a north-south City of Hamilton future minor arterial road north of Arterial Road 1N and south of Dickenson Road West, and a minor collector road south of Arterial Road 1N within the Study Area. From Garner Road to Dickenson Road West, Glancaster Road is anticipated to have capacity reduced from a four-lane to a two-lane cross section, and be upgraded from a two-lane to a four-lane cross-section south of Dickenson Road West and Arterial Road 1N. Glancaster Road will also be reconstructed south of Arterial Road 1N. The AEGD TMP Update – June 2024 recommends a 36-metre ROW along Glancaster Road be protected for north of Arterial Road 1N to allow for four travel lanes along the roadway as well as active transportation facilities. A 30-metre ROW for Glancaster Road south of Arterial Road 1N is recommended.

3.1.3.1 Conceptual Cross Sections

The AEGD TMP Update – June 2024 developed conceptual cross sections for the road network. These conceptual road cross sections were redesigned to comply with the Complete Street Design Guidelines to foster inclusive, safe, and efficient mobility options for all road users. Adhering to these guidelines ensures that road infrastructure is resilient, sustainable, and adaptive to the evolving needs of modern societies and changing climate.

In addition, the conceptual road cross sections were redesigned by the City according to the AEGD Eco-industrial Design Guidelines to ensure sufficient capacity for stormwater conveyance and management is provided. Increasing the width of ditches and providing space for low impact development (LID) techniques can reduce the velocity and volume of runoff, allowing for filtration, evapotranspiration and potential for groundwater infiltration. The redesign also accommodates minimum size culverts under driveways and maintenance needs (slope). Overall, such enhancements ensure the longevity and safety of the transportation network and contribute to sustainable urban development adaptability to climate change.

The cross-section configurations were conceptual and subject to refinement through the Class EA process undertaken for the specific roads.

3.1.3.2 Climate Change

The AEGD TMP Update – June 2024 took into consideration climate change as follows:

Council declared a climate emergency in March 2019. The impacts associated with transportation and related stormwater management can be mitigated by applying innovative design strategies which can add resiliency to the system. Opportunities to provide direct and reliable connections to the provincial highway system help minimize emissions associated with traffic, in particular commercial vehicles.

Aligned with the AEGD Eco-industrial Design Guidelines, incorporating low-impact development features into public infrastructure designs can enhance stormwater management, consistent with Hamilton's Climate Change Action Strategy guidelines. Paired with green infrastructure, these elements can increase rainwater absorption into the soil, minimizing runoff and mitigating the urban heat island effect. Moreover, they offer added social, health and economic advantages.

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Figure 2: Revised Study Area Road Network from AEGD TMP Update (June 2024)

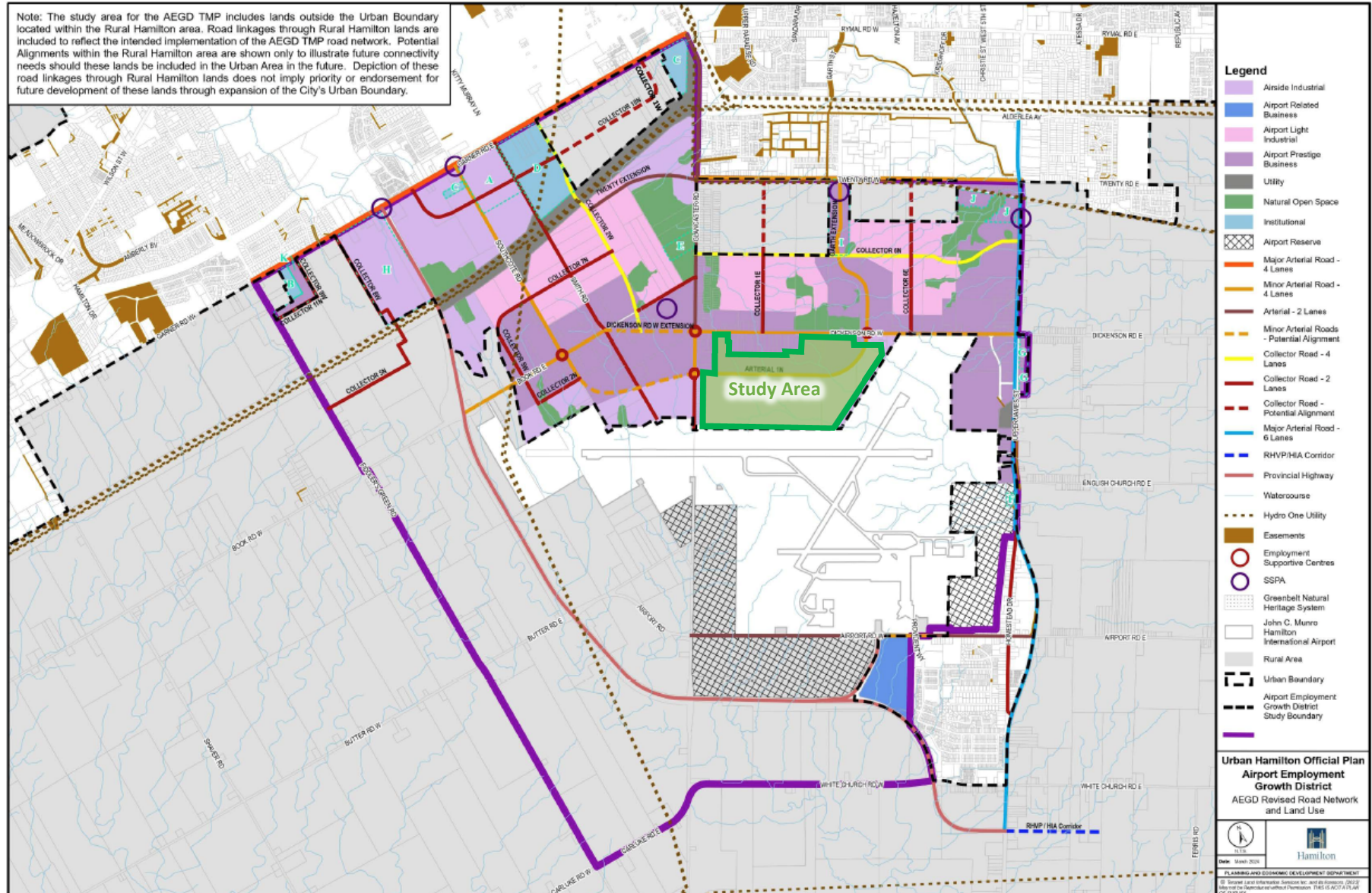
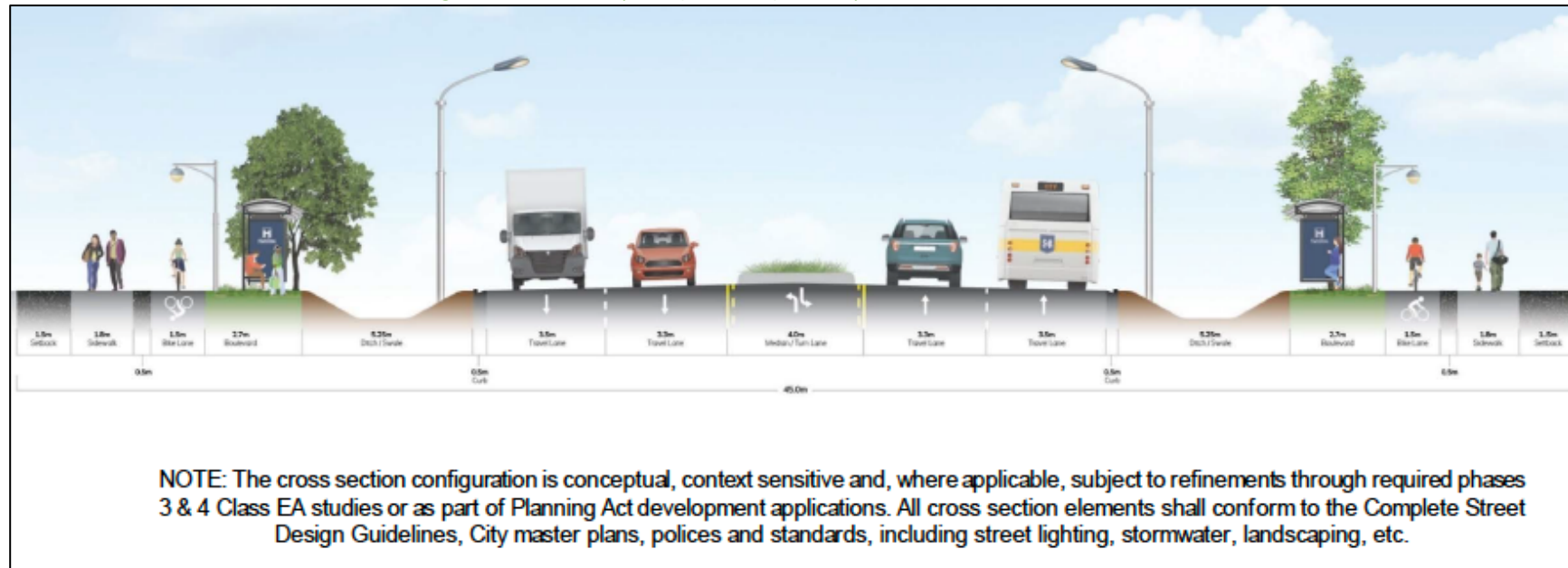


Figure 3: AEGD TMP Update (June 2024) – Conceptual Four-Lane Arterial Road Cross-Section



3.2 Proposed Development Policies and Plans

3.2.1 Draft Plan of Subdivision

The Study Area will be developed through a Plan of Subdivision which will allow for the creation of blocks and a public road right-of-way in accordance with the *Planning Act*. There are 5 proposed industrial development blocks within the Study Area as well as the creation of a new 45m wide east-west municipal road right-of-way and several blocks created for the NHS. There are three blocks for stormwater management (SWM) ponds.

Block 1 (10.30 ha) is situated at the northern limit of the Study Areas between Dickenson Road and the future 45m arterial road. This Block is designated for Airport Light Industrial use.

Block 2 (12.19 ha) lies directly south of the future arterial road and is directly adjacent to the Airport. This Block is designated Airport Prestige Business.

Block 3 (26.31 ha) will be the largest development block within the Study Areas. Situated to the north of the future arterial road, Block 3 will front both on the future arterial road as well as small portion of Dickenson Road at the northwest corner of the site. The majority of Block 3's northern limit will share a boundary with existing residences that front Dickenson Road. Block 3 lands are designed Airport Light Industrial.

Block 4 (24.38 ha) is the parcel situated between the arterial road to the north and the Airport lands to the south, west of the watercourse corridor. This block is designated Airport Prestige Business.

Block 5 (1.49 ha) lies in the northwest corner of the site fronting Dickenson Road. Located north of the arterial road, this block is designated Airport Light Industrial.

The plan of subdivision shows the alignment of Arterial Roadway 1N that was selected during Phase 2 of the Class EA process and was carried forward and adopted through the approval of the plan of subdivision by the Ontario Land Tribunal (OLT). Modifications are being made to the alignment based on the results of Phase 3 of the Class EA process with a change in the alignment for the Glancaster Road intersection. This change is in-keeping with the alignment that is shown on the approved Draft Plan of Subdivision.

Two watercourses in the Study Area will be realigned and consolidated into a central watercourse corridor with substantial wetland creation taking place along its length to compensate for the removal of small, isolated, non-Provincially significant wetlands on the tablelands. A third watercourse and associated wetland, in the northeast corner, will remain in its existing location. In addition to the watercourse corridors, one woodland and a treed area will also be retained on the landscape. These natural heritage features, as well as their associated buffer blocks, will be dedicated to the City through the plan of subdivision process.

The central watercourse corridor will traverse the site from west to east along the northern property limits, then from north to south prior to discharging at an existing outlet to the Airport. This central watercourse corridor is meant to convey all internal and external drainage (i.e., lands north of Dickenson Road) from existing streams (identified as Watercourses (WC) 2A and 2B and Headwater Drainage Feature (HDF) H3 on Figure 9). The watercourse corridor will also incorporate environmental replication features, as described in the Environmental Impact Study (EIS) (Savanta/GEI, 2023) and the EIS Addendum (GEI, 2025).

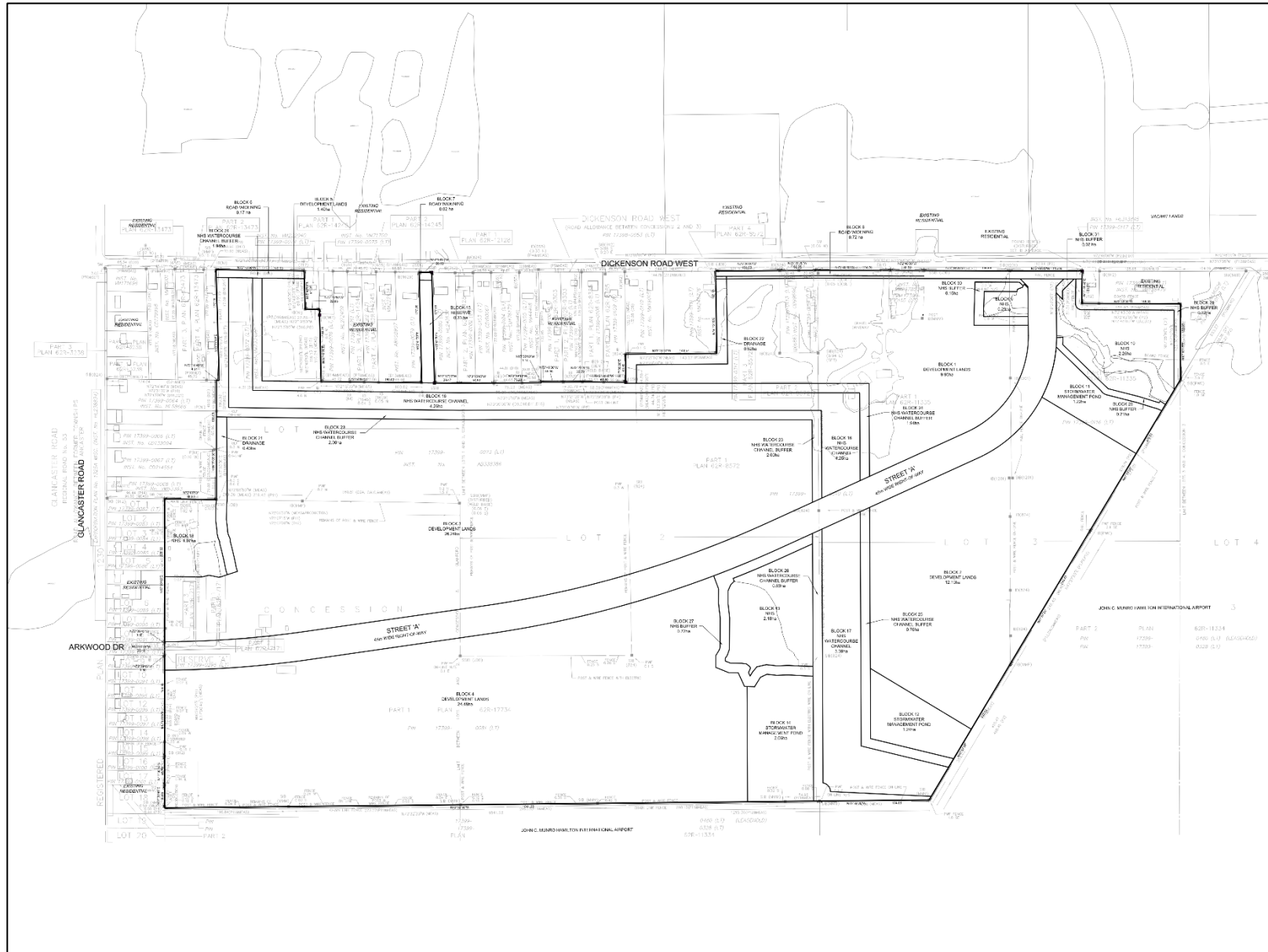
The eastern watercourse block will encompass Watercourse 1 (WC1) (Figure 9) in the northeast corner of the site which will be undisturbed except for the installation of the Arterial Roadway 1N crossing and the removal of an existing piped section that will be replaced with a created wetland.

Three additional blocks (total size of 0.65 ha) have been provided to allow for a future widening of Dickenson Road.

The development blocks, which will be owned and developed under single ownership, will subsequently be developed through the Site Plan Approval process.

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Figure 4: Approved Plan of Subdivision



3.2.2 Development Phasing

The purpose of the phasing plan is to allow for development to proceed in two phases. The phasing plan ensures that appropriate development can commence while facilitating appropriate capacity from a water, sanitary, stormwater, and transportation network perspective. Importantly, the first phase of development will allow for the implementation of all components of the proposed NHS.

3.3 Provincial Policies and Plans

3.3.1 Provincial Planning Statement (2024)

The current Provincial Planning Statement, 2024 (PPS) issued under the *Planning Act* came into effect October 20, 2024, and aims to guide appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment. The PPS focuses growth and development within urban and rural settlement areas and promotes efficient and resilient development and cost-effective land use patterns that support the protection of natural heritage features and areas.

The PPS also encourages the planning of infrastructure to be integrated with the planning for growth to meet the current and projected needs of the area. It also encourages the improvement of existing infrastructure prior to the development of any new infrastructure within a municipality/region. Specifically, the PPS (Section 3.1) states:

- (a) *The use of existing infrastructure and public service facilities should be optimized; and*
- (b) *Opportunities for adaptive re-use should be considered, wherever feasible.*

The PPS also encourages the development of transportation systems that are safe, reliable, and encourage the free movement of persons and goods from one area to another. Specifically, the PPS (Section 3.2) states:

Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address projected needs.

Efficient use shall be made of existing and planned infrastructure, including through the use of transportation demand management strategies, where feasible.

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.

It is clear from the PPS that optimizing existing public infrastructure, including roadways, to a standard that encourages the free and safe movement of persons and goods is desirable.

In addition, Chapter 4 (Wise Use and Management of Resources) provides for the protection of natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits. Policy 4.1 (Natural Heritage) identifies that natural features and areas shall be protected for the long term. Specifically, development and site alteration shall not be permitted in or adjacent to significant wetlands or significant coastal wetlands. Further, development and site alteration is not permitted within significant woodlands, significant valleylands, significant wildlife habitat or significant areas of natural and scientific interest unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Development and site alteration is only permitted within habitat of endangered species, threatened species and fish habitat in accordance with provincial and federal requirements. Mitigation measures may be considered to protect, improve or restore sensitive surface water features, sensitive ground water features and their hydrologic functions.

Policy 4.6 (Cultural Heritage and Archaeology) notes that significant built heritage resources and significant cultural heritage landscapes shall be conserved. 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.

3.3.2 Greenbelt Plan (2017)

The Greenbelt Plan was amended in July 2017 and is an overarching document that serves to protect the Greenbelt Area from urbanization that would cause harm to its agricultural and ecological features. The Greenbelt Plan is supported by The Growth Plan for the Greater Golden Horseshoe.

The Greenbelt Plan (2017) is part of the Greater Golden Horseshoe which is an area that contains many ecologically and hydrologically significant natural environments and scenic landscapes. The Greenbelt Plan is one of the Plans (the other two plans are the Oak Ridges Moraine Conservation Plan and Niagara Escarpment Plan) that identifies where urbanization should not occur to provide permanent protection to the agricultural land base and the ecological and hydrological features, areas and functions occurring on this landscape. The Greenbelt Plan establishes a land use planning framework for the Greater Golden Horseshoe that supports the economy, environment and social equity. This is accomplished by identifying environmental and agricultural protected lands where urbanization should not occur.

The Study Area is located in the Settlement Areas Outside of the Greenbelt. As such, the Greenbelt Plan is not applicable and is not required to be met.

4 Class EA Process and Public Consultation

4.1 Municipal Engineers Association's Municipal Class EA Planning Process

This Class EA planning process, which follows the Municipal Engineers Association's (MEA) Municipal Class Environmental Assessment document (February 2024), takes into consideration the protection of all aspects of the natural, social and economic environment as well as long-term planning for the mitigation of any adverse effects during both construction and commissioning. The Class EA process also includes consultation with the Public, Indigenous communities, Government Agencies, local interest groups and review bodies to obtain input and feedback and to ultimately attain general acceptance for the preferred alternative.

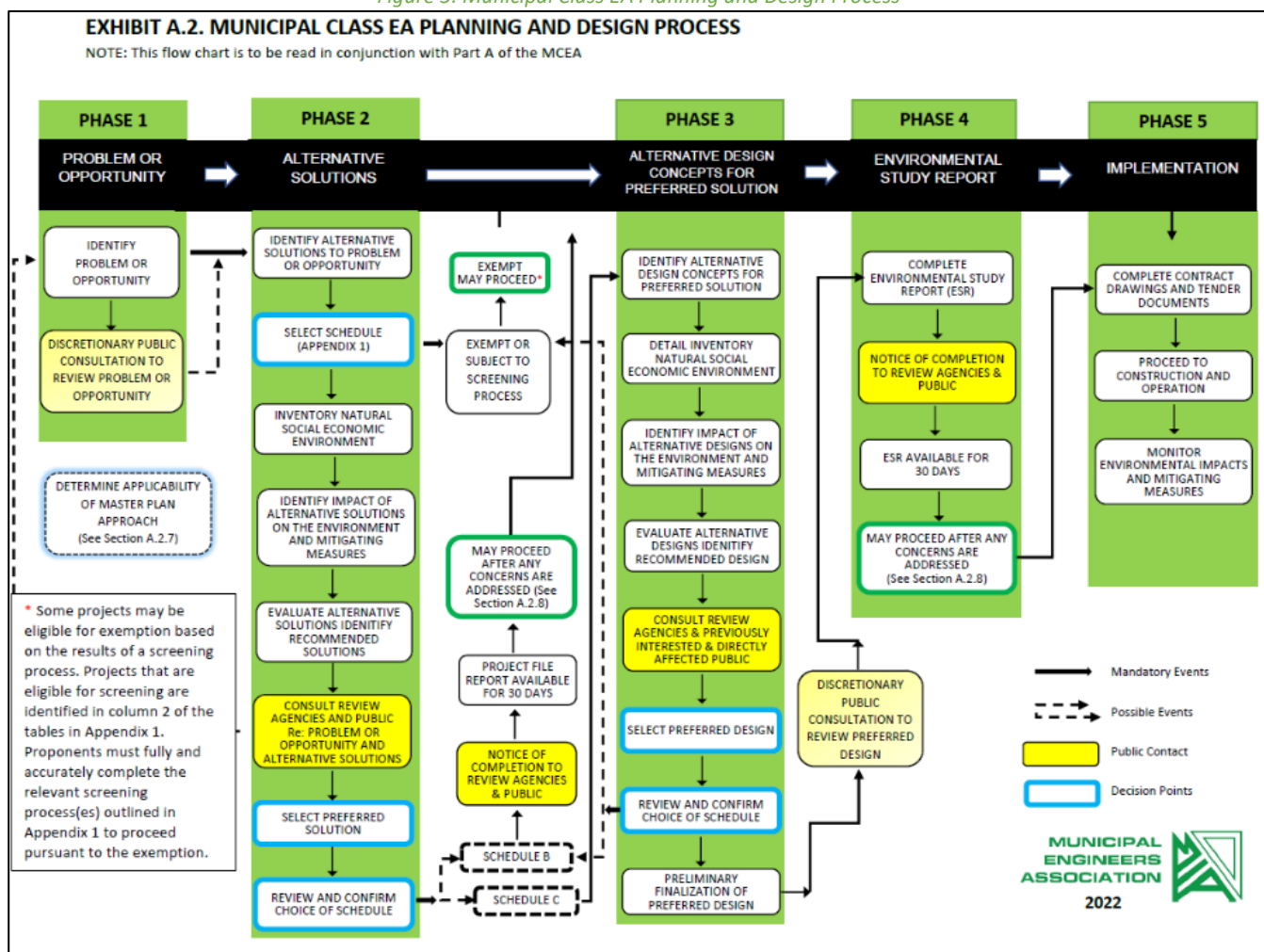
There are five (5) phases depicted in the Municipal Class EA Planning and Design Process, which include:

- **Phase 1 - Identify the problem(s) or opportunity:** Identify the problem or opportunity that the Class EA is intended to address.
- **Phase 2 - Identification of alternative solutions and selection of a preferred solution:** This is based on a thorough evaluation of the options against a set of criteria. Phase 2 includes a detailed inventory of the natural, social and economic environment as well as the identification of any adverse impacts/effects and associated mitigating measures. Public consultation is held to review the problem/opportunity as well as all alternative solutions in an attempt to gain feedback leading to the selection of the preferred solution.
- **Phase 3 - Identification and assessment of alternative design concepts for the preferred solution:** The preferred solution selected in Phase 2 is expanded on in Phase 3 to include detailed design concepts. A second public consultation event is held to review the alternative design concepts in an attempt to gain further feedback leading to the selection of the preferred design.

- **Phase 4 - Preparation of an Environmental Study Report (ESR):** An ESR is developed documenting all phases and components of the Class EA process. The ESR is placed on public record, and a notice of completion is filed.
- **Phase 5 - Implementation:** Implementation of the project works, including complete contract drawings and tender documents followed by construction and operation and monitor construction for adherence to environmental provisions and commitments.

The complete Municipal Class EA Planning and Design Process is shown in the following Figure.

Figure 5: Municipal Class EA Planning and Design Process



Source: Municipal Engineers Association

4.2 Municipal Class EA Schedules

The Class EA document categorizes projects into one (1) of four (4) possible schedules depending on the project's complexity and the nature and significance of potential adverse effects on the environment. The schedule under which a particular project falls determines the specific planning and design phases that must be adhered to. The four (4) schedules are:

1. **Exempt Projects** - are generally limited in scale and usually consist of minor operational/upgrade works. These projects usually have minimal adverse impacts on the environment and may proceed to

implementation without further assessment since they are no longer required to meet the requirements of the EA Act.

2. **Eligible for Screening** – projects that are identified as eligible for screening are exempt from the requirements of the EA Act based on the results of the archeological screening process and the collector roads screening process (where applicable). Proponents must fully and accurately complete the screening processes to determine whether the project can be screened and proceed directly to implementation.
3. **Schedule B** - projects have the potential for some adverse environment effects and must accordingly proceed through Phase 1 and Phase 2 of the planning and design process. Alternative solutions to the problem must be identified, all impacts to the natural, social-cultural and/or economic environment must be inventoried, and a preferred solution selected through consultation with the Public and government review agencies. The project file must be completed and put on public record for a minimum 30-day public comment period.
4. **Schedule C** - projects are the most complex and require a more detailed study, public and agency consultation, and documentation. These projects have the potential for significant environment effects. A Schedule C project must complete all five (5) Phases of the planning and design process. An ESR must be completed and put on public record for a minimum 30-day public comment period.

It is important to note that the Schedule assigned to a particular project is proponent driven. For example, even if a project can be categorized as Schedule B, the proponent can voluntarily decide to comply with the requirements of a Schedule C of the MEA process based on the magnitude of anticipated impacts or the special public and agency consultation requirements specific to that particular project. Projects that are classified as exempt cannot be elevated to a Schedule B or C process.

Public and agency consultation are integral to the Class EA planning process, with minimum consultation requirements varying depending on the project's Class EA Schedule.

The Class EA process provides an appeal mechanism to change the project status. Under the provisions of section 16 of the amended EA Act, there is an opportunity under the Class EA planning process for the Minister to review the status of a project. Members of the public, interest groups and review agencies may request the Minister to require a Proponent to comply with section 16 of the EA Act before proceeding with a proposed undertaking. For Schedule B and C projects the public can request additional investigation by filing a section 16 Order Request to the Ministry of the Environment, Conservation and Parks. The Minister determines whether this is necessary, with the Minister's decision being final. The procedure for dealing with concerns, which may result in the Minister, by order, requiring the Proponent to comply with section 16 of the Act is outlined in the MEA document (February 2024). Revisions to the Act found in the *More Homes, More Choice Act, 2019* resulted in a change to section 16 Order requests. This change removed the opportunity for anyone to request a section 16 Order (formerly a Part II Order) for any project unless the order may prevent, mitigate or remedy adverse impacts on existing Aboriginal and treaty rights.

4.2.1 Schedule C Classification

This project was based on a "master plan approach" that followed Approach #1 in the MEA Class EA process. Approach #1 documents Phases 1 and 2 of the Class EA process and becomes the basis for, and used in support of, road projects that were identified in the TMP. The Transportation Master Plan Approach #1 does not include approval under the EA Act since a Notice of Completion was not issued and there was no opportunity for Section 16 Orders to be requested related to Aboriginal or treaty rights.

Arterial Roadway 1N falls under Schedule C as in Appendix 1 – Project Tables of the MEA Class EA document, under item 34 of “Reconstruction of Roads with Increase to Travel Lanes”. This is characterized as:

*Construction of new roads or other linear paved facilities (*e.g., HOV lanes) with a cost greater than or equal to \$3,000,000.*

As such, this study is being conducted in accordance with the approved requirements for a Schedule C Municipal Class EA, which requires the completion of Phases 1 to 4 of the planning and design process. Phases 1 and 2 (partially) completed through the City’s AEGD TMP – Update June 2024 which leaves the remainder of Phase 2 and Phases 3 and 4 to be finished as part of this project for Arterial Roadway 1N.

Consultation between the proponent and the public, affected and interested stakeholders and Indigenous communities early on and throughout the process is a key feature of EA planning, which provides opportunities for the exchange of information by which decision-making may be influenced. In addition, one of the primary goals in effectively consulting with stakeholders and Indigenous communities is to resolve issues proactively to avoid controversy.

In a Schedule C Class EA, the required Consultation Plan outlines the mandatory points of contact with the public and review agencies and how these activities will be addressed. After issuance of the Notice of Commencement, the first point of contact follows the proponent’s identification of the recommended alternative solution (Phase 2). It is at this point, through invitation for public comment and input that an opportunity for stakeholders and Indigenous communities to assist in the selection of a preferred solution exists. The second point of contact follows the proponent’s identification of the recommended design solution (Phase 3). It is at this point, through invitation for public comment and input that an opportunity for stakeholders and Indigenous communities to assist in the selection of a preferred design solution exists. The third point of contact consists of the Notice of Completion issued for completion of the Environmental Study Report (ESR) making the ESR available for the mandatory 30-day public comment period by interested members of the public, Indigenous communities, and agency groups.

5 Existing Conditions

5.1 Natural Environment

The PPS defines an NHS as a system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of Indigenous species, and ecosystems. As required by the PPS, the City identified an NHS within the AEGD through the Secondary Planning process. NHS areas within the AEGD Secondary Plan consist of Key Natural Heritage Features, Key Hydrologic Features, Core Areas and Linkages. Core Areas are described by the Urban Hamilton Official Plan (UHOP) as the most important components in terms of biodiversity, productivity, and ecological and hydrological functions. Linkages are described in the UHOP as are natural areas within the landscape that ecologically connect Core Areas. Other than watercourses, the AEGD Secondary Plan did not identify any NHS within the Study Area.

An EIS (GEI, 2023) and EIS Addendum (GEI, 2025) were prepared in support of the draft plan of subdivision process. The EIS and EIS Addendum confirmed that there are no Core Areas or Linkages within the Study Area. However, several key natural heritage and key hydrologic features were identified including wetlands, significant woodlands, fish habitat and significant wildlife habitat. For the purpose of this ESR, the findings of the EIS and EIS Addendum

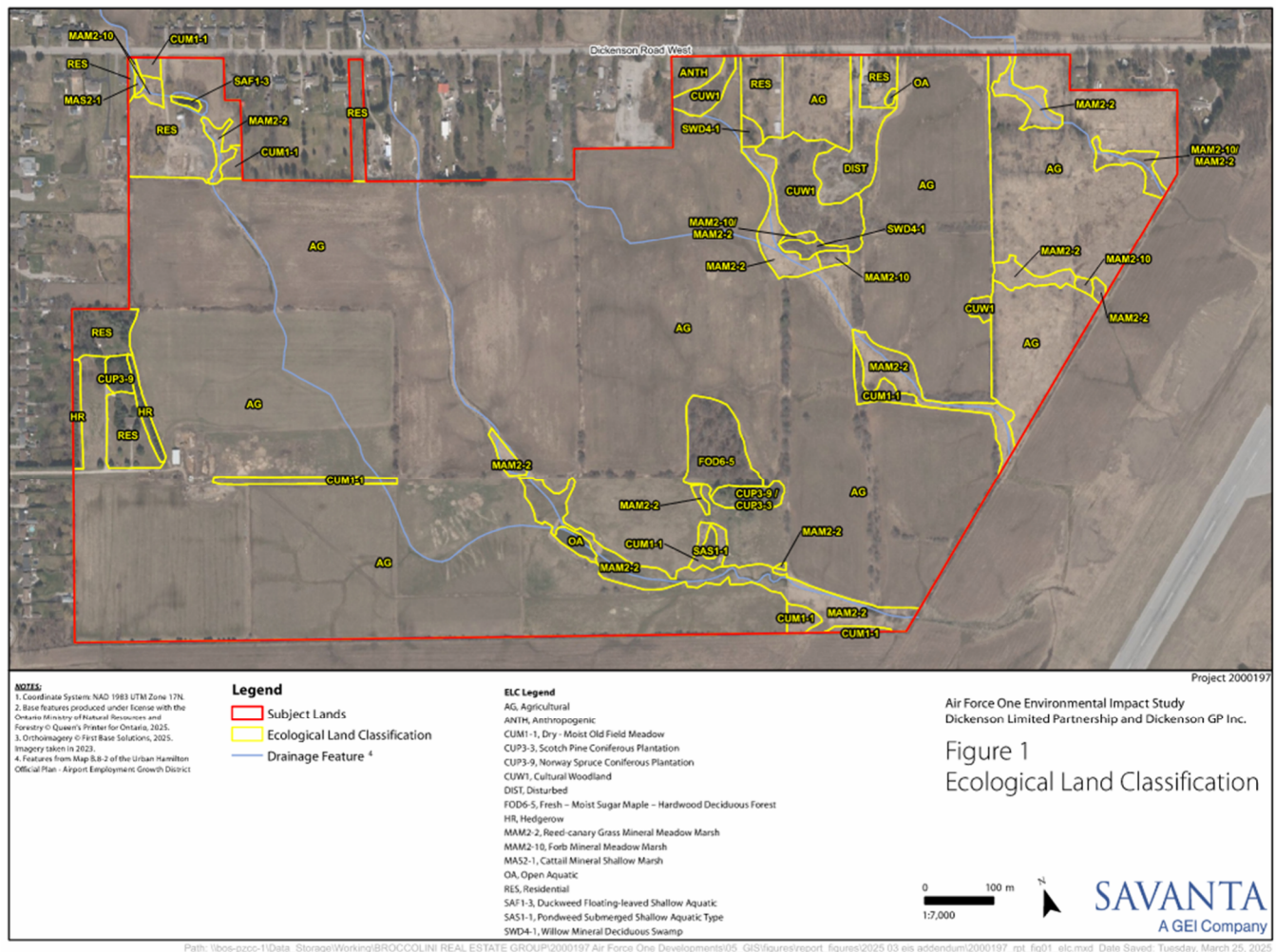
have been used to inform the existing natural heritage features and functions within the EA Study Area. The following outlines the various key natural heritage and key hydrologic features within the City's NHS that were considered as part of the draft plan of subdivision process.

Of note, the impact evaluation is based on the NHS as provided for in the approved draft plan of subdivision. This includes the realignment and consolidation of two watercourses into a centralized watercourse corridor that incorporates wetland re-creation to address the removal of small, isolated tableland wetlands, the retention of the northeastern watercourse and wetland in the current location, the retention of the southern woodland and western cultural plantation and the removal of the northern cultural woodland.

5.1.1 Vegetation Communities

As part of the EIS, Ecological Land Classification (ELC) was completed to identify the vegetation communities with the Study Areas. These communities are shown on Figure 6 and were used to further refine and focus the areas on the Study Areas for specific fieldwork.

Figure 6: Ecological Land Classification



Source: Environmental Impact Study Addendum, Figure 1 (GEI, 2025)

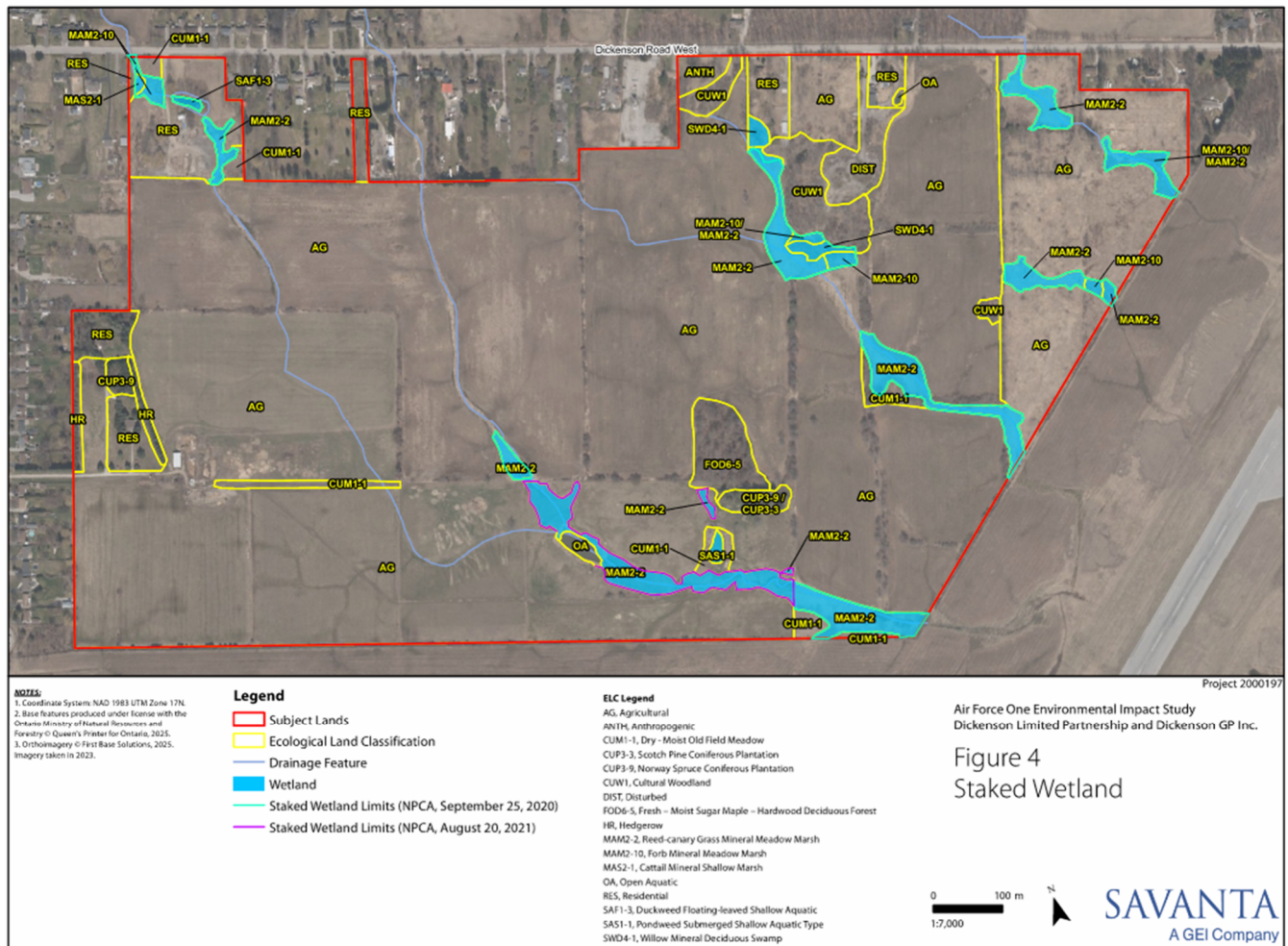
5.1.2 Habitat of Endangered and Threatened Species / Species at Risk

The EIS (GEI, 2023) and EIS Addendum (GEI, 2025) confirmed there are no endangered or threatened species on the Study Areas.

5.1.3 Significant and Non-Significant Wetlands

The EIS (GEI, 2023) and EIS Addendum (GEI, 2025) confirmed that there are no Provincially Significant Wetlands (PSWs) or significant coastal wetland in the Study Area. The Urban Hamilton Official Plan (UHOP) considers all wetlands to be Key Natural Heritage Features. As a result, there are several non-significant wetlands that were staked by the Niagara Peninsula Conservation Authority (NPCA) in 2020 and 2021.

Figure 7: Stacked Wetland



Source: Environmental Impact Study Addendum, Figure 4 (GEI, 2025)

No mapped PSWs are located within the Study Areas. Wetlands within the Study Area are also not expected to be hydrologically connected to other PSWs in proximity to the Study Area. Non-significant wetlands may still be considered Key Natural Heritage and Key Hydrologic Feature within the City's NHS.

Figure 7 above identifies the wetland communities on the Study Area.

The wetland associated with WC1 will be directly impacted by the alignment of Arterial Roadway 1N. The loss of wetland area associated with this impact has been accounted for in the comprehensive wetland replication plan

for the plan of subdivision and will be compensated for on a 1.5:1 area-based ratio within the on-site watercourse corridors.

5.1.4 Significant Woodlands

The EIS (GEI, 2023) and EIS Addendum (GEI, 2025) confirmed there are no significant woodlands in the Study Area however, there are two significant woodlands located on the adjacent lands of the Study Area. These woodlands are located off-site; one significant woodland is located immediately north of Dickenson Road and the other is located on the west side of Glancaster Road, however, the alignment of the roadway is not expected to have a direct impact on those woodlands outside of the Study Area.

5.1.5 Significant Valleylands

The EIS (GEI, 2023) confirmed there are no significant valleylands within the Study Area.

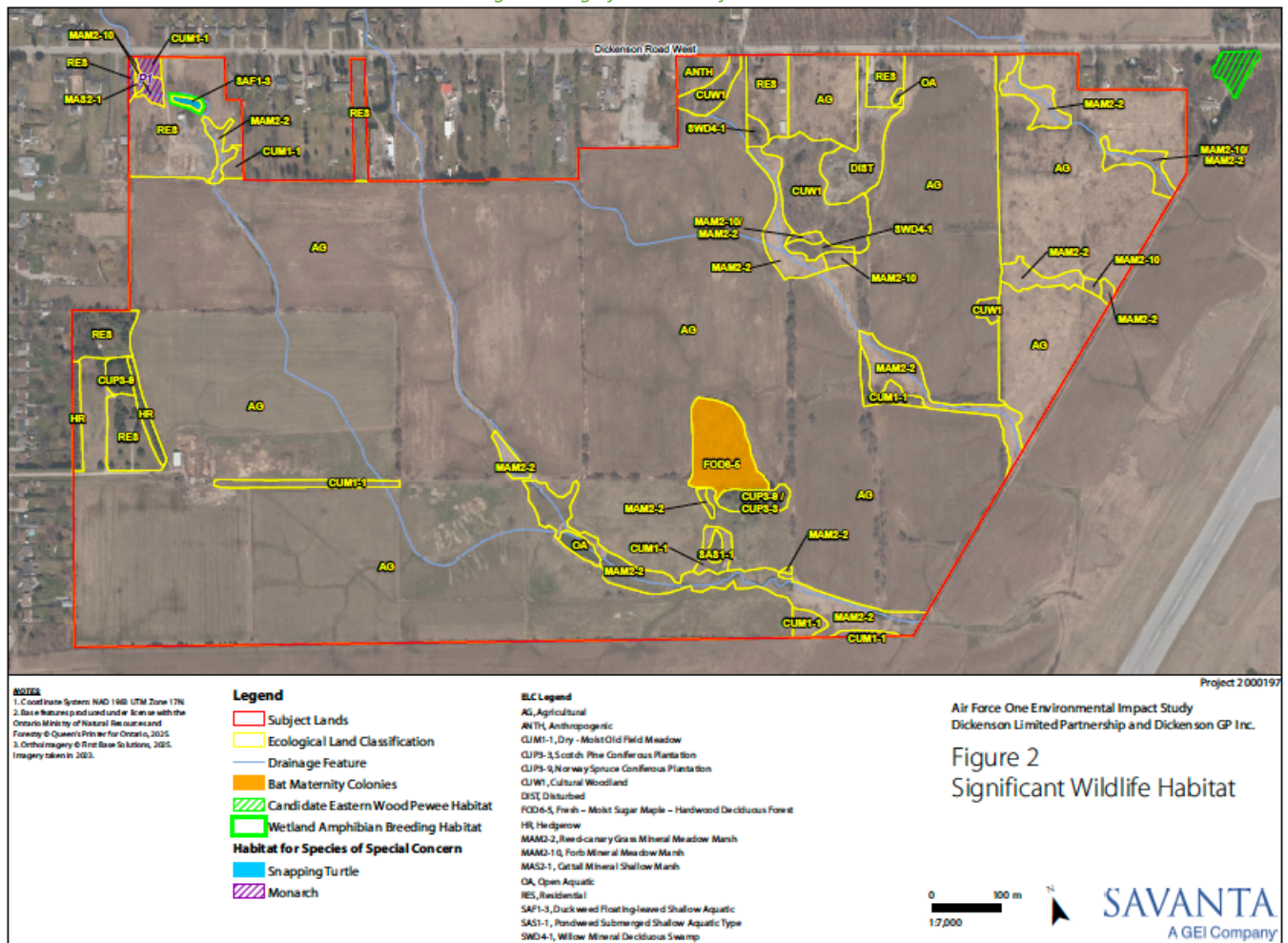
5.1.6 Significant Wildlife Habitat

The EIS (GEI, 2023) identified Significant Wildlife Habitat (SWH) within the small online pond at the northwest corner of the Study Area.

There are woodlands that are not considered to be significant woodlands present in the Study Area that may have bat maternity colony SWH.

Neither the online pond nor the woodlands on site are not impacted by the Arterial Roadway 1N. As such, there is no impact to SWH as a result of the roadway.

Figure 8: Significant Wildlife Habitat



Source: Environmental Impact Study Addendum, Figure 2 (GEI, 2025)

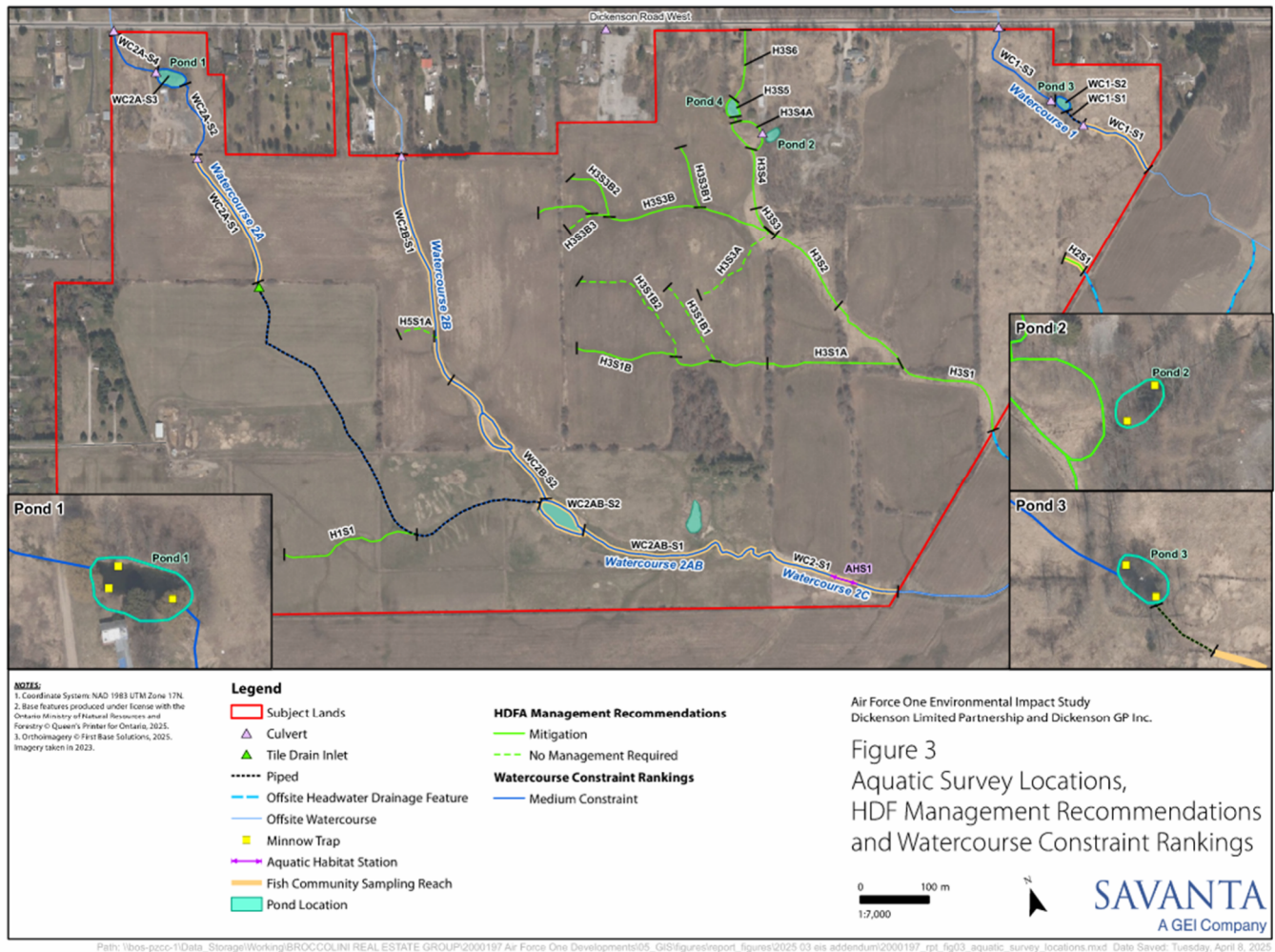
5.1.7 Significant Areas of Natural and Scientific Interest

There are no Significant Areas of Natural and Scientific Interest identified by the Ministry of Natural Resources in the Study Area.

5.1.8 Fish Habitat and Watercourses

The EIS (GEI, 2023) identified several local drainage features that convey drainage across the Study Area. Aquatic surveys of the Study Area, performed on April 2 and 3, 2020, May 21, 2020, August 10, 2020, and December 10, 2020, as well as March 18, 2021, May 19, 2021, and August 5, 2021, provided an assessment of all onsite drainage features. The drainage is characterized by three watercourses (WC1, WC2A and WC2B) and four HDFs.

Figure 9: Aquatic Survey Locations



Source: Environmental Impact Study Addendum, Figure 3 (GEI, 2025)

WC1 is a 240m tributary that traverses the Study Area from northwest to southeast. WC1 receives upstream external drainage from an area approximately 3.4 ha in size from north of Dickenson Road and approximately 12.7 ha of onsite drainage. WC1 ultimately drains offsite into the Airport prior to reaching confluence with HDF H2S. WC1 will be directly impacted by the alignment of Arterial Roadway 1N. The crossing will need to be appropriately sized to address fluvial and wildlife passage requirements.

WC2 consists of WC2A and 2B. WC2A enters the Study Area at the northwest corner. It is approximately 510 m in length and receives internal and external drainage from areas approximately 16.2 ha and 36.1 ha, respectively. WC2B enters the Study Area further to the east than WC2A. It is approximately 430m in length and receives internal and external drainage from areas approximately 9.3 ha and 28.1 ha, respectively.

WC2A and 2B converge in the south-central portion of the Study Area before discharging offsite on the Airport. Through the plan of subdivision implementation, WC2A and 2B will be combined into the central watercourse corridor. This watercourse corridor will have one crossing of Arterial Roadway 1N. The design of the watercourse corridor will need to account for this road crossing.

HDF H2S is a small headwater feature, having only 36 m of the HDF in the Study Area. The upstream drainage area of HDF H2S is approximately 9.8 ha. H2S reaches confluence with tributary WC1 on the Airport. HDF H2S is proposed for removal through the plan of subdivision implementation and will not be impacted by Arterial Roadway 1N.

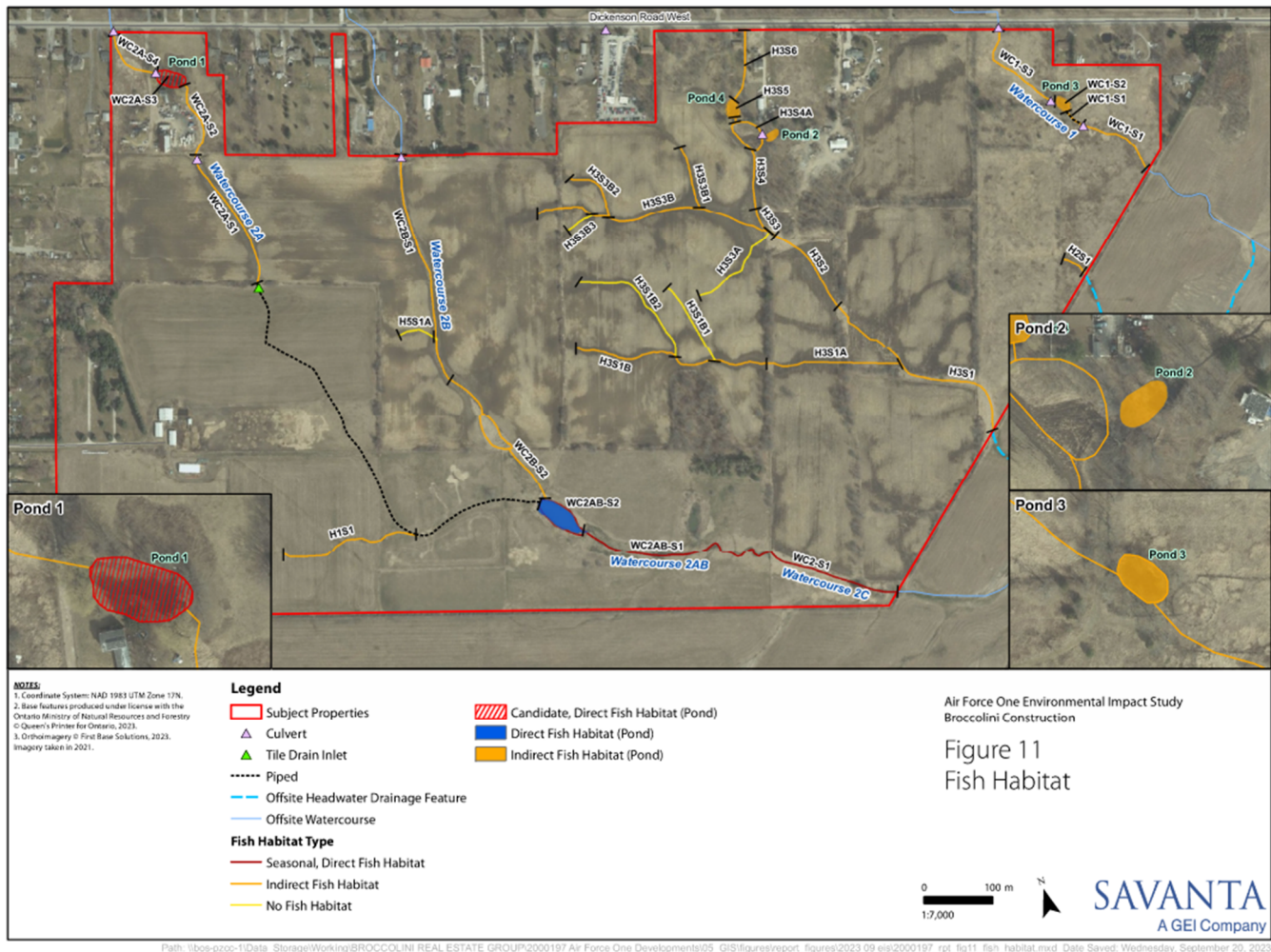
HDF H3S is comprised of series of smaller drainage features that primarily run dry. This set of drainage features drain from northwest to southeast prior to discharging to the Airport where its drainage is routed to a culvert beneath the north-south runway. The HDF H3S combined stream length of all branches is approximately 2,060 m and receives both internal and external drainage. H3S receives approximately 8.1 ha of drainage from lands to the north of Dickenson Road and approximately 40.5 ha of drainage internal to the Study Areas. H3S is proposed to be realigned such that it connects into the central watercourse corridor along the northern property limit. As a result, H3S will not be impacted by Arterial Roadway 1N.

The aquatic surveys identified and recommended that WC1, WC2A and WC2B were medium constraint watercourses. HDFs H1, H2 and H3 were classified as Mitigation. Features classified as Mitigation are drainage features that can be removed provided their features and functions are replicated elsewhere on site using enhanced lot level conveyance measures such as vegetated swales or replicated wetland features. LID features can be used to recreate Mitigation features and restore functions lost due to removal of these features. Some of the smaller HDFs have been assigned a No Management Required management recommendation. These features have limited ecological value due to their ephemeral nature within an actively managed agricultural setting. HDFs assessed as No Management Required can be removed from the landscape without the need for mitigation.

With the exception of fish within the southerly online pond, there is no direct fish habitat in the Study Area. There is also no species at risk (SAR) fish habitat in the Study Area. One watercourse on the Airport has been identified as habitat for Grass Pickerel however, that watercourse is not hydrologically connected to the watercourses in the Study Area since that watercourse flows north-east towards Twenty Mile Creek, while the watercourses in the Study Area flow towards Three Mile Creek. It is acknowledged that Grass Pickerel is identified downstream within Three Mile Creek, however this is located approximately 5.3 km from the Study Area.

Fish habitat, as identified through the EIS Addendum (GEI, 2023) is shown on the following figure.

Figure 10: Fish Habitat



Source: Air Force One Environmental Impact Study, Figure 11 (GEI, 2023)

Within the Study Area, fish habitat restoration and protection measures along with the enhanced riparian corridors along WC1 and WC2, proposed through the plan of subdivision, will ensure no negative impact to fish habitat on-site or downstream and should result in a positive impact to fish habitat. The intention is to construct the watercourse realignment of WC2 and road crossing in the dry, thereby limiting the impact to the watercourse and fish habitat.

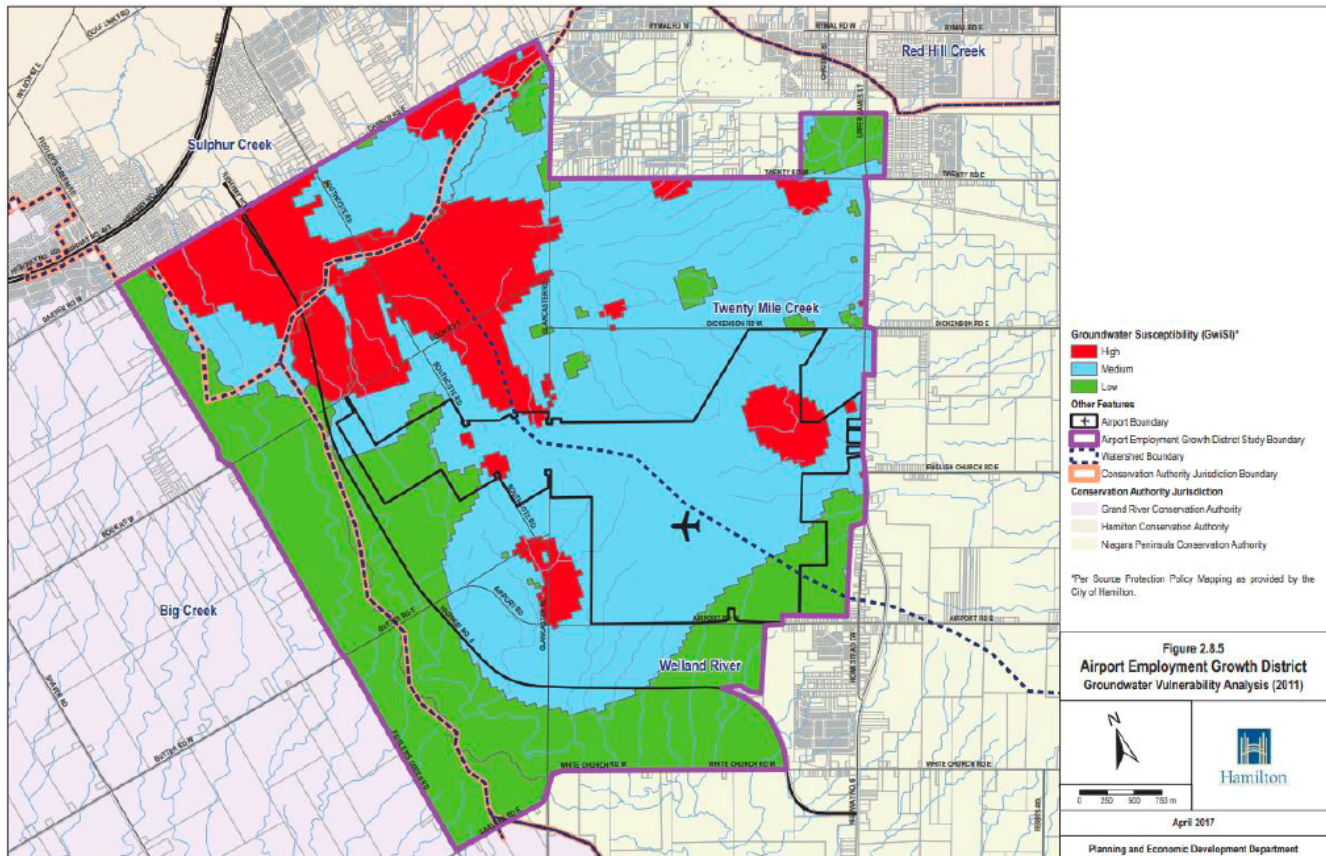
5.1.9 Hydrogeology and Soils

Private water wells are common in proximity to the Study Area. Groundwater levels are shallow and trend with the seasons with level highest (0.4 m below ground) in the spring. Soils in the Study Area have low permeability and groundwater levels limit infiltration.

A groundwater vulnerability analysis was undertaken at the time that the AEGD Secondary Plan was developed. This analysis identified that there is a low groundwater susceptibility area in part of the Study Area, but this is outside of the area proposed for Arterial Roadway 1N. However, there are small areas of high groundwater susceptibility along Glancaster Road near the intersection with Arterial Roadway 1N that are likely associated with water wells. These will be taken into consideration during detailed design of the roadway.

The Hydrogeological Assessment (Terra-Dynamics, 2023), completed in support of the draft plan of subdivision application, confirmed that the Niagara Peninsula Source Protection Authority did not map any Significant Recharge Areas in the Study Area and the fieldwork completed in support of the draft plan of subdivision application confirmed that there are no groundwater discharge areas in the Study Area. The Assessment also confirmed that the drainage features in the Study Area are primarily intermittent with some that are ephemeral. No sensitive surface water features were identified. There are no municipal drinking water supplies or designated vulnerable areas, vulnerable surface or groundwater in the Study Area.

Figure 11: Groundwater Vulnerability Analysis for AEGD



Source: Airport Employment Growth District Ground Water Vulnerability Analysis, Figure 2.8.5 (City of Hamilton, 2011)

5.1.10 Hydrologic and Hydraulic Modelling

Hydrologic and floodplain modelling has been conducted for the Study Area for both the existing and proposed development conditions. The April 2017 AEGD Sub-watershed Study & Stormwater Management Plan (AEGD SWMP) conducted a basic level hydrologic modelling for the AEGD Secondary Plan area using high level catchment areas to determine existing hydrologic conditions. No hydraulic floodplain analysis was performed in that report. High-level hydrologic modelling was conducted, with finer discretization of the catchment areas to provide a detailed and precise understanding of the existing hydrologic conditions within the Study Areas as part of the draft plan of subdivision process. The results of the hydrologic modelling performed were compared to the 2017 AEGD SWMP and adjusted to ensure results were consistent with the previous background studies. Post-development conditions hydrologic modelling was performed to determine the post-development discharge flows and storage requirements for each development block, including the required discharge-storage relationships needed to

ensure all regulated storm events are controlled to existing conditions. The existing condition for all flow control is the AEGD unitary flow rates.

Hydraulic floodplain modelling was performed for both the pre- and post-development conditions to determine the floodplain extents and ensure that the proposed watercourse corridors can successfully convey the Regulatory storm event (100-year storm event) and the regional storm event.

5.1.11 Stormwater Drainage

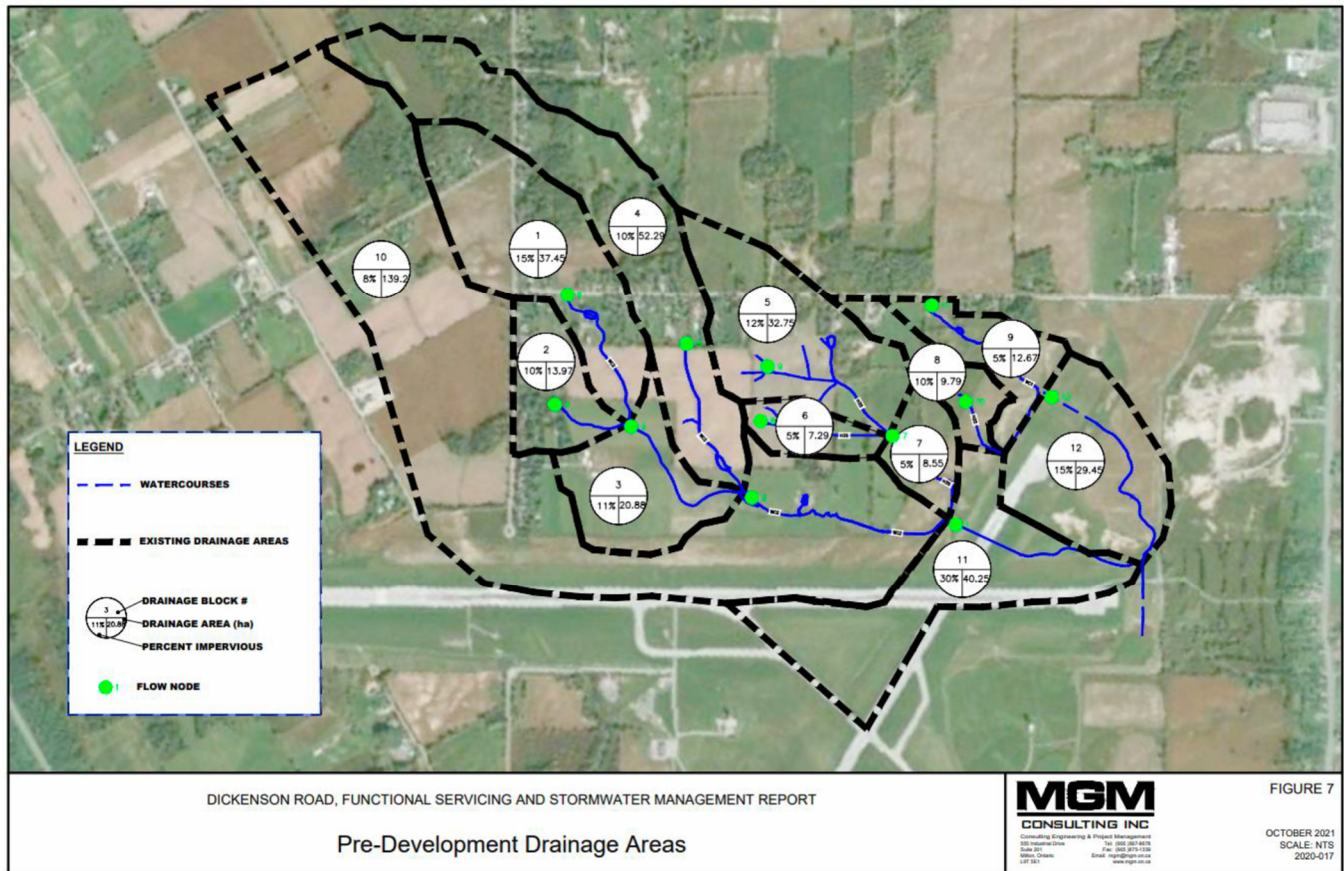
The Study Area generally drains from northwest to the southeast through various onsite drainage features. Surrounding stormwater is managed through storm sewers and municipal drains. The future proposed area developments will result in additions and removals of stormwater projects driven by land use and road network changes.

Six small agricultural/rural residential ponds exist in the Study Area. These ponds do not serve any stormwater management functions. Of the six ponds, five are online and are associated with WC1, WC2 and HDF H3S (refer to Figure 9). The six pond was not observed to be hydrologically connected during early spring HDF Assessments (HDFAs). All ponds have footprints less than 0.15 ha.

The SWM strategy for the Study Area relies on four SWM facilities strategically placed to capture and manage drainage, encompassing both public and private blocks. Three of these SWM facilities will be municipally owned ponds, serving as collection points for drainage from both private blocks and the arterial road. Beneath Arterial Roadway 1N, a 5-year storm sewer will handle events up to this threshold, effectively preventing flooding issues within the road. For events exceeding the 5-year storm, the system is further enhanced by utilizing 5.25m wide roadside swales along both sides of the road for overland conveyance.

Importantly, the municipal roadway is engineered to avoid receiving any drainage from private sites for all events up to and including the Regulatory 100-year storm event. Only in emergency events beyond this magnitude will drainage be temporarily routed into the right-of-way and then conveyed overland to the SWM facilities.

Figure 12: Pre-Developed Drainage Areas



5.2 Social-Cultural Environment

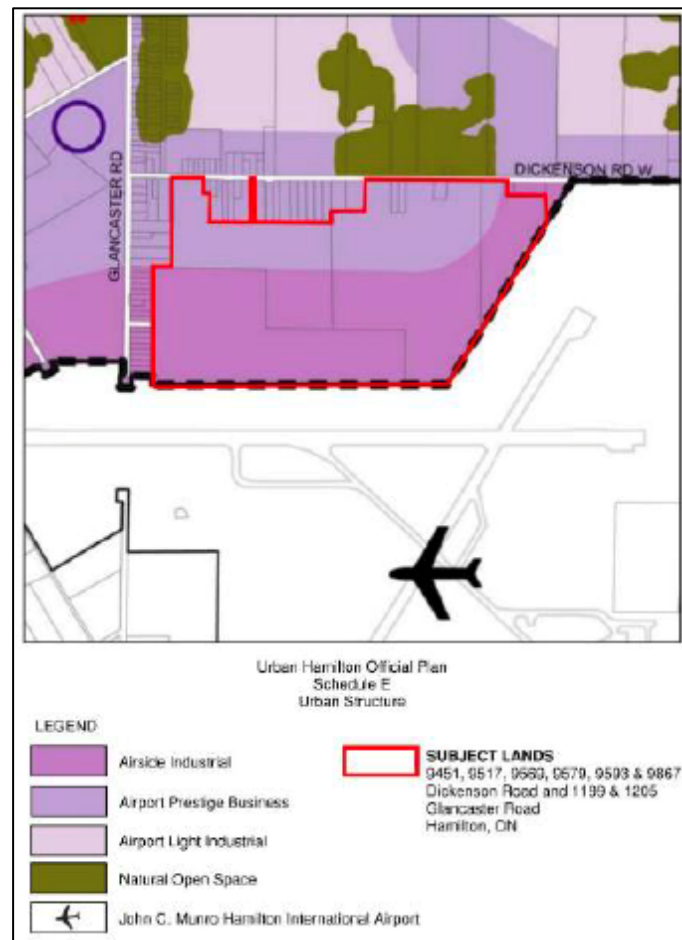
5.2.1 Existing and Future Land Uses

The existing land use in the Study Area is natural open spaces and rural and agricultural land. The lands are designated for employment uses in the UHOP. The Study Areas are surrounded by clusters of rural residential lots with many of the homes, in particular to the west of the Airport, situated on large estate lots.

The AEGD Secondary Plan has designated two different land use types within the Study Areas: Airport Prestige Business and Airport Light Industrial. These land use types of Study Area are separated by the future Arterial Roadway 1N. Lands directly adjacent to the Airport (south of the future arterial road) are designated Airport Prestige Business. Airport Prestige Business lands are intended to be employment generating areas that will benefit from fronting the airport directly. Lands to the north of the arterial road and not adjacent to the airport are designated as Airport Light Industrial. Airport Light Industrial lands are also intended to provide future economic growth opportunities. This designation is intended for developments that do not require direct frontage with the airport lands but still can benefit from the proximity to the services provided by the airport.

The Study Area (shown as the “Subject Lands” in the figure below) identifies the land use designations from the City of Hamilton’s Official Plan, Schedule E.

Figure 13: Urban Hamilton Official Plan Schedule E

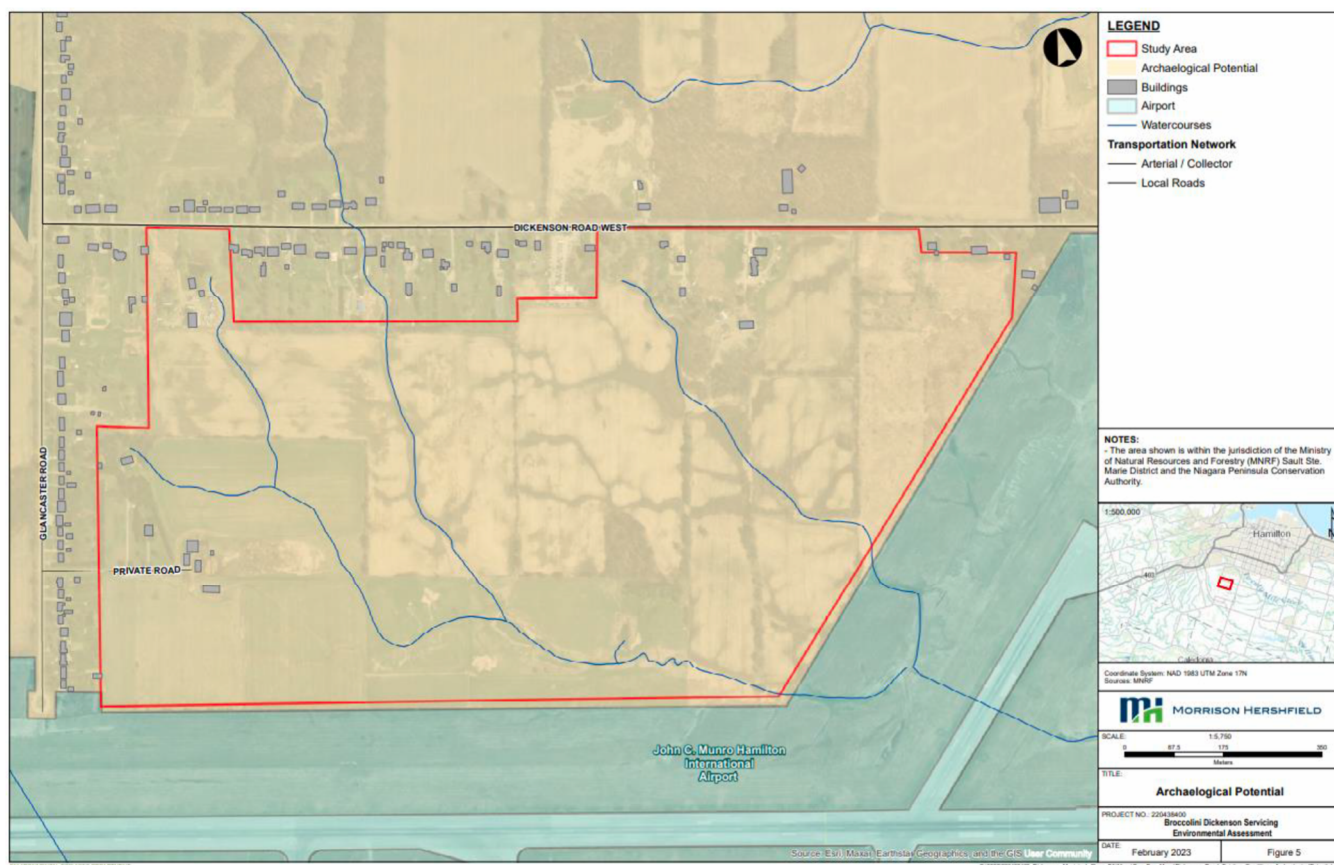


5.2.2 Archaeology Assessments

Stage 1 and 2 Archaeological Assessments were prepared in September 2021 and July 2023. The Stage 2 identified 14 archaeological sites within the Study Area. Based on these findings a Stage 3 Archaeological Assessment was undertaken on the 14 archaeological sites from June 2022 to November 2023. Based on the results of the Stage 3, the Study Area contains sites that required further assessment of cultural heritage value and interest, and a Stage 4 Archaeological Assessment was undertaken from December 2024 to March 2025.

Any archaeological sites identified in the Study Area that could be impacted by construction of Arterial Roadway 1N will have any necessary Stage 3 and Stage 4 Archaeological Assessments completed and the impacted area cleared with the reports submitted to the Ministry of Citizenship and Multiculturalism prior to construction.

Figure 14: Archeological Potential



5.2.3 Cultural Heritage

A Cultural Heritage Impact Assessment was completed by WSP for 1205 Glancaster Road on November 7, 2023. The report assessed the impact of the proposed development on the built heritage resource and no Documentation & Salvage report is required for the property.

There are other properties with cultural heritage value or interest listed on the City of Hamilton's Inventory of Heritage Properties that are adjacent to the area for the proposed development and Cultural Heritage Assessments were undertaken. However, these properties are located outside of the study area for Arterial Roadway 1N and will not be impacted by the road construction.

5.3 Existing Transportation Network

5.3.1 Local Road Network

Glancaster Road

Glancaster Road is a north-south City of Hamilton minor arterial road with a two-lane rural cross section. No pedestrian or cycling facilities are present within the Study Area. Glancaster Road has a posted speed limit of 50 km/h north. The UHOP maintains a 26.213-metre right-of-way along Glancaster Road within the Study Area.

Dickenson Road West

Dickenson Road West is an east-west City of Hamilton minor arterial road with a two-lane rural cross section. No pedestrian or cycling facilities are present within the Study Area. Dickenson Road West has a posted speed limit of 60 km/h. The UHOP maintains a 37-metre right-of-way along Dickenson Road West within the Study Area.

The intersection of Dickenson Road West and Glancaster Road is an unsignalized, three-legged intersection with all-way stop-control. The northbound approach consists of a shared through / right-turn lane, the southbound approach consists of a shared through / left-turn lane, and the westbound approach consists of a shared left-turn / right turn lane. No turn restrictions are noted at the intersection.

Upper James Street

Upper James Street is a north-south City of Hamilton major arterial road with a four-lane rural cross section. No pedestrian or cycling facilities are present within the Study Area, and only gravel shoulders are provided. Upper James Street has a posted speed limit of 70 km/h north of Dickenson Road West and a posted speed limit of 80 km/h south of Dickenson Road West. Upper James Street is a designated truck route. The UHOP maintains a 45-metre right-of-way along Upper James Street within the Study Area.

The intersection of Upper James Street at Dickenson Road West is a signalized intersection. Both the southbound and northbound approaches consist of an auxiliary left-turn lane, two through lanes, and an auxiliary right-turn lane. The eastbound approach consists of a shared through / left-turn lane, and an auxiliary right-turn lane. The westbound approach consists of a full-movement lane. No turn restrictions are noted at the intersection.

5.3.2 Dickenson Road Widening

Currently, Dickenson Road West is a 2.5 km, two-lane municipal road that spans from Glancaster Road in the west to Upper James Street in the east. With the intended development in the AEGD Secondary Plan area, the June 2011 AEGD TMP proposed that Dickenson Road be widened to provide more capacity for the anticipated growth in traffic. The 2011 TMP study findings recommended that Dickenson Road be widened from two lanes to four lanes and contain multi-use trail connections.

The AEGD TMP Update – June 2024 identified improvements to Dickenson Road (between Upper James Street and Glancaster Road) as well as designating it as a truck route. The City of Hamilton is undertaking the Schedule C, Municipal Class EA process (Phases 1 to 4) for Dickenson Road between Upper James Street and Glancaster Road, within the AEGD.

The corridor has been identified for improvements to address long-term transportation requirements and to provide a transportation network consistent with the AEGD Secondary Plan. The improvements include widening to a four-lane urban roadway and a continuous centre left turn lane, adding pedestrian and cycling facilities along the corridor and accommodating future transit shelter spaces within the boulevard. In addition, new intersections are required along the corridor for future roadways to be constructed to support future employment growth.

Public Information Centre #2 was held in December 2024 to address Phase 3 of the Class EA process. The ESR (Phase 4) has not been released to complete the Class EA process. Implementation (detailed design and construction) was identified as occurring within the next 5-to-10-year time frame.

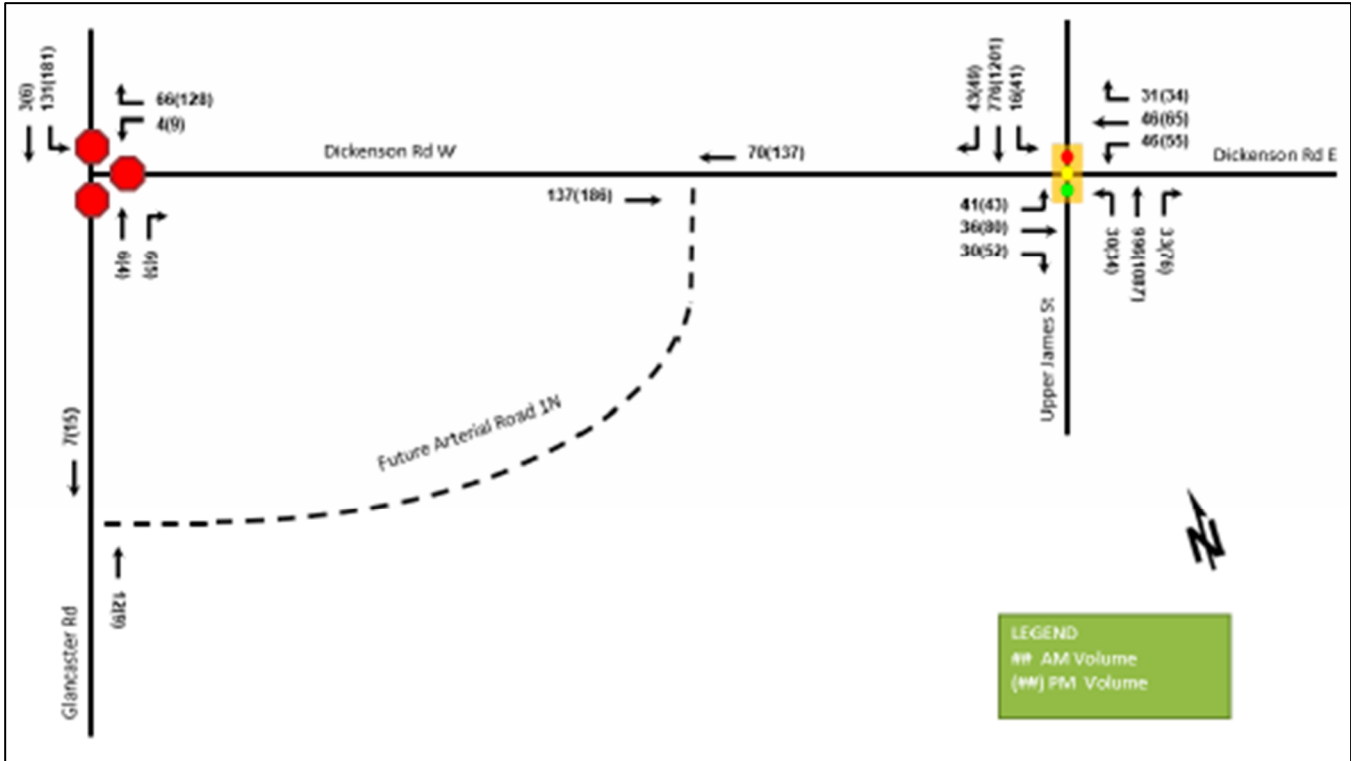
5.3.3 Existing Peak Hour Travel Demand

CGH Transportation completed the 9451 Dickenson Road Traffic Impact Assessment (TIA) (November 2025). To understand the existing traffic volumes, turning movement counts (TMCs) were collected for the Study Area

intersections during the AM and PM peak hours. These TMCs included the counts for vehicles, heavy vehicles, pedestrians, and cyclists.

The following Figure illustrates the 2025 existing horizon traffic volumes at the Study Area intersections. The traffic movement counts from 2023 have been grown using a 2% compound annual growth rate (CAGR) to estimate the 2025 volumes. Additionally, the collected intersection counts also provided existing pedestrian and cyclist demands at the Study Area intersections for both AM and PM peak periods. Minimal pedestrian and cyclist volumes were noted at the Study Area intersections, which is expected and reflects the lack of active transportation infrastructure in the Study Area. To minimize coding null input parameters in Synchro, a value of 5 has been assumed for pedestrians and cyclists at all Study Area approaches.

Figure 15: Turning Movement Counts



5.3.4 Future Traffic Operation (Half and Full Build-Out)

The future traffic operation was also based on the 9451 Dickenson Road TIA (CGH, November 2025).

The passenger vehicle trips to the site are expected to be made by employees working at the proposed development. As a result, the majority of the passenger vehicle trips are expected to come from and go to the north of the proposed site, due to the location of existing residential developments within the City of Hamilton and its vicinities. To the north of the proposed site, downtown Hamilton and the GTA are expected to generate the majority of the trips from and to the site; to the south of the proposed site, a few small townships are expected to have a minor contribution to the total trips. As a result, approximately 90% of the trips are expected to come from or go to the north, while 10% are going to or from the south. For the northbound trips, Glancaster Road and Upper James Streets are the two routes available to drivers. Glancaster Road is going to reach the same capacity as Upper James Street, given the proposed road widening project that is expected to be completed by the time

when development of the site becomes operational. As a result, the northbound trips are expected to distribute equally between Glancaster Road and Upper James Street, resulting in 45% assignment respectively.

The proposed development includes warehouse facilities supplied through the Airport, which is expected to serve the Golden Horseshoe region upon completion. As a result, trucks are expected to serve three major directions, including to and from the GTA to the north, the Brantford-London-Windsor corridor to the southwest, and the St. Catharines-Niagara Falls region to the east. Among these major destinations, the bulk of deliveries are expected to serve locations in the GTA, given it is the population center of the region.

As a result, it is expected that approximately 70% of the total truck trips will be bound to originate from the GTA. Within this portion of truck trips, 30% are expected to access highways via Upper James Street south of Dickenson Road, while the remaining 40% are expected to do so via Upper James Street north of Dickenson Road. The slightly higher allocation for the northern leg of Upper James Street is to account for the trips that serve downtown Hamilton. Brantford, London, and Windsor are estimated to contribute 20% of the total truck trips, and another 10% is expected to serve the St. Catharines and Niagara Falls region, based on the population of the respective municipalities. Since within the most recent AEGD TMP update, the Glancaster Road was not a designated truck route, all truck trips are assigned to Upper James Street enroute to their destinations.

6 Phase 2: Alternative Solutions

6.1 Identification of Alternative Solutions (Alignments)

The new arterial road (Arterial Roadway 1N) is needed to connect to Dickenson Road West and Glancaster Road and to service the lands adjacent to the Airport. Arterial Roadway 1N is also indicated to extend west of Glancaster Road and ultimately connect to Book Road at Southcote Road.

A preferred alignment (alternative) is identified in Phase 2, and Phase 3 of the EA process then evaluates alternative designs for the preferred alignment.

The “Do Nothing” Alternative does not entail constructing Arterial Roadway 1N. While there would be no impact on the environment it does not meet the problem or opportunity statement and does not provide for development to occur in the area. The Do Nothing Alternative was not carried forward for evaluation, but this was considered to provide a baseline on the existing conditions present.

Since the Do Nothing Alternative was not carried forward there were three Alternative alignments identified for Arterial Roadway 1N that were comparatively evaluated to determine the preferred alternative.

6.1.1 Alternative A (AEGD TMP Alignment)

The AEGD TMP Update – June 2024 specified a roadway location for Arterial Roadway 1N closer to the north limit of Dickenson’s land. To increase the developable block sizes and align with market demands, during Phase 2 of the EA process other potential alignments of Arterial Roadway 1N were analyzed and evaluated.

This alignment for Alternative A (AEGD TMP Alignment) includes one reverse curve with no superelevation. Superelevation is the banking of a roadway along a curve so motorists can safely and comfortably maneuver the curve at reasonable speeds. Superelevation increases as vehicular speeds increase, or as curves become tighter. The alignment avoids both woodland communities, but the alignment requires excess fill to be imported to achieve the required grades.

6.1.2 Alternative B

The alignment for Alternative B has five horizontal curves with superelevation associated with two of the curves. Superelevation is the banking of a roadway along a curve so motorists can safely and comfortably maneuver the curve at reasonable speeds. Superelevation increases as vehicular speeds increase, or as curves become tighter. The alignment requires partial removal of the southern woodland however overall grading impacts can be minimized without additional fill required.

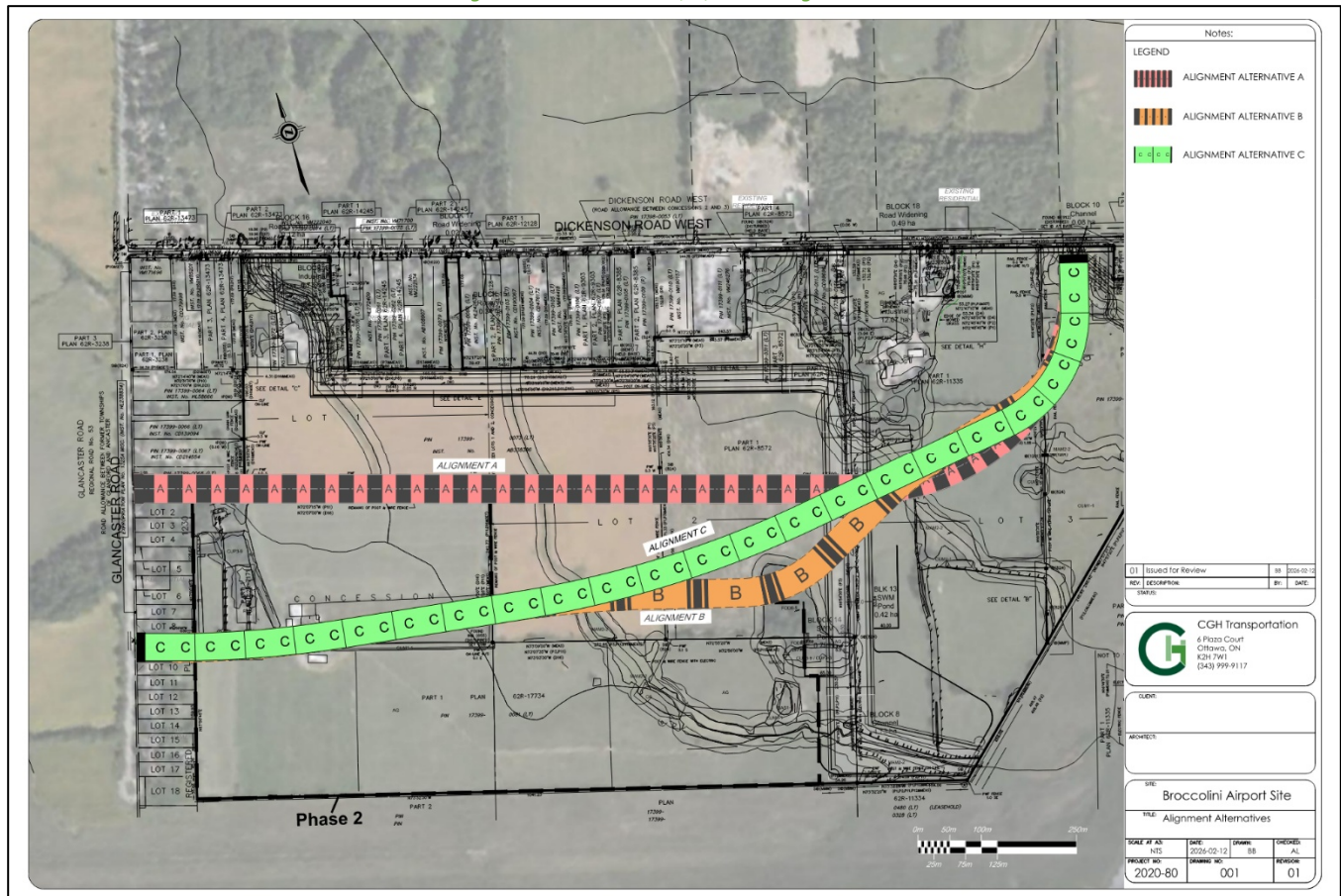
6.1.3 Alternative C

Alternative C has an alignment that utilizes conventional roadway geometry and does not have superelevation. This alignment avoids both woodland communities, however, there are grading challenges that must be addressed in proximity to the woodland buffer.

6.1.4 Alternative A, B and C Alignments

Figure 16 below displays the alternative alignments developed for Arterial Roadway 1N within the Study Area.

Figure 16: Alternative A, B, and C Alignments



6.2 Evaluation Methodology and Criteria

6.2.1 Evaluation Criteria

This section documents the evaluation of the three alternatives presented in **Section** Error! Reference source not found. Taking the existing environment into consideration, the alternative solutions were comparatively evaluated using a descriptive or qualitative assessment based on criteria developed within the following categories (representing the broad definition of the environment as described in the *EA Act*):

- **Social Environment** – having regard for land use, planned communities and existing communities.
- **Cultural Environment** – having regard for the presence of known archaeological remains and built cultural heritage features.
- **Natural Environment** – having regard for protecting the natural and physical components of the environment (e.g., air, land, water and terrestrial).
- **Technical Considerations** – having regard for the technical suitability/longevity and other engineering aspects associated with the alternative solutions including:
 - **Transportation Design** – horizontal geometry (e.g., horizontal curves).
 - **Utility Impact** – municipal services and stormwater quality and quantity.
- **Cost** – having regard for the capital cost and potential throw-away costs associated with the alternative solutions.

The evaluation criteria were developed to comparatively assess the alternatives, to identify the potential environmental effects and distinguish the advantages and disadvantages between alternatives. The criteria reflect all components of the environment in the study area, the alternative solutions being considered, the problem/opportunity being addressed, and the Class EA requirements. The criteria categories include the social, cultural, and natural environments, and technical considerations and cost and the criteria and indicators used to evaluate the alternatives are described in Table 1 below.

Table 1: Evaluation Criteria

Criteria Category	Criteria	Indicator
Transportation Design	Horizontal Geometry	Total number of horizontal curves and their complexity
Social Environment and Land Uses	Compatibility with Existing/Planned Communities	Displacement of, or loss of access to, existing and planned land uses
		Compatibility with existing use of land
	Urban Design Potential	Ability to incorporate streetscaping improvements, public art
		Ability to link private and public spaces and communities
		Development efficiency for land use

Natural Environment	Effects on aquatic habitat	Permanent effects on aquatic habitat and species (e.g. habitat removal, increased shading)
		Temporary effects on aquatic habitat and species (e.g. temporary disturbance during construction, sedimentation)
	Effects on terrestrial habitat	Effects to vegetation (e.g. woodlands, wetlands, meadows/thickets), wildlife and migratory birds
	Effects on natural heritage features and functions	Loss/impact on significant species (flora/fauna)
		Potential impact on significant natural features (e.g. Provincially Significant Wetlands, Significant Wildlife Habitat, Areas of Natural and Scientific Interest, Urban Natural Features, Core Areas and Linkages)
		Potential impacts to terrestrial linkages
Utility Impact	Effects on Municipal Services and Utilities	Potential impacts to natural heritage buffers
		Effects on infrastructure and utilities including new water crossings
		Effects on existing and new crossings
Cost	Capital Cost	Effects on stormwater quality and quantity
		Estimated construction costs (including excavation/filling, lighting, signals, landscaping, associated infrastructure, construction complexity)
		Potential throw-away costs

6.2.2 Evaluation Methodology

Evaluation criteria were developed to evaluate the alternatives based on natural, social and cultural environment and technical and financial considerations, and comparatively assess the alternatives in a qualitative manner. A numerical or weighted ranking system was not used; instead, the evaluation focused on the strengths and weaknesses of each alternative to identify the best possible solution.

Although set weightings of criteria were not specifically assigned, all evaluation criteria are not necessarily created equal and professional judgement and knowledge of the area and issues was used to understand preferences. The process requires considering trade-offs to select the preferred alternative which needs to take into consideration whether potential impacts can be mitigated or not. Reasonable mitigation measures were then identified to avoid or minimize any potential negative effects. The selection of the preferred alternative is based on the relative

advantages and disadvantages of each alternative within the natural environment, social environment, technical and economic evaluation criteria and includes consideration of mitigation measures.

The ranking of each alternative solution relative to the specific evaluation criterion is included in the tables below. The tables use a color-coded system: green circle indicates the lowest negative impacts or greatest benefits (considered most preferred), yellow triangle identifies moderate negative impacts and benefits (considered less preferred), and red square shows the highest negative impacts or lowest benefits (considered least preferred). The comparison of each criterion was made horizontally (within a category such as the natural environment) between the alternatives and then vertically (between categories such as natural and technical environments) to derive the recommended solution. A row for the "Total Criteria Category Score" is provided for each alternative, which is based on key advantages and disadvantages across the categories: natural, social-cultural, technical, and cost environments. The alternative solution demonstrating the highest number of "most preferred" boxes and/or the fewest "least preferred" boxes, relative to their potential environmental effects, is likely to be preferred. However, this preference depends on the extent of potential effects and whether they can be mitigated.1.1

6.3 Comparative Evaluation and Selection of Preferred Alignment

Based on the methodology presented above, a preliminary evaluation has been developed and presented at the Public Information Centre. The original evaluation table is included as part of the original PIC board in Appendix A. With the feedback received from the PIC session, some evaluation items have been changed and the tables that follow show the final ratings considering the inputs from the PIC.

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Table 2: Analysis and Evaluation – Transportation Design

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Transportation Design	Horizontal Geometry	Total number of horizontal curves and their complexity	One reverse crown curve, no superelevation* is required	Five horizontal curves, superelevation is required on two curves	Three horizontal curves, superelevation is required for one
Total Criteria Category Score					

* Superelevation is the banking of a roadway along a curve so motorists can safely and comfortably maneuver the curve at reasonable speeds. Superelevation increases as vehicular speeds increase, or as curves become tighter.

Table 3: Analysis and Evaluation – Social Environment and Land Use

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Social Environment and Land Use	Compatibility with Existing/Planned Communities	Displacement of, or loss of access to, existing and planned land uses	Potential loss of up to three (3) existing residential lots fronting Glancaster Road, that are not owned by developer and/or City of Hamilton.	Utilizes an existing City-owned right-of-way, namely, Arkwood Drive to connect to Glancaster Road. Potential loss of up to three (3) existing residential lots fronting Glancaster Road which are not currently owned by developer and/or City of Hamilton.	Utilizes an existing City-owned right-of-way, namely, Arkwood Drive to connect to Glancaster Road. Potential loss of up to three (3) existing residential lots fronting Glancaster Road which are not currently owned by developer and/or City of Hamilton. Road
			Aligns with overall Urban Hamilton Official Plan (UHOP) AEGD Transportation Master Plan (TMP), however, it does not align with intended development of adjacent landowner west of Glancaster Road	Requires modifications to planned Arterial Roadway 1N alignment west of Glancaster Road and overall AEGD TMP and UHOP however, it is aligned with the intended development of adjacent landowner west of Glancaster Road	Requires modifications to planned Arterial Roadway 1N alignment west of Glancaster Road and overall AEGD TMP and UHOP however, it is aligned with the intended development of adjacent landowner west of Glancaster
					

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Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
	Compatibility with Existing/Planned Communities	Compatibility with existing use of land	Impacts to existing residential fronting Glancaster Road due to shallow development blocks on the north side of Arterial Roadway 1N and inability to establish appropriate setbacks and buffers from employment uses.	Creates opportunity for larger buffers between existing residential fronting Glancaster Road and employment uses, by way of setbacks.	Creates opportunity for larger buffers between existing residential fronting Glancaster Road and employment uses, by way of setbacks.
			Shallow block depths will not facilitate feasible “Prestige Industrial” development that can accommodate required gross floor area, parking areas, loading bays, landscaping, etc. Results in “Airside Industrial” development blocks that are too large/deep to meet current market demands, resulting in an inefficient use of urban lands	Is aligned with intended development of lands on the west side of Glancaster Road	Is aligned with intended development of lands on the west side of Glancaster Road
					
	Urban Design Potential	Ability to incorporate streetscaping improvements, public art	Shallow development blocks would constrain the ability to provide streetscaping improvements, including planting strips, and screened parking and loading	Larger development blocks allow for more flexible end user design and streetscaping improvements, including planting strips, and screened parking and loading	Larger development blocks allow for more flexible end user design and streetscaping improvements, including planting strips, and screened parking and loading
					
		Ability to link private and public spaces	Provides a fully urbanized cross-section, including sidewalks and bike lanes	Provides a fully urbanized cross-section, including sidewalks and bike lanes	Provides a fully urbanized cross-section, including sidewalks and bike lanes

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Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
		and communities			
		Development efficiency for land use	Shallow block depths will not facilitate feasible “Prestige Industrial” development that can accommodate required gross floor area, parking areas, loading bays, landscaping, etc.	Allows for opportunity for larger building footprints within the “Prestige Industrial” to meet current market demands.	Allows for opportunity for larger building footprints within the “Prestige Industrial” to meet current market demands.
			Results in “Airside Industrial” development blocks that are too large/deep to meet current market demands, resulting in an inefficient use of urban lands	Results in more logical block size for “Airside Industrial” lands	Results in more logical block size for “Airside Industrial” lands
					
Total Criteria Category Score					

Table 4: Analysis and Evaluation – Natural Environment

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Natural Environment	Effects on aquatic habitat	Permanent effects on aquatic habitat and species (e.g. habitat removal, increased shading, etc.)	Potential effects include two watercourse crossings and permanent loss of and decrease in habitat quality, including habitat complexity, instream cover and riparian growth opportunity and associated watercourse crossings due to shading	Potential effects include two watercourse crossings and permanent loss of and decrease in habitat quality, including habitat complexity, instream cover and riparian growth opportunity and associated watercourse crossings due to shading	Potential effects include two watercourse crossings and permanent loss of and decrease in habitat quality, including habitat complexity, instream cover and riparian growth opportunity and associated watercourse crossings due to shading
					
		Temporary effects on aquatic habitat and species (e.g. temporary disturbance during construction, sedimentation, etc.)	A temporary decrease in habitat quality and effects to fish passage due to temporary flow diversion, localized loss of natural heritage features such as riparian vegetations (e.g. wetlands). Increase in impervious surfaces affecting runoff patterns, and increased erosion, scouring and deposition during the installation of the culverts	A temporary decrease in habitat quality and effects to fish passage due to temporary flow diversion, localized loss of natural heritage features such as riparian vegetations (e.g. wetlands). Increase in impervious surfaces affecting runoff patterns, and increased erosion, scouring and deposition during the installation of the culverts	A temporary decrease in habitat quality and effects to fish passage due to temporary flow diversion, localized loss of natural heritage features such as riparian vegetations (e.g. wetlands). Increase in impervious surfaces affecting runoff patterns, and increased erosion, scouring and deposition during the installation of the culverts
					

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Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
	Effects on terrestrial habitat	Effects to vegetation (e.g. woodlands, wetlands, meadows/thickets, etc.), wildlife and migratory birds	Moderate loss of meadow/thicket habitat resulting in the potential displacement of wildlife and migratory birds. Creation of a 15 m native vegetated buffer surrounding the Deciduous Forest	Highest loss of meadow/thicket and woodland habitat resulting in the potential displacement of wildlife and migratory birds	Moderate loss of meadow/thicket habitat resulting in the potential displacement of wildlife and migratory birds. Creation of a 15 m native vegetated buffer surrounding the Deciduous Forest
					
	Effects on natural heritage features and functions	Loss/impact on significant species (flora/fauna)	No impacts to threatened and endangered species (and their associated habitats) are expected.	No impacts to threatened and endangered species (and their associated habitats) are expected.	No impacts to threatened and endangered species (and their associated habitats) are expected.
			No impact to locally rare and uncommon species or vegetation communities are expected	No impact to locally rare and uncommon species or vegetation communities are expected	No impact to locally rare and uncommon species or vegetation communities are expected
					
		Potential impact on significant natural features*	Moderate loss of the following significant natural heritage features: Habitat for Species of Conservation Concern (Monarch) within Cultural Meadows.	Highest loss of the following significant natural heritage features: including Bat Maternity Colonies and Habitat for Species of Conservation Concern (Monarch) within Cultural Meadows.	Moderate loss of the following significant natural heritage features: Habitat for Species of Conservation Concern (Monarch) within Cultural Meadows.
			Moderate loss of short length of watercourse as a result of the watercourse crossing	Moderate loss of short length of watercourse as a result of the watercourse crossing	Moderate loss of short length of watercourse as a result of the watercourse crossing
					

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Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
		Potential impacts to terrestrial linkages	No impacts to known terrestrial linkages	No impacts to known terrestrial linkages	No impacts to known terrestrial linkages
					
		Potential impacts to natural heritage buffers	No impacts to existing or proposed buffers: 15 metre buffer provided to southern woodland	Road traverses the northern half of the southern woodland: proposed alternative does not provide for a buffer along the northern limit of the southern woodland	No impacts to existing or proposed buffers: 15 metre buffer provided to southern woodland
			Road traverses wetland near Dickenson Road West	Road traverses wetland near Dickenson Road West	Road traverses wetland near Dickenson Road West
					
Total Criteria Category Score					

*Examples of Significant Features include Provincially Significant Wetland, Significant Wildlife Habitat, Areas of Natural and Scientific Interest, Urban Natural Features, Core Areas and Linkages, etc.

Table 5: Analysis and Evaluation – Utility Impacts

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Utility Impact	Effects on Municipal Services and Utilities	Effects on infrastructure and utilities including new water crossings	Requires the most stormwater management infrastructure	Requires the least stormwater management infrastructure	Requires intermediate stormwater management infrastructure
			Shortest servicing/utility crossing at proposed watercourse crossing	Longest servicing/utility crossing at proposed watercourse crossing	Intermediate servicing/utility crossing at proposed watercourse crossing
					Increased grading constraints to incorporate existing woodlot
					
		Effects on existing and new crossings	Existing crossings remain unchanged	Existing crossings remain unchanged	Existing crossings remain unchanged
			Shortest proposed crossing length	Moderate proposed crossing length	Moderate proposed crossing length
					
		Effects on stormwater quality and quantity	Longest and most costly overland flow path for all development blocks and right-of-way drainage	Shortest and least expensive overland flow path for all development blocks and right-of-way drainage	Intermediate length and mid-level costs for the overland flow path for all development blocks and right-of-way drainage
			Requires the highest easement land dedications needed to convey major flows	Requires the least easement land dedications needed to convey major flows	Requires an intermediate level of easement land dedications for major flow conveyance

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Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
			Provides the least quality control for the development blocks due to the shortest flow paths in stormwater management facilities	Provides the most quality control for the development blocks due to the longest flow paths (in stormwater management facilities and drainage swale easements)	Provides moderate quality control for the development blocks
					
Total Criteria Category Score					

Table 6: Analysis and Evaluation – Cost

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Cost	Capital Cost	Estimated construction costs (including excavation/filling, lighting, signals, landscaping, associated infrastructure, construction complexity)	Largest Fill requirement	Moderate fill requirement	Moderate fill requirement
			Largest storm sewer capital cost resulting from the long minor system flow path of drainage block 2	Moderate storm sewer capital cost resulting from the long minor system flow path of drainage block 2	Moderate storm sewer capital cost resulting from the long minor system flow path of drainage block 2
			Moderate right-of-way sanitary sewer cost	Moderate right-of-way sanitary sewer cost	Moderate right-of-way sanitary sewer cost
			Moderate right-of-way watermain sewer cost	Moderate right-of-way watermain sewer cost	Moderate right-of-way watermain sewer cost
					
		Potential throw-away costs	Potential watermain flushing stations at dead end	None	None
					
Total Criteria Category Score					

6.3.1 Summary Score

The three alternatives (alignments) were evaluated based on all aspects of the environment. However, the following factors were similar for all three alternatives and were not used as a basis to comparatively evaluate the alternatives:

- All three alignments are similar in terms of alignment length, right-of-way width and cross section.
- All three alignments are similar from a social environment perspective (i.e., noise, air quality, vibration).
- All three alignments are similar from a cultural environment perspective (i.e., archaeology, heritage buildings/landscapes).
- Lands need to develop as per the AEGD Secondary Plan.

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- Existing Conditions includes the realigned channel corridors.
- Same number of watercourse crossings for each alignment.

The following table shows the comparative analysis and the summary score for each alternative.

Table 7: Evaluation Summary Score

Criteria Category	Alternative A (AEGD TMP Alignment)	Alternative B	Alternative C
Transportation Design			
Compatibility with Existing/Planned Communities and Land Uses			
Natural Environment			
Utility Impact			
Cost			
SUMMARY SCORE			 (Preferred)

6.4 Preferred Alternative Solution (Alignment)

Alternative C was identified as the preferred alternative solution for the alignment of Arterial Roadway 1N. This alignment provides a conventional roadway geometry which is less complex to design and construct. The alignment does not impact the woodland communities. In comparison to the alignment identified in the AEGD TMP Update – June 2024, Alternative C results in preferred market demand since it results in larger buildable blocks in the development.

The intersection design at Dickeson Road is part of the Dickenson Road Class EA that the City of Hamilton is undergoing. The preferred alignment shown above was brought forward to the OLT process. The segment west of Glancaster Road is to be confirmed in a future EA study that is to be conducted by other proponents and is considered to be outside of this Schedule C Class EA process.

7 Phase 3: Identification of Alternative Design Solutions

Following completion of Phase 2 of the Class EA process the alignment for Arterial Roadway 1N was confirmed. Phase 3 of the Class EA process requires completing a comparative evaluation of the alternative design solutions. For Arterial Roadway 1N the following design components were evaluated:

- Cross-section for Arterial Roadway 1N
- Glancaster Road intersection
- Mid-block intersections

The intersection with Dickenson Road West was not part of the evaluation since the City is undertaking a separate Schedule C, Class EA process that is addressing the widening of Dickeson Road West. The widening will address the intersection with Arterial Roadway 1N and incorporates the four-lane cross-section and design requirements for Arterial Roadway 1N.

8 Phase 3: Alternative Design Solutions

8.1 Evaluation of General Design Options

8.1.1 Evaluation of Typical Cross Sections: Urban versus Rural

The AEGD TMP Update – June 2024 cross sections were developed in accordance with the *Hamilton Complete Streets Design Guidelines (2022)* and the *Eco-Industrial Design Guidelines (2010)*.

Research and consultations were carried out by the City to develop the recommended cross sections.

A screening level evaluation was undertaken to determine which cross-section elements should be carried forward in the design of Arterial Roadway 1N. The results of the evaluation are shown in the table below. In summary, all of the cross-section elements that fulfill the necessary modal needs (as identified in the AEGD TMP Update – June 2024 Conceptual Cross Section) for this type of arterial road will be carried forward in the development of Arterial Roadway 1N design. Depending on the design alternative selected, the cross-section may require modifications related to the Glancaster Road intersection to accommodate the elements.

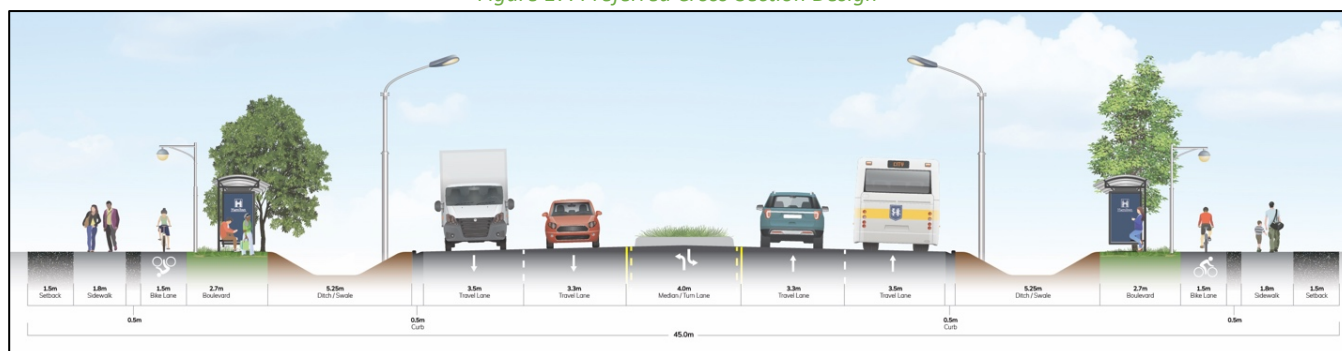
Table 8: Cross-section Screening

Element	AEGD TMP Update Conceptual Cross Section	Carry Forward? (√ = Yes / x = No)
Pedestrian Realm	3.8 m Multi-Use Path (MUP) with 1.5 m edge zone	√
Cycling Facilities	1.5 m one way bike lane provided as part of MUP	√
Transit Service	2.7 m boulevard for transit service infrastructure (stop, shelter, etc.)	√
Through Movement	Two lanes per direction with centre median/turn lane with total midblock lane width of 17.6 m	√
On-Street Parking	No on-street parking provided	√
Green Infrastructure	Bioswales provided along with boulevard landscaping as low impact development features	√

8.1.2 Preferred Cross-Section Design

Based on the screening results a preferred cross-section design was developed. The preferred cross-section alternative design is consistent with the AEGD TMP Update – June 2024. Glancaster Road and Arterial Roadway 1N is a key intersection where the design was evaluated further (see below). Based on the results of this evaluation the cross-section design at Glancaster Road may differ and is dependent on the preferred design selected.

Figure 17: Preferred Cross-Section Design



8.1.3 Preferred Midblock Intersections

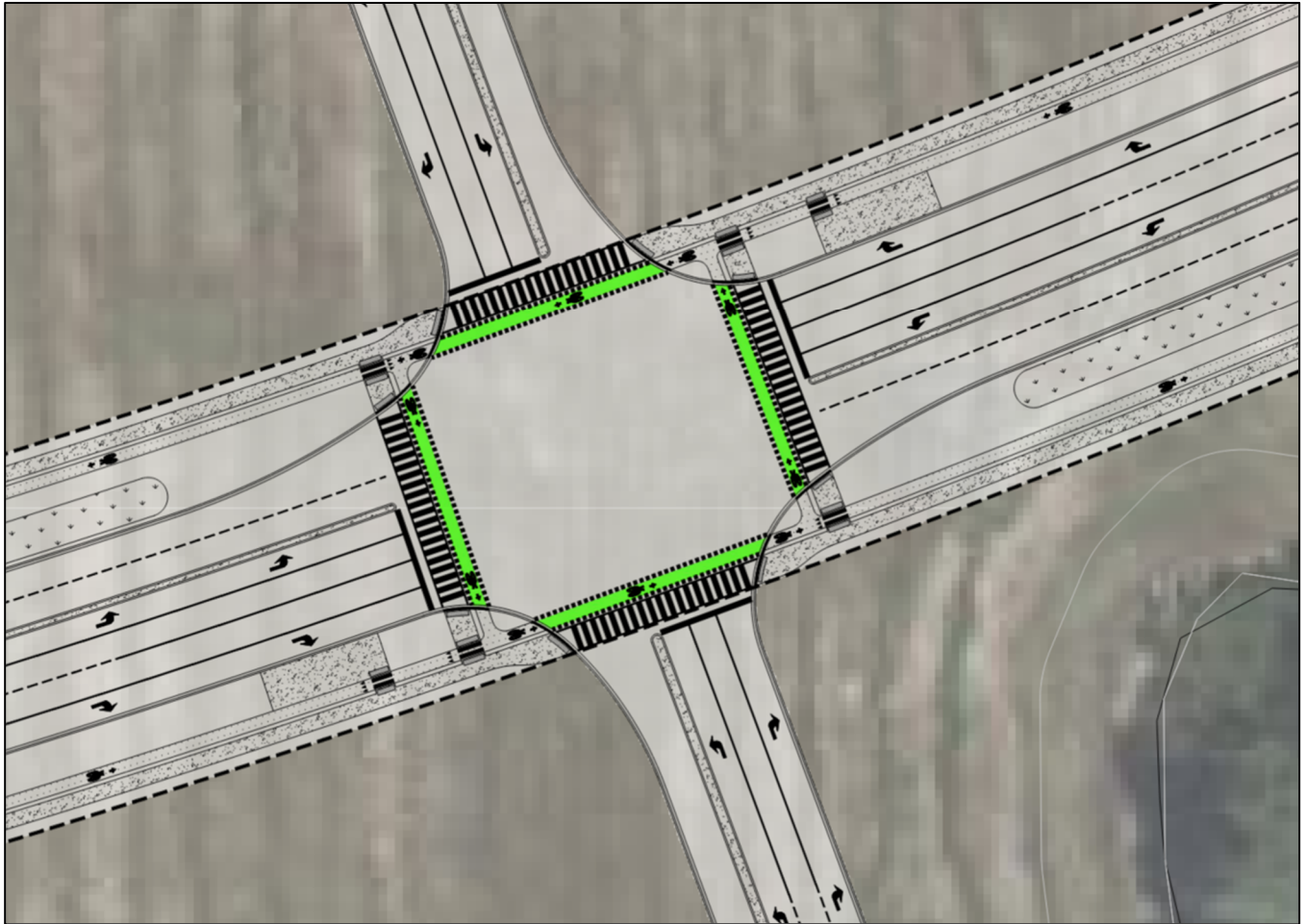
Taking into consideration the preferred cross-section designs a typical midblock intersection was developed for intersections with internal roads that may be required to better service the development itself. The midblock intersection design configuration will include the following:

- Provision of pedestrian and cyclist amenities.
- Inclusion of bioswales (a designed, shallow, vegetated channel to manage stormwater runoff) on both sides of the roadway; and
- Bus pads are provided near the side.

Any midblock intersections will be further refined during detailed design which is completed at a later stage. Some of the detailed design considerations include:

- Signal warrants (which is a guideline used to determine if an intersection requires traffic signals taking into account the projected traffic volume).
- Preferred location of the intersections (which is determined based on the location of side streets required to access adjacent developments).

Figure 18: Typical Midblock Intersection Design



8.2 Evaluation of Alternative Designs for Glancaster Road Intersection

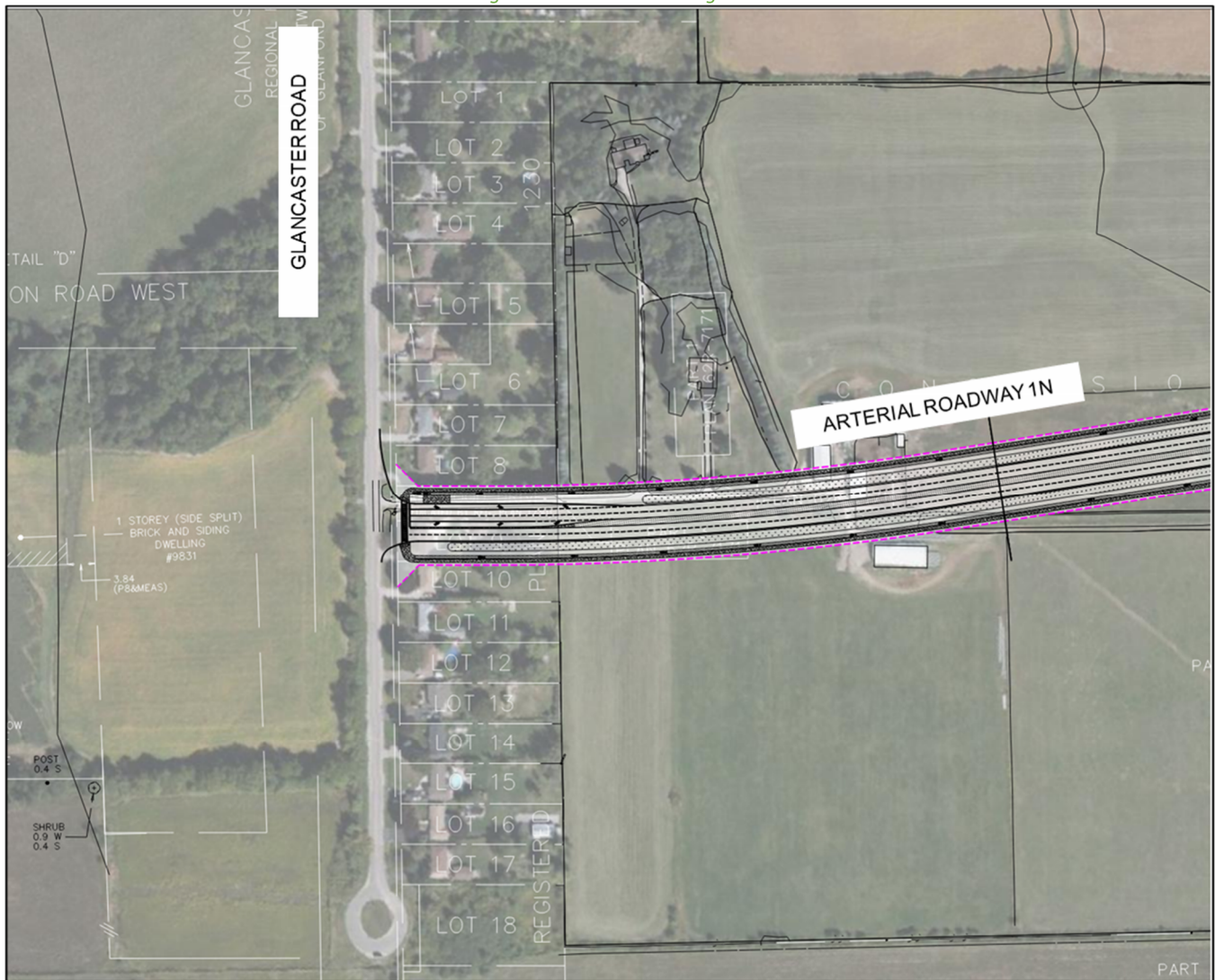
A key intersection to be designed is the intersection of Arterial Roadway 1N and Glancaster Road. Since there were several alternative design options that could be considered for this intersection, it was further evaluated.

8.2.1 Identification of Alternative Designs

Alternative Design 1

This alternative design incorporates standard (12.9 m x 12.9 m) daylight triangles. For this design to fit it would require the acquisition of three private properties (Lots 8, 9 and 10 as shown in Figure 19). A greater number of trees would need to be removed based on the alignment through Lots 8, 9 and 10 as compared to Alternative Designs 2 and 3. The design provides an approximate 17 m future buffer to the woodland that is located on the west side of Glancaster Road north of the proposed intersection with Arterial Roadway 1N through a future EA by other proponents.

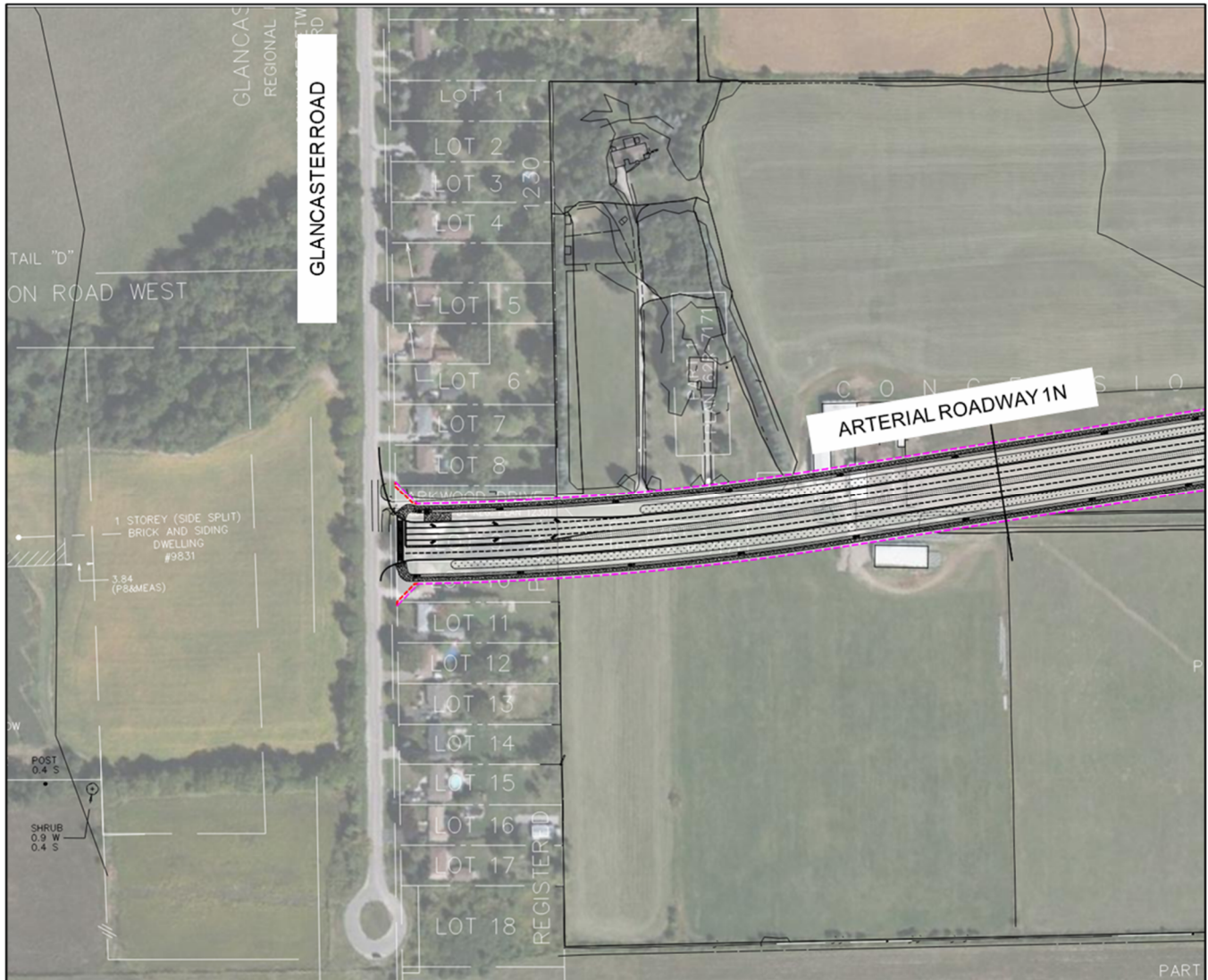
Figure 19: Alternative Design 1



Alternative Design 2

This alternative design incorporates modified daylight triangles (10 m x 10 m) to minimize the property requirements. For this design to fit it would require the acquisition of two private properties (Lots 9 and 10 as shown within the red outline on the Figure 20). Fewer trees will need to be removed than for Alternative 1 but more than Alternative 3 based on the alignment. The design provides an approximate 28 m future buffer to the woodland that is located on the west side of Glanaster Road north of the proposed intersection with Arterial Roadway 1N through a future EA by other proponents.

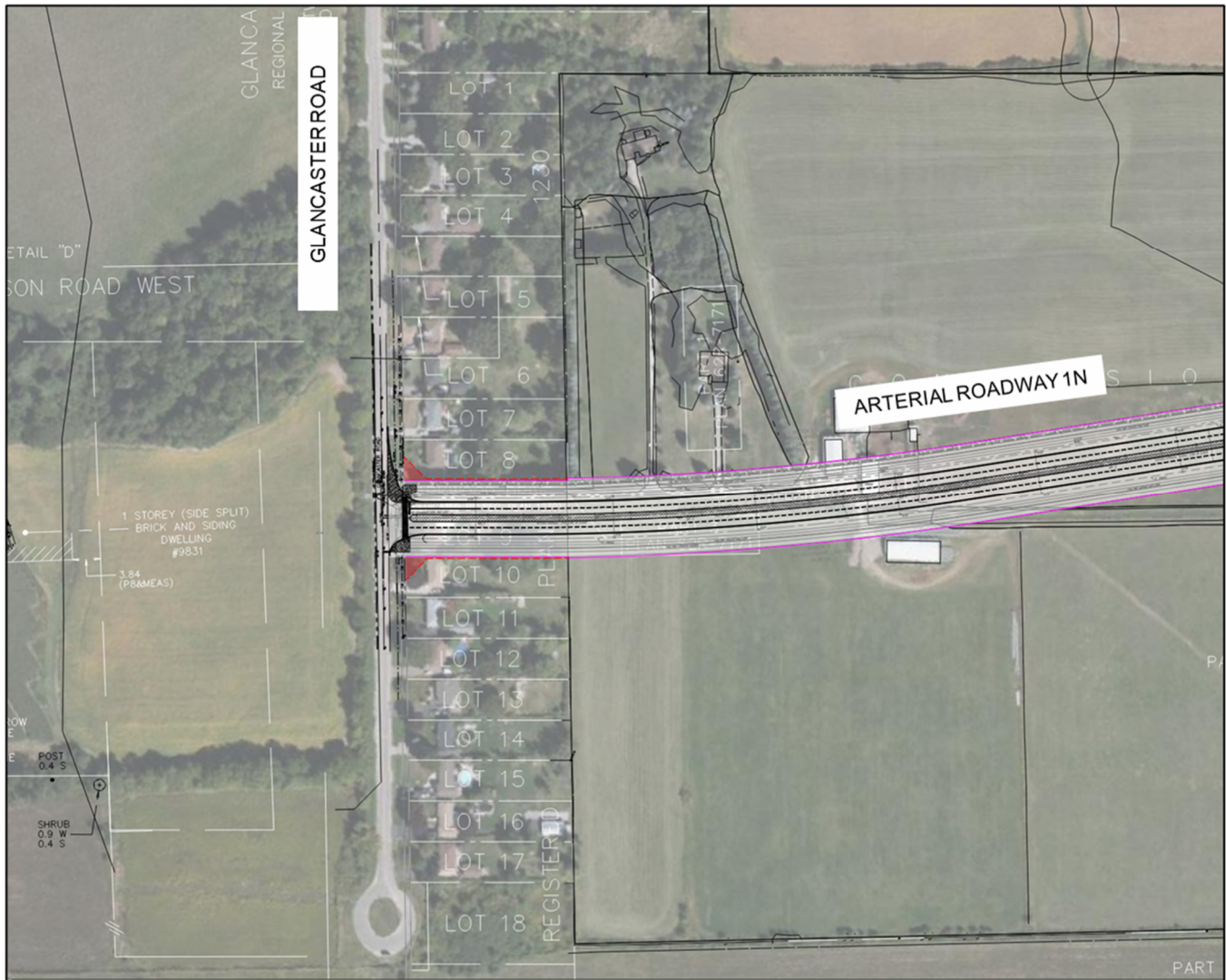
Figure 20: Alternative Design 2



Alternative Design 3

For this alternative design standard daylight triangles are not available. In the future, if the extension and widening is implemented to the west of Glanaster Road (through a future EA by other proponents) the issue of daylight triangles can be mitigated. For this alternative design to fit with the acquisition of only Lot 9 (private property), the design requires narrowing of the Arterial Roadway 1N cross-section while maintaining the four-lane configuration within the Lot 9. The alternative will result in the fewest number of trees removed based on this narrow alignment through Lot 9 only. The design provides an approximate 28 m future buffer to the woodland that is located on the west side of Glanaster Road north of the proposed intersection with Arterial Roadway 1N through a future EA by other proponents.

Figure 21: Alternative Design 3



8.2.2 Evaluation Criteria

This section documents the evaluation of three design alternatives that were comparatively evaluated using a descriptive or qualitative assessment based on criteria developed within the following categories (representing the broad definition of the environment as described in the *EA Act*):

- **Transportation Design** – having regard for road design criteria.
- **Social Environment** – having regard for land use, planned communities and existing communities.
- **Natural Environment** – having regard for protecting the natural and physical components of the environment (e.g., air, land, water and terrestrial).
- **Technical Considerations** – having regard for the effects on municipal services and utilities.
- **Cultural Environment** – having regard for the presence of known archaeological remains and built cultural heritage features.
- **Cost** – having regard for the capital cost associated with construction.

Table 9: Evaluation Criteria

Criteria Category	Criteria	Indicator
Transportation Design	Design Criteria	Ability to provide daylight (sight) triangle (these are triangular areas of land located at intersections of roads that are free of obstructions to ensure clear sightlines for motorists and pedestrians)
		Ability to provide connectivity to Glancaster Road
		Ability to accommodate required capacity
		Ability to accommodate active modes
		Ability to be staged
Social Environment	Compatibility with Existing/ Planned Communities	Displacement of, or loss of access to, existing and planned land uses
Natural Environment	Effects on aquatic habitat	Permanent effects on aquatic habitat and species (e.g. habitat removal, increased shading, etc.)
		Temporary effects on aquatic habitats and species (e.g. temporary disturbance during construction, sedimentation, etc.)
	Effects of terrestrial habitat	Effects to vegetation (e.g. woodlands, wetlands, meadows/thickets, etc.), wildlife and migratory birds
	Effects on natural heritage features and functions	Loss/impact on significant species (flora/fauna)
		Potential impact on significant features (e.g. Provincially Significant Wetland, Significant Wildlife Habitat, Areas of Natural and Scientific Interest, Urban Natural Features, Core Areas and Linkages)

		Potential impacts to terrestrial linkages
		Potential impacts to natural heritage buffers
Technical Considerations	Effects on Municipal Services and Utilities	Effects on infrastructure and utilities including new water crossings
		Effects on existing and new crossings
		Effects on stormwater quality and quantity
Cultural Environment	Presence of known Archeological resources	Impacts on known Archeological resources
	Presence of Built Cultural Heritage resources	Impacts on Built Cultural Heritage resources
Cost	Capital Cost	Estimated construction costs (including excavation/filling, lighting, signals, landscaping, associated infrastructure, construction complexity)

8.2.3 Evaluation Methodology

Evaluation criteria were developed to evaluate the alternatives based on natural, social and cultural environment and technical and financial considerations, and comparatively assess the alternatives in a qualitative manner. A numerical or weighted ranking system was not used; instead, the evaluation focused on the strengths and weaknesses of each alternative to identify the best possible solution.

Although set weightings of criteria were not specifically assigned, all evaluation criteria are not necessarily created equal and professional judgement and knowledge of the area and issues was used to understand preferences. The process requires considering trade-offs to select the preferred alternative which needs to take into consideration whether potential impacts can be mitigated or not. Reasonable mitigation measures were then identified to avoid or minimize any potential negative effects. The selection of the preferred alternative is based on the relative advantages and disadvantages of each alternative within the natural environment, social environment, technical and economic evaluation criteria and includes consideration of mitigation measures.

The ranking of each alternative solution relative to the specific evaluation criterion is included in the tables below. The tables use a color-coded system: green circle indicates the lowest negative impacts or greatest benefits (considered most preferred), yellow triangle identifies moderate negative impacts and benefits (considered less preferred), and red square shows the highest negative impacts or lowest benefits (considered least preferred). The comparison of each criterion was made horizontally (within a category such as the natural environment) between the alternatives and then vertically (between the indicators) to derive the overall “Criteria Category Ranking” which is provided for each alternative. For the indicators under two of the criteria categories (Transportation Design and Natural Environment) where there was no difference between the three alternatives (e.g., impacts were the same) the columns were combined into one column and the result of the evaluation for that indicator was provided for all three alternatives. For certain indicators under four of the criteria categories (Social Environment, Technical Considerations, Cultural Environment and Cost) where there was no difference between the three alternatives (e.g., impacts were the same) instead of combining the columns together the same text was provided under each column for the three alternatives.

A summary ranking table was then developed which shows the “Criteria Category Ranking” for each alternative based on key advantages and disadvantages across the categories: transportation design, social environment, natural environment, technical considerations, cultural environment and cost. The alternative design solution demonstrating the highest number of "most preferred" boxes and/or the fewest "least preferred" boxes, relative to their potential environmental effects, is likely to be preferred. However, this preference depends on the extent of potential effects and whether they can be mitigated.

8.2.4 Selection of Preferred Alternative Design

Table 10: Analysis and Evaluation – Transportation Design

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Transportation Design	Design Criteria	Ability to provide sight triangle	Incorporates standard daylight triangles of 12.9 x 12.9 metres	Incorporates modified daylight triangles of 10 x 10 metres to minimize property requirements	Standard daylight triangles are not available. Extension and widening to the west through future EA studies by other proponents will mitigate the issue
		Ability to provide connectivity to Glancaster Road	Connectivity to Glancaster Road provided		
		Ability to accommodate required capacity	Full capacity can be accommodated		
		Ability to accommodate active modes	Sidewalk and bike lanes are provided and separated from the roadway		
		Ability to be staged	Can be staged and protects for the potential extension of Arterial Roadway 1N		
Transportation Design Ranking					

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Table 11: Analysis and Evaluation – Social Environment

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Social Environment	Compatibility with Existing/ Planned Communities and Land Uses	Displacement of, or loss of access to, existing and planned land uses	Three (3) existing residential lots (Lots 8, 9 and 10) facing expropriation which are not currently owned by the developer and/or City of Hamilton	Two (2) existing residential lots (Lots 9 and 10) facing expropriation which are not currently owned by the developer and/or City of Hamilton	One (1) existing residential lot (Lot 9) facing expropriation which is not currently owned by the developer and/or City of Hamilton
Social Environment Ranking					

Table 12: Analysis and Evaluation – Natural Environment

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Natural Environment*	Effects on aquatic habitat	Permanent effects on aquatic habitat and species (e.g. habitat removal, increased shading, etc.)	- All alternatives require two watercourse crossings (culverts) - No direct fish habitat present; only impacts are on indirect fish habitat - Watercourse crossing of the central watercourse corridor will likely take place in the dry due to the construction taking place at the same time as the watercourse realignment (i.e., prior to flows being directed to the new watercourse channel), thereby minimizing impacts to indirect fish habitat - As a result of the above, habitat removal will only take place along the eastern watercourse crossing		
		Temporary effects on aquatic habitats and species (e.g. temporary disturbance during construction, sedimentation, etc.)	Temporary effects will be the same for all alternatives and will include potential for sedimentation during construction and the use of ESC measures to prevent such sedimentation		

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	Effects of terrestrial habitat	Effects to vegetation (e.g. woodlands, wetlands, meadows/thickets, etc.), wildlife and migratory birds	- No encroachment into woodland; right of way will be setback minimum of 15m from woodland - Minimal impact to terrestrial habitat expected; Portion of northeastern wetland required to be removed and replicated at a 1.5:1 ratio (created:removed) through the draft plan of subdivision - local wildlife is accustomed to background noise level from existing land-uses (i.e., Airport)		
	Effects on natural heritage features and functions	Loss/impact on significant species (flora/fauna)	- No impacts to threatened and endangered species (and their associated habitats) are expected - No impact to locally rare and uncommon species or vegetation communities are expected; salvage plan required as part of draft plan of subdivision		
		Potential impact on significant features (e.g. Provincially Significant Wetland, Significant Wildlife Habitat, Areas of Natural and Scientific Interest, Core Areas and Linkages)	- No impact to significant features will occur - Partial removal of non-significant wetland will be removed and re-created at a 1.5:1 ratio through the draft plan of subdivision - Alignment is proposed adjacent to a woodland; however, proposed 15m setback and mitigation measures will minimize disturbance to natural feature and its associated functions		
		Potential impacts to terrestrial linkages	No impacts to terrestrial linkages. Watercourse crossings designed to provide wildlife passage.		
		Potential impacts to natural heritage buffers	No impacts to existing or proposed buffers		
	Natural Environment Ranking				

Table 13: Analysis and Evaluation – Technical Considerations

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Technical Considerations	Effects on Municipal Services and Utilities	Effects on infrastructure and utilities including new water crossings	Negligible additional impacts on stormwater infrastructure	Negligible additional impacts on stormwater infrastructure	Minor addition of intermediate stormwater management infrastructure
		Effects on existing and new watercourse crossings	Moderate proposed crossing length	Moderate proposed crossing length	Moderate proposed crossing length
		Effects on stormwater quality and quantity	Standard requirements of water quality and quantity	Standard requirements of water quality and quantity	Slight reduction in water quantity and quality requirements due to reduced road width
Technical Considerations Ranking					

Table 14: Analysis and Evaluation – Cultural Environment

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Cultural Environment	Presence of known Archaeological resources	Impacts on known Archaeological resources	Three (3) existing properties that could potentially have archeological resources present	Two (2) existing properties that could potentially have archeological resources present	One (1) existing property that could potentially have archeological resources present
	Presence of Built Cultural Heritage resources	Impacts on Built Cultural Heritage resources	No impact since no resources are present	No impact since no resources are present	No impact since no resources are present
Cultural Environment Ranking					

Table 15: Analysis and Evaluation – Cost

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Cost	Capital Cost	Estimate construction costs (including excavation/filling, lighting, signals, landscaping, associated infrastructure, construction complexity)	- Moderate fill requirement - Moderate right-of-way sanitary sewer cost - Moderate right-of-way watermain sewer cost - Cost of expropriation of three (3) lots	- Moderate fill requirement - Moderate right-of-way sanitary sewer cost - Moderate right-of-way watermain sewer cost - Cost of expropriation of two (2) lots	- Moderate fill requirement - Moderate right-of-way sanitary sewer cost - Moderate right-of-way watermain sewer cost - Cost of expropriation of one (1) lot
Cost Ranking					

8.2.5 Overall Ranking

Table 16 is a summary of the overall ranking for the three alternatives to the criteria category. The preferred design alternative is one with the overall ranking that has a green dot representing the lowest negative impacts or greatest benefits.

Table 16: Overall Ranking Summary

Criteria Category	Alternative 1	Alternative 2	Alternative 3
Transportation Design			
Social Environment			
Natural Environment			
Technical Considerations			
Cultural Environment			
Cost			
OVERALL RANKING			 (Preferred)

9 Preferred Design Solution

The preferred design solution for Arterial Roadway 1N is comprised of the following components:

- Horizontal and vertical alignments
- Terminus and mid-block intersections
- Typical cross-section for Arterial Roadway 1N and modified cross-section approaching Glancaster Road
- Watercourse crossing

9.1 Arterial Roadway 1N – Alignment

9.1.1 Horizontal Alignment

Figure 22 below shows the preferred horizontal alignment of Arterial Roadway 1N.

Figure 22: Preferred Alignment



The preferred alignment connects the Dickenson Road and Glancaster Road with a conventional roadway curvature. As the roadway travels south of the Dickenson Road, it veers to the west through a 190-metre radius and heads southwest to cross the future watercourse being developed through the Plan of Subdivision.

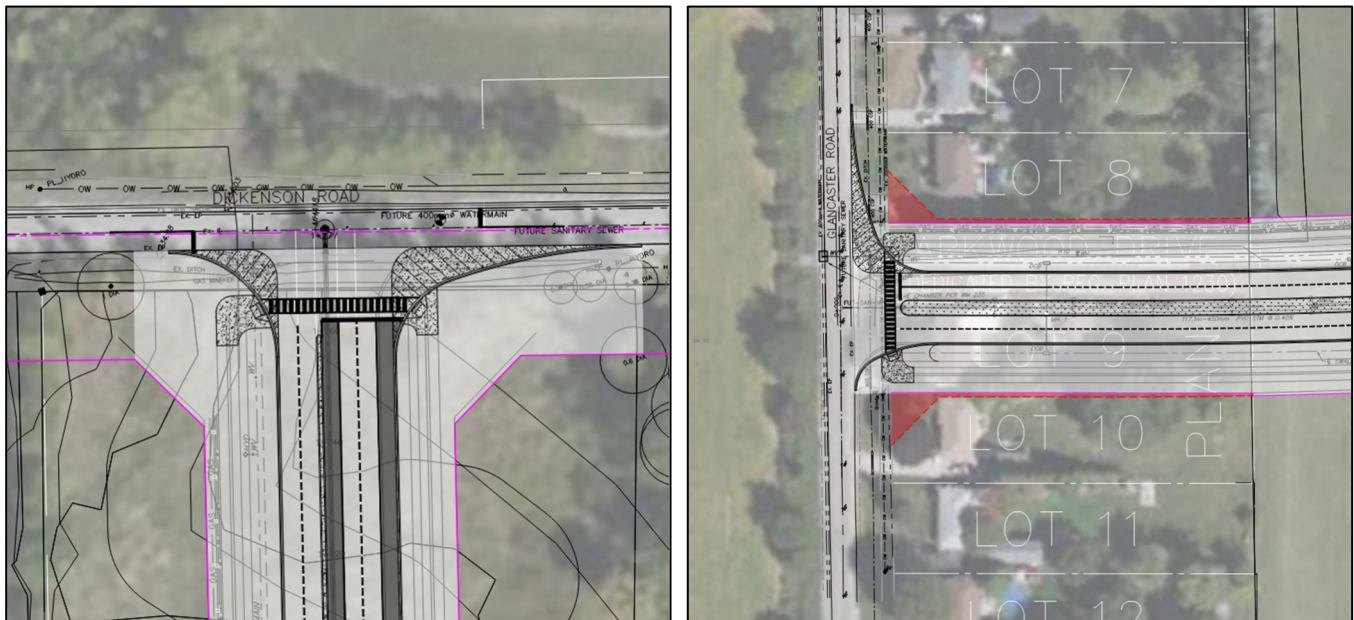
To the west of the water course, the alignment continues in a southwest trajectory, avoiding the woodland community and maintaining a buffer of approximately 15 metres. The alignment continues going southwest with a gentle curvature of 1680-metre radius and terminates at its intersection with Glancaster Road. Beyond the limits of the Plan of Subdivision and the approach to Glancaster Road, the alignment requires the space offered by Arkwood Drive and Lot 9. The design maintains a 45-metre ROW for most part of the roadway with some adjustments made near the intersection to fit the localized conditions.

Arterial Roadway 1N will also include roadway lighting and landscaping along its length.

9.1.2 Terminus Intersections

The details of the intersection designs at the Dickenson Road and Glancaster Road intersections are shown in the figure below:

Figure 23: Designs of Intersections at Dickenson Road West (Left) and Glancaster Road (Right)



Dickenson Road West Intersection

Arterial Roadway 1N, as it approaches Dickenson Road will be a typical four-lane divided cross-section, with 45-metre ROW. The existing conditions of Dickenson Road will be maintained, those being an undivided two-lane rural cross-section.

The intersection at the Dickenson Road will be signalized. A pedestrian crossing will be provided on the south leg of the intersection. Given this configuration will someday be expanded, when the City reconstructs Dickenson Road, the space provided for the northbound left turn and right turn will be reserved for future use.

To accommodate design vehicles, those being WB-20s, the turning radius of 19.5 metres on the west side and a compound curve with radii from 15.0 to 110.0 metres on the east side have been provided along with mountable space to accommodate wheel tracking. The radii on all mountable turning aprons are 5 metres. The 12.9 by 12.9 metres sight triangles have been provided and the property noted in Figure 22 also accommodate for the future Dickenson Road widening.

Glancaster Road Intersection

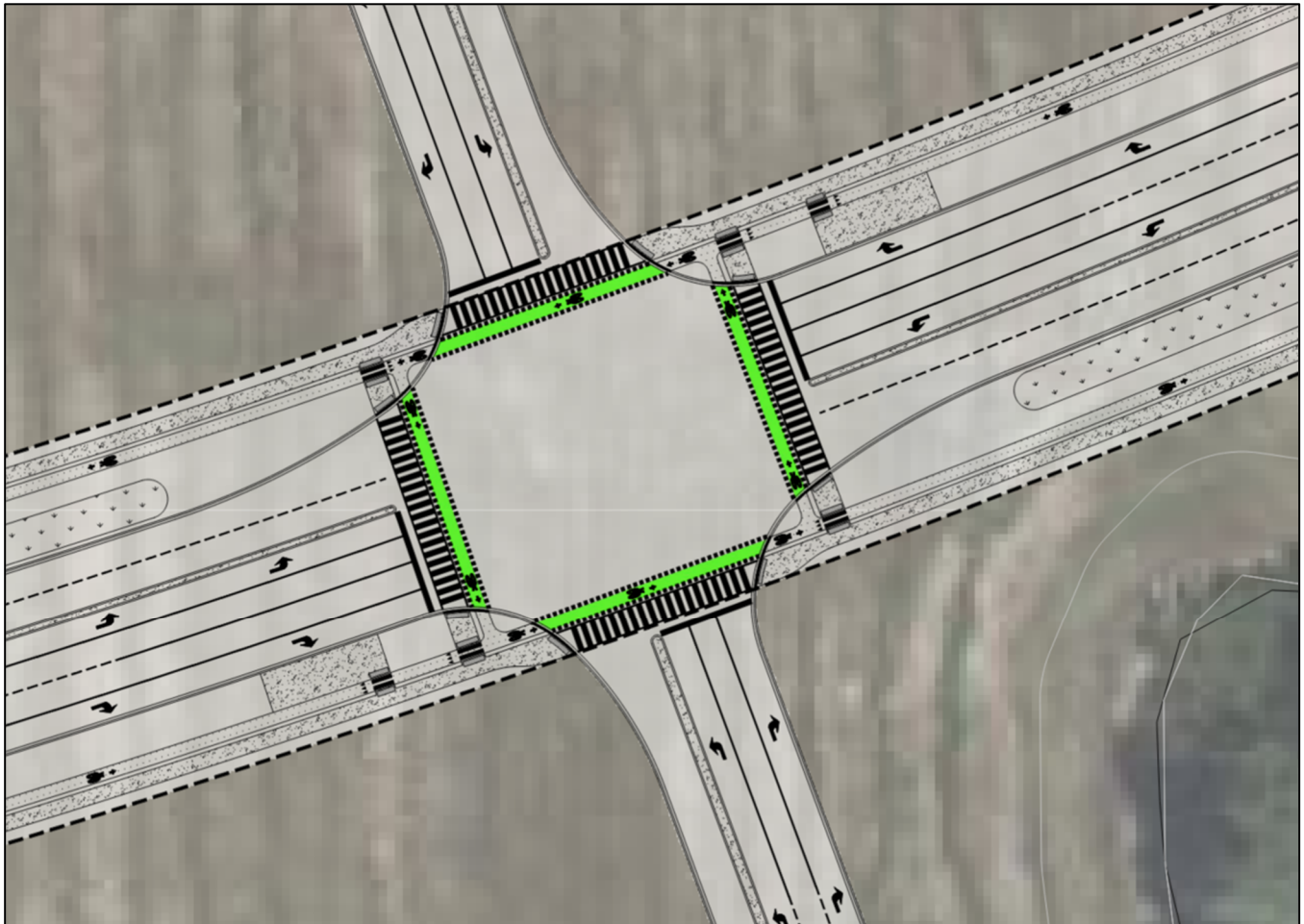
Arterial Roadway 1N will be a four-lane divided cross-section as it approaches Glancaster Road. The ROW will be reduced to 43 metres before it reaches the property limits of the houses on Glancaster Road, in order to fit the ROW with the space offered by Arkwood Drive and Lot 9. The design features of the adjusted cross-section are shown in Figure 26 under Section 9.2.2.

The intersection at the Glancaster Road will be an unsignalized intersection. A pedestrian crossing will be provided on the east leg of the intersection. To accommodate design vehicles, those being WB-20s, a compound curve with turning radii of 15.0 to 100.0 metres on the north side have been provided along with mountable space to accommodate wheel tracking. The radius of the mountable turning apron is 5 metres. On the south side, a turning radius of 9 metres has been provided to accommodate Heavy Single Unit trucks. The 12.9 by 12.9 metres sight triangles have been provided and the property noted in Figure 22 also accommodate for the potential future Glancaster Road widening led by other proponents.

9.1.3 Midblock Intersections

To meet the development requirements there are anticipated to be internal roads within the Study Area. The points where these internal roads intersection with Arterial Roadway 1N will be designed to maintain the four-lane roadway. The location of these intersections will be determined during finalization of the Plan of Subdivision and incorporated into the detailed design for Arterial Roadway 1N.

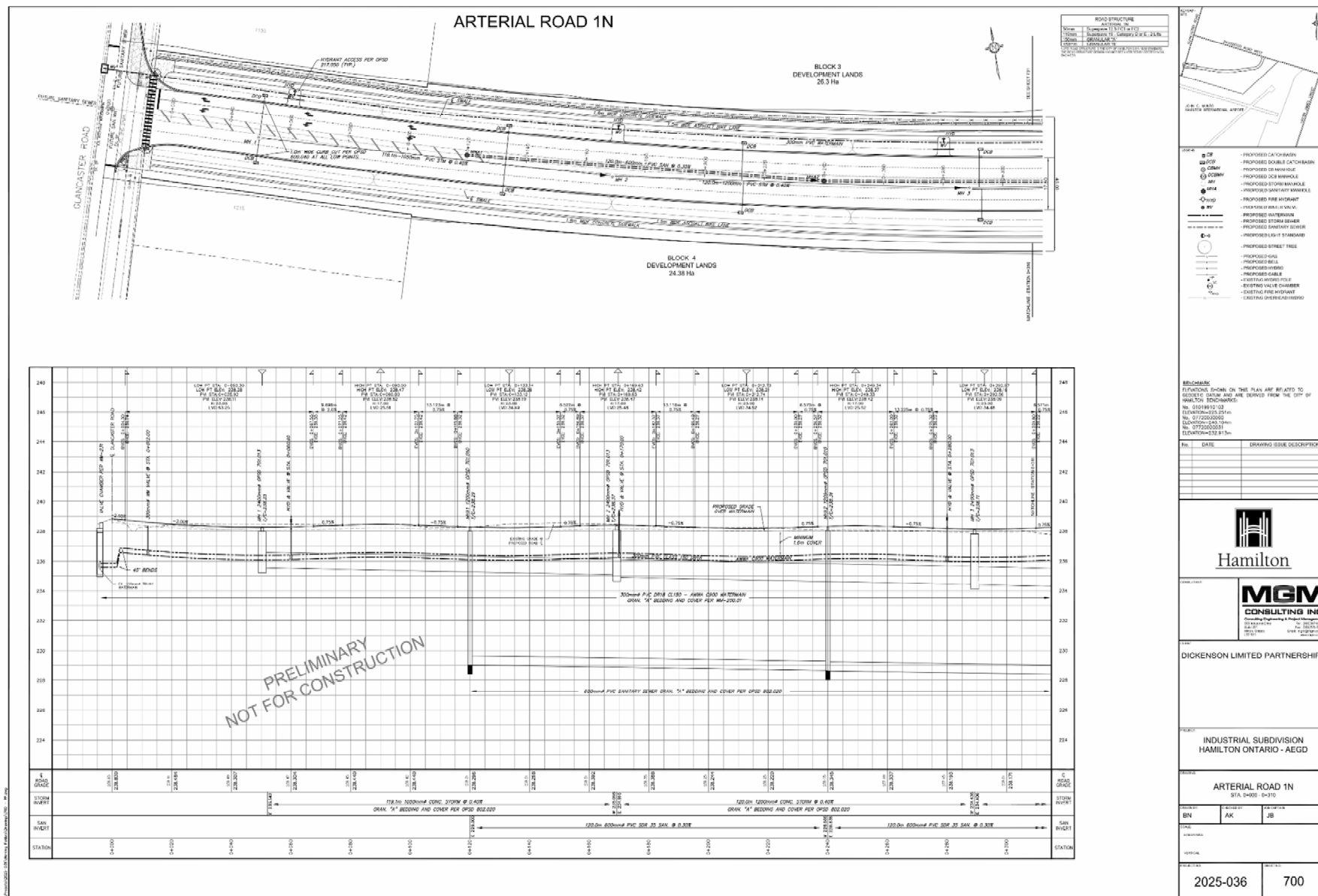
Figure 24: Typical Midblock Intersection Design



9.1.4 Vertical Alignment

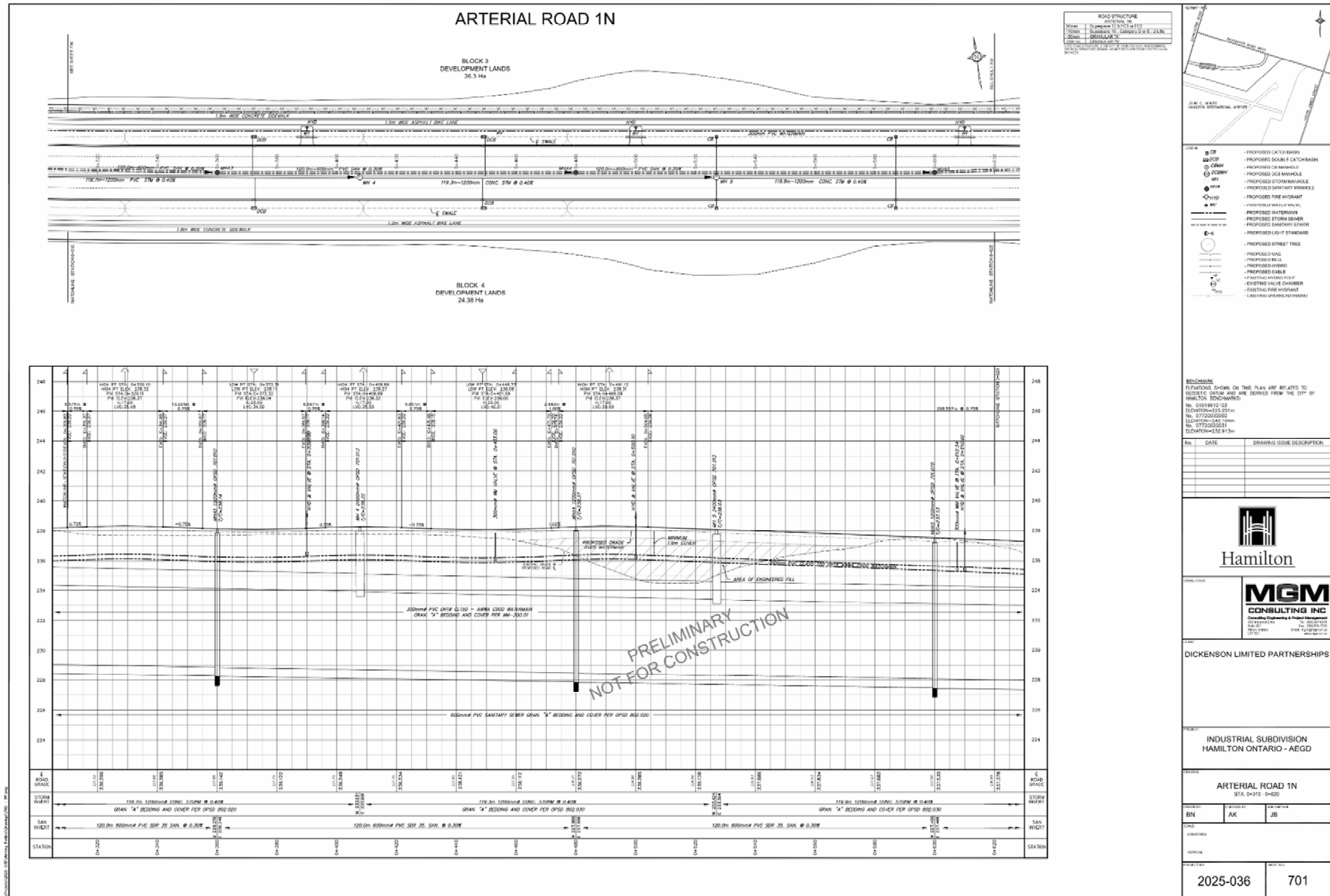
The proposed roadway alignment involves slight grade changes from Dickenson Road West to Glancaster Road. On the Dickenson Road end, the roadway will have a centreline elevation of 234.57 mm and a side elevation of 234.25 mm, aligning with the required camber slope for drainage purpose. As the roadway veers to the west, the elevation drops slightly to 233.22 mm on the centreline and 232.90 mm on the edges and goes up again to 234.86 mm on the centreline and 234.54 mm on the edges near the end of the curve. It goes up again to 238.53 mm as it reaches Glancaster Road and connects to Glancaster Road at the elevation of 238.75 mm. Figure 25 through Figure 30 below shows the grade plan and profile of the roadway with the described changes.

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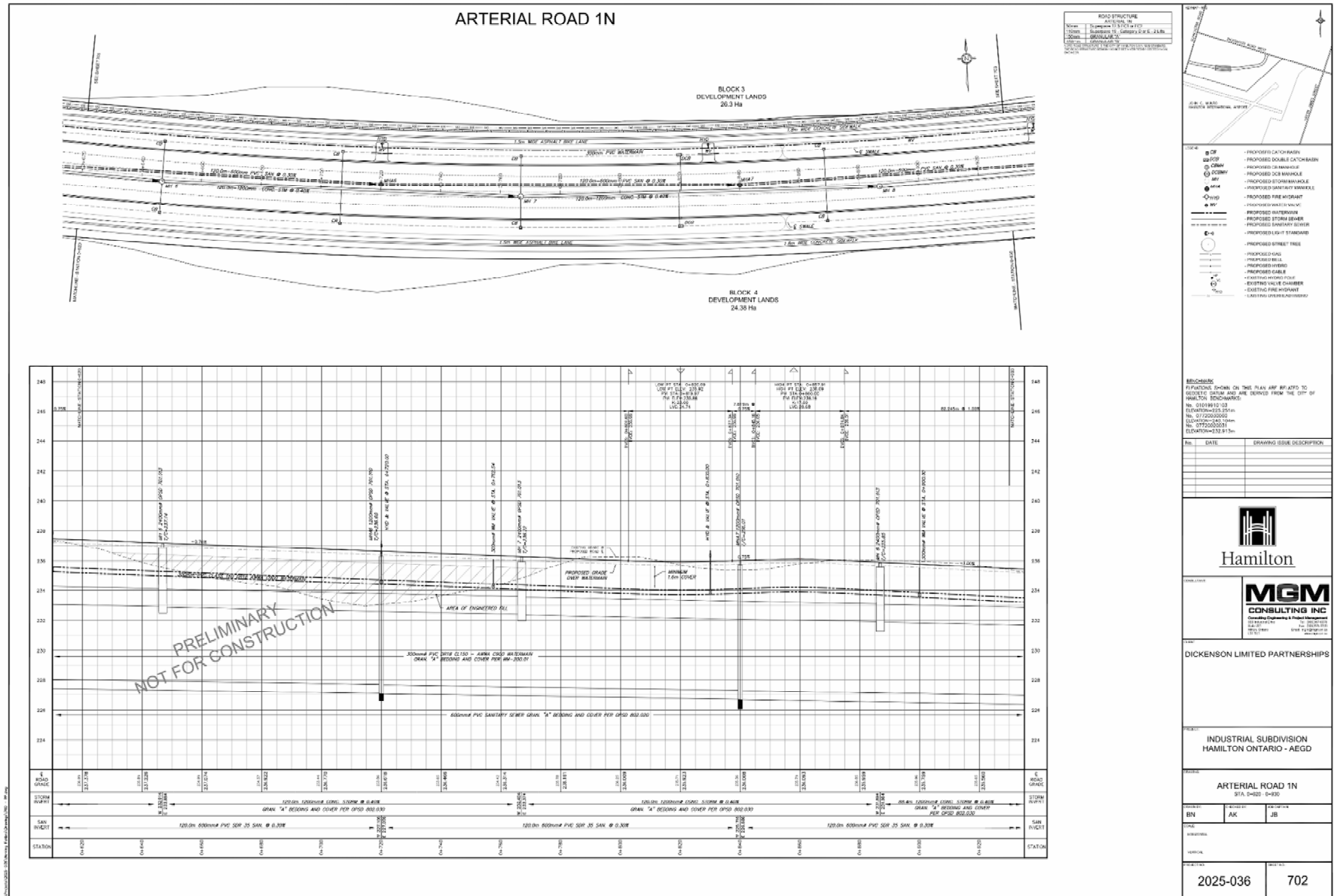
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Figure 26: Arterial Roadway 1N Grade Plan and Profile – Part 2

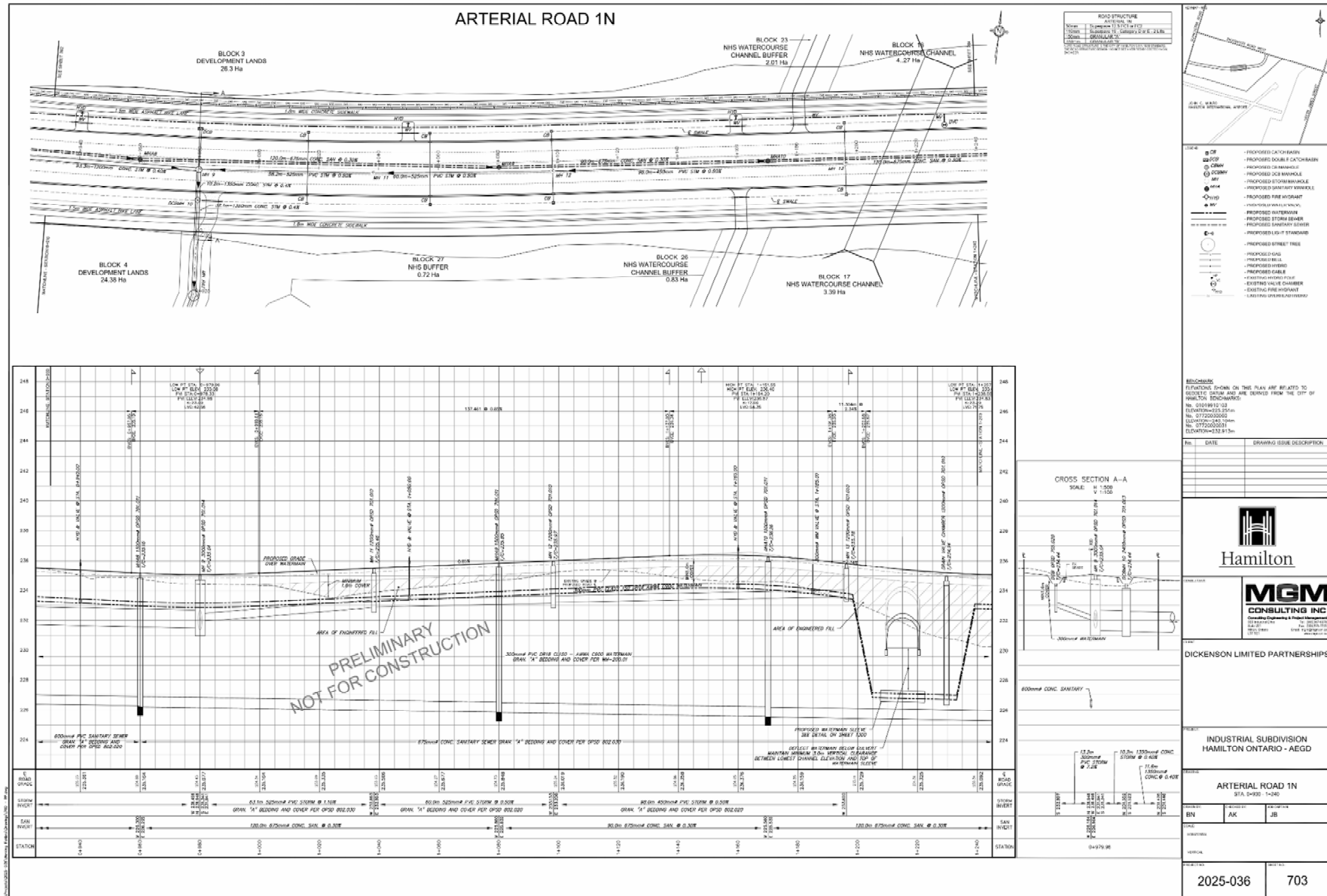


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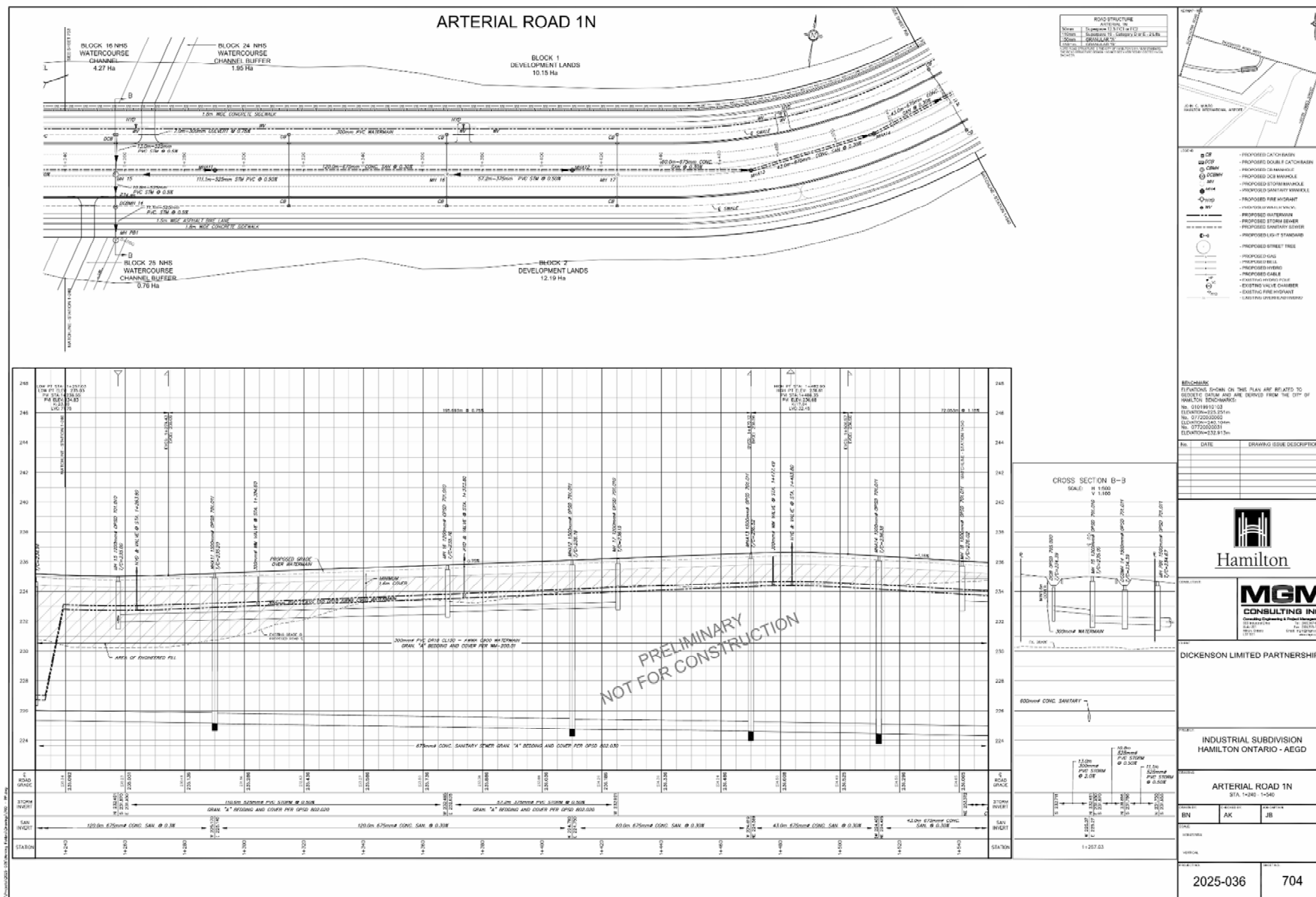
Figure 27: Arterial Roadway 1N Grade Plan and Profile – Part 3



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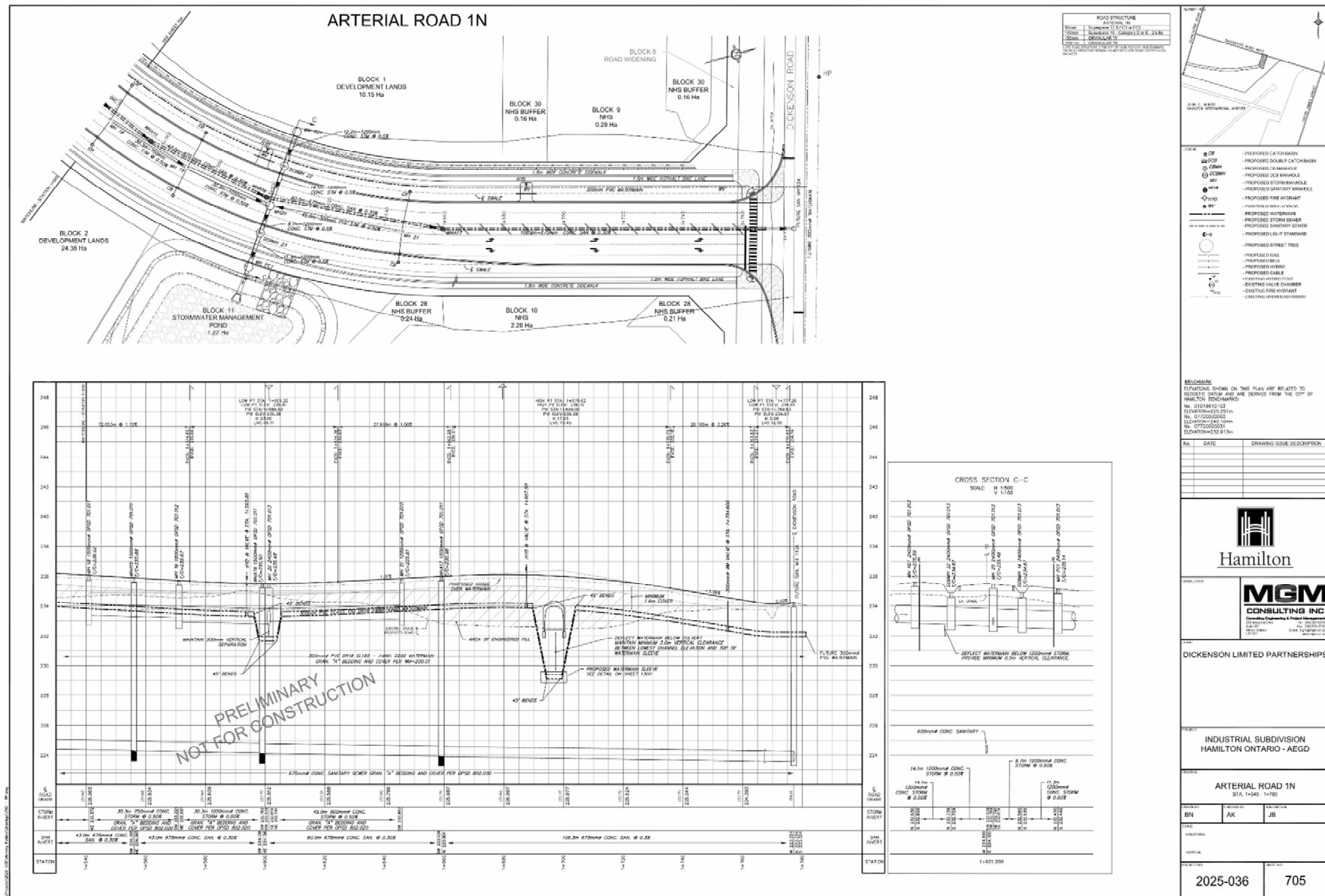


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Figure 30: Arterial Roadway 1N Grade Plan and Profile – Part 6

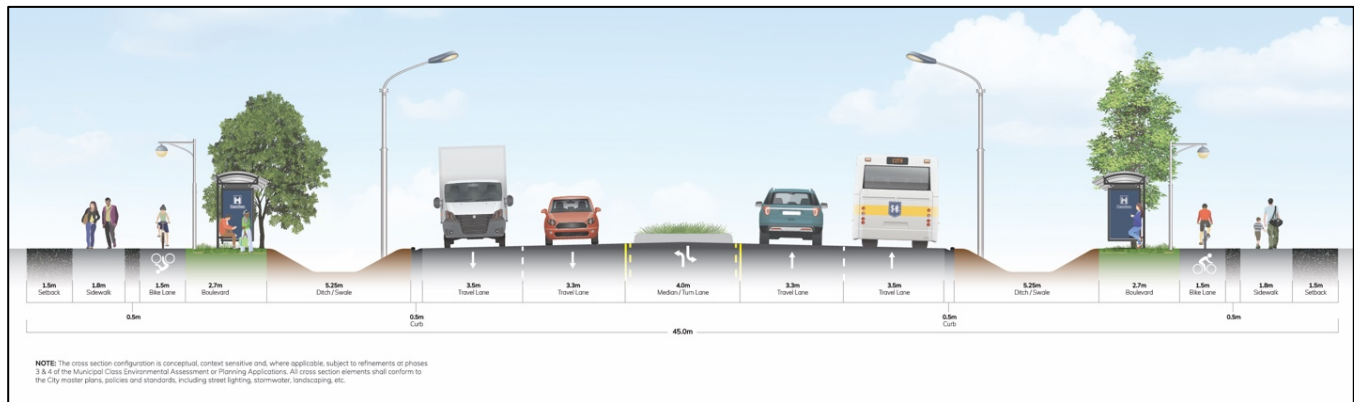


9.2 Arterial Roadway 1N - Cross Section

9.2.1 Cross Section

The cross-section for the alignment of Arterial Roadway 1N will extend east of Glancaster Road and to the intersection with Dickenson Road West. Following an evaluation, it was determined that the cross-section would be the same as the one developed in the AEGD TMP Update – June 2024. The only exception is the modification to the design for the intersection with Glancaster Road.

Figure 31: Preferred Cross-Section Design

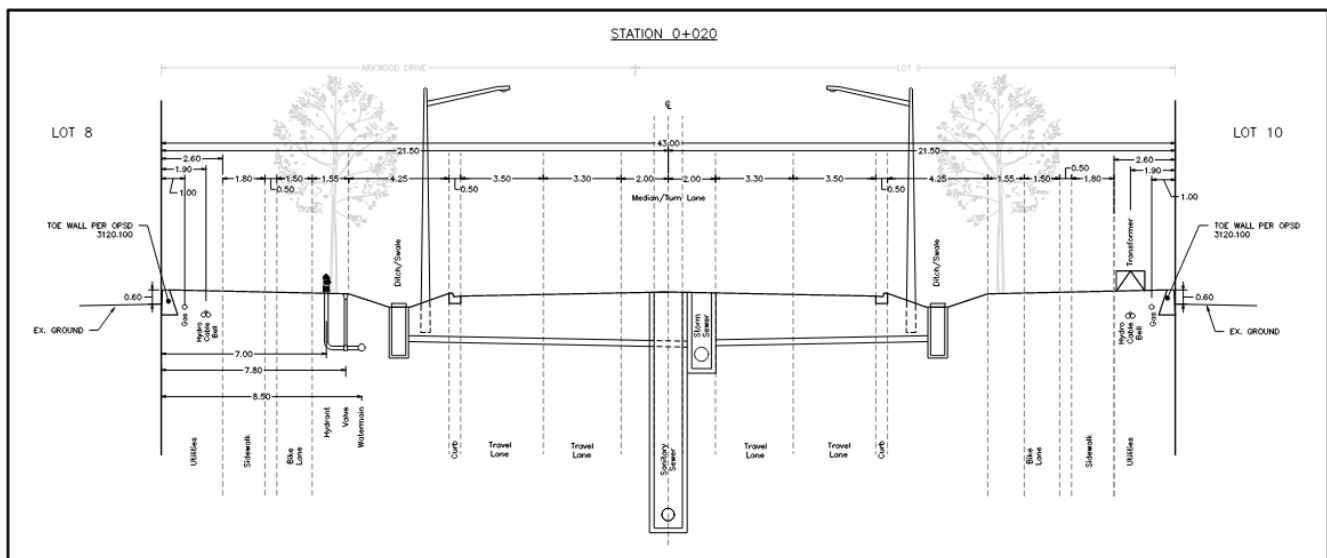


There are two watercourse crossings by Arterial Roadway 1N that will be sized to accommodate wildlife movement. Exclusionary fencing and other mitigation measures will be explored during detailed design to ensure that wildlife/vehicle interactions are limited to the extent possible.

9.2.2 Modified Cross-Section for Glancaster Road Intersection

The cross-section design for the Glancaster Road intersection has been modified to fit the roadway within Arkwood Drive and Lot 9. Figure 32 below displays the modified cross-section design.

Figure 32: Glancaster Road Intersection Cross-Section



9.2.3 Related Class EAs to Address Future Build Out

The AEGD TMP Update - June 2024 showed that Arterial Roadway 1N is proposed to continue as a four-lane arterial road by extending west of Glancaster Road and ultimately connecting to Book Road at Southcote Road. The extension from Glancaster Road west to Collector 2N was also identified as a Schedule C project with high priority, which means that implementation was intended to occur by 2031.

In addition, Glancaster Road is identified as requiring a future Class EA process by the City of Hamilton for widening to four lanes with a 36 m right-of-way and a transition from a rural to an urban cross-section from Dickenson Road West to Arterial Roadway 1N. This portion of Glancaster Road was identified as a Scheduled C project in the AEGD TMP Update – June 2024 with short term timing for implementation.

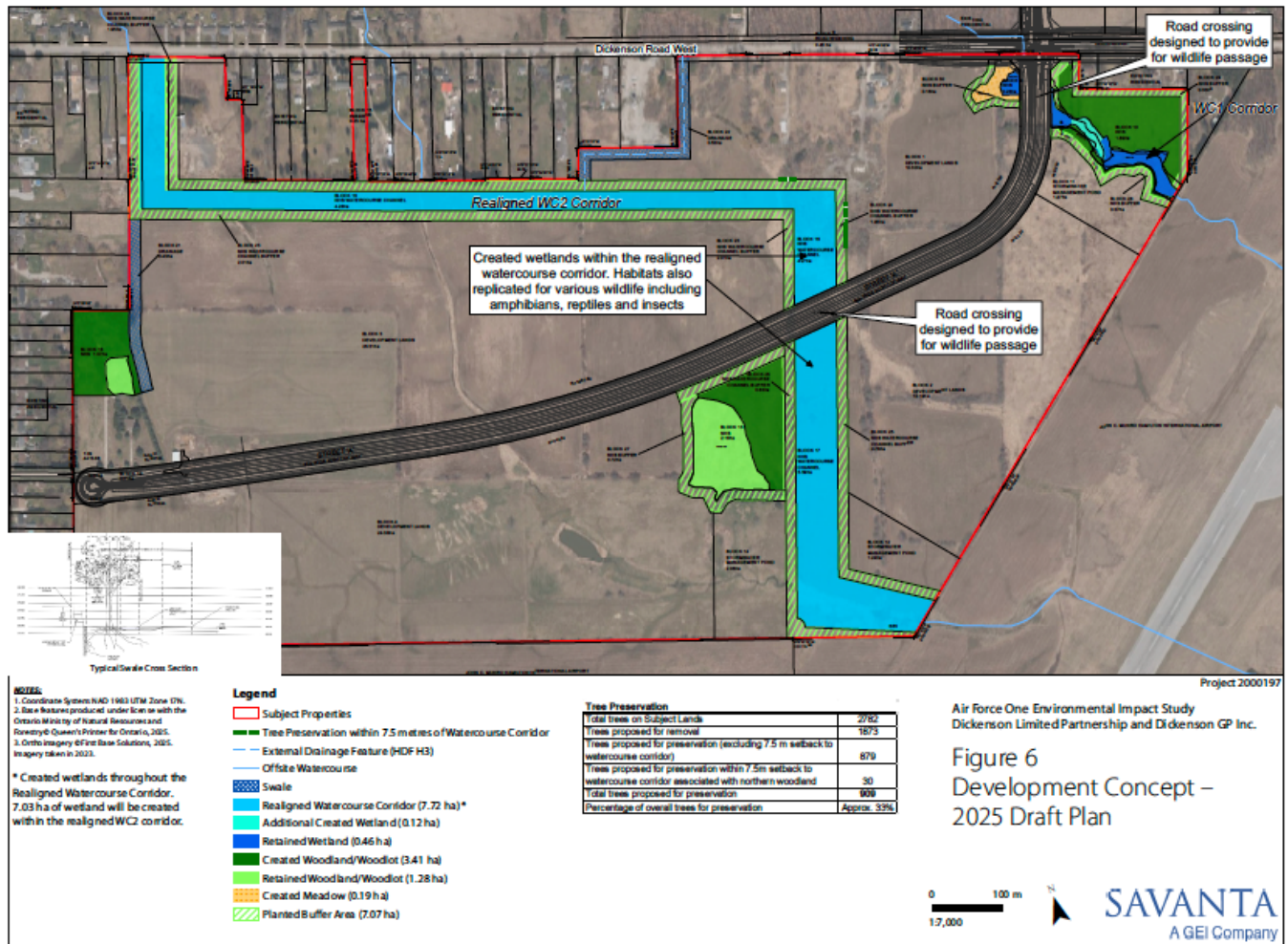
Glancaster Road south of Arterial Roadway 1N to the Airport boundary will remain as a two-lane road with a 30 m right-of-way but will transition from a rural to an urban cross-section (as outlined in the AEGD TMP Update – June 2024). This portion of Glancaster Road was identified as a Schedule B project with the Class EA requirements addressed through the AEGD TMP Update – June 2024 and it was noted to have a long-term timing for implementation.

9.3 Watercourse Crossings

The EIS (GEI, 2023) and EIS Addendum (GEI, 2025) identified SWH within the Study Area. While both documents identified potential impacts to SWH, those impacts are associated with the proposed realigned WC2 corridor and not the construction of Arterial Roadway 1N. As such, there are no impacts to SWH as a result of Arterial Roadway 1N.

The watercourse crossings associated with Arterial Roadway 1N will be designed to facilitate wildlife passage, providing safe movement for target wildlife within the NHS corridor, without the need to cross Arterial Roadway 1N. Specifically, the crossing of WC2 has been sized to accommodate deer passage although it is noted that linkage opportunities for deer to the south and north of the Study Area are limited given the fencing associated with the Airport to the south and the culvert to the north at Dickenson Road that is not currently sized for deer movement. Both crossings will have dry benches on either side of the watercourse and will also provide passage for amphibians and small mammals.

Figure 33: Road Crossing Wildlife Passage and Treed Area Buffers



9.4 Permits, Authorizations and Approvals

There are permits, authorizations and approvals that are required for the development of the Study Area as a whole but in some instances, they may be specifically required to implement the road. The following describes the permits, authorizations and approvals that will need to be obtained for the development of the Study Area that are anticipated to be related to the construction of Arterial Roadway 1N.

9.4.1 Niagara Peninsula Conservation Authority (NPCA)

Permits may be required development within regulated areas covering activities such as construction, site grading and altering watercourses or wetlands. A permit from the NPCA will be required for the crossing of WC1 and WC2 with Arterial Roadway 1N.

9.4.2 Ministry of the Environment, Conservation and Parks (MECP)

9.4.2.1 *Permit to Take Water / Environmental Activity and Sector Registry*

For construction dewatering, water takings of more than 50,000 L/day but less than 400,000 L/day do not require a PTTW but may be registered on the Environmental Activity and Sector Registry (“EASR”). Water takings of more than 400,000 L/day require a PTTW issued by the MECP. These permits often require supporting hydrogeology studies for their approval by the MECP. No dewatering is anticipated for the construction of Arterial Roadway 1N.

9.4.2.2 *Authorization under the Endangered Species Act*

On June 5, 2025, the Province of Ontario passed Bill 5: Protecting Ontario by Unleashing our Economy Act, 2025, which included amendments to the Endangered Species Act, 2007 (ESA) that are now in force, and the creation of the Species Conservation Act, 2025. The government is consulting on regulations that need to be in place before the SCA comes into force, at a specific time that is to be determined.

Until the SCA comes into force, the amended ESA continues to apply. Once the SCA is proclaimed, most activities adversely impacting protected species or their habitat will be required to register, unless excepted. This means that for many activities that would currently require a permit, most would likely require a registration instead, with permits only required under specific circumstances that are still being finalized. Permits, other authorizations, and registrations under the ESA will transition to the SCA through rules set out in a transition regulation.

The need for any permits will be reviewed during the detailed design stage pursuant to the Act and regulation that is in effect at that time.

9.4.3 Ministry of Natural Resources and Forestry (MNRF)

Scientific Collector’s Permits (fish and wildlife) are required to be obtained for completing wildlife salvage(s) prior to natural feature removal. These are obtained from the Ministry of Natural Resources and Forestry. It is anticipated that a Scientific Collector’s Permit will be required for the crossing of WC1. The crossing of WC2 will be completed in the dry as part of the comprehensive watercourse realignment. As such, a Permit specifically for the WC2 crossing is not anticipated.

9.4.4 Department of Fisheries and Oceans

The channel realignment of Watercourse 2 (WC2) will require a Request to Review from the federal Department of Fisheries and Oceans (DFO). Channel realignments are commonly accepted approaches with DFO. Based on the proposed mitigation measures it is likely that a HADD (Harmful, Alteration, Disruption or Destruction) can be avoided and a *Fisheries Act* Authorization is likely not required. That said, the WC2 realignment is required independent of the roadway construction and, as such, the DFO review is not tied directly to Arterial Roadway 1N.

10 Identification of Mitigation Measures

10.1 Utilities

The exact number and locations requiring utility re-location and/or support will be determined during detailed design with continuous communication and cooperation with utilities’ owner.

10.2 Social-Cultural Environment Impacts

10.2.1 Public Notification

Public notification should occur in advance of construction to ensure that businesses are kept informed. Commercial business and community services should be notified directly of impending works.

10.2.2 Noise and Vibration Control

There may be temporary impacts on surrounding residents during construction of Arterial Roadway 1N. To limit disturbances and comply with the local noise by-law, a Noise and Vibration Construction Monitoring Plan can be developed to help manage these impacts. The report provides recommended monitoring methodologies and relevant noise and vibration limits, as well as resources available during the project's construction.

10.2.3 Generation of Excess Materials

Excess soil will need to be managed during construction and production of planning documents will be required to inform and facilitate the handling and disposal of the project soils. This will include the completion of an Assessment of Past Uses (APU), a Sampling and Analysis Plan (SAP) and Soil Characterization Report (SCR) during the design phase to inform soil quality within the project area.

10.2.4 Encountering Unknown Archaeology Remains

Based on the Stage 1, 2, 3 and 4 Archaeological Assessments completed in the Study Area, there is low potential for additional archaeological resources to be found within the Study Area.

However, in the unlikely event that unknown archaeological remains are encountered during construction, the consultant archaeologist, approval authority, and the Archaeology Programs Unit of the Ministry of Citizenship and Multiculturalism (MCM) must be immediately notified.

10.3 Natural Environment Impacts

10.3.1 Erosion and Sediment Control

Erosion and sedimentation controls (ESC) are to be in place to protect the existing and realigned swales, watercourses and vegetation communities from the transport of silt and oil residues. This will be achieved by the installation of silt protection fence at the limits of construction to prevent encroachment beyond the working zone. ESCs will be investigated further during the detailed design stage. During construction, personnel will inspect all erosion and sediment controls regularly. ESC practices are to be implemented in accordance with the NPCA's permit requirements and the Toronto Region Conservation Authority (TRCA) ESC Guideline titled *Erosion and Sediment Control Guideline for Urban Construction*. The erosion and sediment control guidelines are general in nature and will be used as a guiding principle for the completion of the individual detailed erosion and sediment control designs.

10.3.2 Trees and Vegetation

The road construction is expected to result in the loss of vegetation and tree removal. This loss will be minimized where possible but has been quantified. A 15m vegetated protection zone has been provided, between the proposed road alignment and the southern woodland.

No vegetation removal should occur between April 1 and August 31 of any given year to protect birds (Migratory Birds Convention Act) and further extended to March 15 to October 31 for tree removal or pruning to protect the bat maternal roosting period (Endangered Species Act). This will be developed further during detailed design.

A Tree Protection and Management Plan (TPMP) (GEI, 2025) was developed for the larger Study Area to identify tree protection measures and compensation planting requirements. Tree removal and compensation requirements for trees removed outside of the wooded areas will follow the City of Hamilton's Tree Protection Guidelines and applicable tree protection fencing will be erected prior to construction activities.

11 Public, Agency and Indigenous Community Consultation

A key feature of the Class EA process is to ensure effective communication with the general public, agencies and other stakeholders throughout the project. To meet the Class EA consultation requirements for this Schedule C study, steps were taken to ensure effective communication throughout the project with the public, Indigenous communities, agencies and other stakeholders. The overall strategy was to provide various opportunities to communicate and receive input from the public, government, agencies, Indigenous communities and other stakeholders and to review, consider, integrate (as appropriate) and provide responses in a reasonable timeframe.

In addition, the City of Hamilton completed the Airport Employment Growth District Transportation Master Plan Update that followed Approach 2 of the Municipal Class EA process. The final AEGD TMP Update is available on the City of Hamilton's website which provided additional information on the policies, programs and infrastructure improvements needed to manage both existing and future transportation demand for the business park, which includes Arterial Roadway 1N.

Copies of project Notices, as well as the list of regulatory agencies and project stakeholders (Project Mailing List) are provided in **Appendix B**. A copy of all presentation materials from Public Information Centres #1 and 2 and the Frequently Asked Questions matrix are also included in Appendix A along with correspondence between the project team and stakeholders, public and Indigenous communities concerning the project.

11.1 Notices and Public Consultation

11.1.1 Notice of Study Commencement and Public Information Centre #1

Initial communication with stakeholders and the public started with issuance of the combined Notice of Commencement and Public Information Centre (PIC) #1 in the Hamilton Spectator newspaper on both June 13 and June 20, 2024. The Notice provided information on the study background along with project contacts and included a map showing the Study Area.

Notices were mailed to the surrounding residents and emailed out to Agencies, Ministries, Indigenous communities, and other stakeholders on the project mailing list.

For general distribution of project information to the public and stakeholders, the Notice was posted:

- On the project website (cghtransportation.com/planning/Arterial1NEA) with project related material remaining accessible to the public throughout the Class EA process; and
- In the Hamilton Spectator (newspaper).

The Notice also provided information on the project and included a "We want your input!" section which provided the link to the project website for the display boards, project contacts and the comment period.

11.1.2 Public Information Centre #1

A live virtual meeting was held on June 27, 2024 from 6:00 pm to 8:00 pm which included an overview presentation of the project as well the project team was available to answer questions. Participants could connect on the Zoom platform online or by phone. Participants were asked to pre-register through the project website.

PIC #1 provided the project background and Study Area overview, review of the technical studies completed and the existing constraints and considerations regarding the natural, social and physical environments. The potential cross section was shown along with three alternative alignments (Alternatives A, B and C). The alignments presented were evaluated based on all aspects of the environment with Alternative C selected as the preliminary preferred alignment.

The presentation was recorded and posted to the project website along with the presentation materials. A comment period extended from June 20 to July 18, 2024.

As part of the PIC #1 process a matrix was developed for “Frequently Asked Questions” (dated June 27, 2024). The matrix provided questions and answers related to various topics under the three general headings: 1. Background, Timing and Process; 2. Existing Conditions; and 3. Design and Cross-Section. The Frequently Asked Questions were also posted on the project website and have continued to be available to the public.

The project website also provided contact information, the ability to provide additional comments and to request being added to the project mailing list as well as a summary of Next Steps and Background Documents/Links.

Following completion of PIC #1 and a review of comments received the preferred alignment was confirmed to be Alternative C. This preferred alternative would undergo an evaluation of the design to determine the preferred design.

11.1.3 Notice of Public Information Centre #2

The Notice of Public Information Centre (PIC) #2 was posted in the Hamilton Spectator newspaper on December 31, 2025 and January 7, 2026. The Notice provided information on the study background, preferred road alignment along with project contacts and a map.

Notices were mailed to the surrounding residents and emailed out to Agencies, Ministries, Indigenous communities, and other stakeholders.

For general distribution of the Notice was posted:

- On the project website (cghtransportation.com/planning/Arterial1NEA) with project related material remaining accessible to the public throughout the Class EA process; and
- In the Hamilton Spectator (newspaper).

The Notice also provided information on the project and included a “We want your input!” section which provided the link to the project website for the display boards, project contacts and the comment period.

11.1.4 Public Information Centre #2

A live virtual meeting was held on January 14, 2026 from 6:00 pm to 8:00 pm which included an overview presentation of the project as well the project team was available to answer questions. Participants could connect on the Zoom platform online or by phone. Participants were asked to pre-register through the project website.

PIC #2 provided an opportunity to review the project to date, summary of PIC #1, evaluation of the cross section for the preferred alignment, sample mid-block intersection design, evaluation of the alternatives designs for the intersection with Glancaster Road and the technically preferred alternative design for Arterial Roadway 1N.

There were 11 participants that joined the meeting for both the presentation and the question-and-answer period. In addition, the presentation was recorded and posted to the project website along with the presentation materials. A comment period extended from January 15 to January 29, 2026.

The Notice and project website also provided contact information and the ability to provide additional comments and to request being added to the project mailing list.

11.1.5 Notice of Study Completion

The Notice of Study Completion will be sent out to stakeholders (include all agencies, ministries, Indigenous communities and previously identified stakeholders) and the public that provided comments or requested being added to the mailing list. To also provide a more general distribution the Notice will be placed on two dates in the Hamilton Spectator newspaper and posted on the project website.

A period of 30 calendar days following issuance of the Notice of Completion will be provided for comment. The Notice will outline how to request a section 16 Order within the 30-day comment period. Further to the More Homes More Choice Act (2019) an Order can only be requested where it would mitigate, prevent or remedy adverse impacts on existing aboriginal and treaty rights. There are no other grounds for requesting a section 16 Order, regardless of what was provided for in the original Class EA process.

This EA will be successfully completed, and the project will proceed to implementation following completion of the Notice of Completion comment period and MECP's Section 16 Order additional review period and confirmation by MECP that no Section 16 Order requests were received.

11.2 Public and Agency Comments

Following distribution of the Notices and holding of PIC #1 and PIC #2 comments were received from the public and agencies. These comments were taken into consideration and incorporated into the Class EA process.

Comments were received based on PIC #1 and the preliminary preferred alternative alignment was identified with the consideration of the comments. A frequently asked questions and responses document was developed based on discussions during the PIC #1 and was posted on the project website and can be found in **Appendix C**. The comments received did not result in changes to the recommended alignment and the alignment was confirmed and carried forward as the preferred alignment.

Based on input received from PIC #1 some minor design changes were made to technical considerations for transportation design.

Comments were received based on PIC #2 related to the technically preferred alternative design. The comments received from public and agencies have been summarized along with all associated responses. The comments and responses have been logged in a table which shows the stakeholder, date of their response, summary of comments, response provided, and date of response and this table can be found in Table 17.

Table 17: Comments Received after Public Information Centre #2

Comment #	Comment	Response
City of Hamilton		
1a	Request inclusion of: Zoomed-in drawings of intersections at Glanaster Road and Dickenson Road, in the scale and level of detail/colour matching that of the mid-block intersection drawing (suggest for e.g., embedding in the bottom-right quadrants of the existing drawings shown in PIC drawings).	Report updated with the zoomed-in figure
1b	Legends explaining the cross-section elements of intersections. (Descriptions are insufficient for accurate interpretation of drawings for full understanding). Please advise if you need a copy of Dickenson Road intersection for inclusion in your ESR. (suggest for e.g., embedding below the alternative descriptions to save space).	The report has included a cross-section with elements labelled
1c	A copy of georeferenced Microstation files of intersection alternatives at Glanaster Road so that they can be accurately incorporated in adjoining future studies led by the City of Hamilton.	Noted
2	Request replacement of “expropriation” in the evaluation tables and in any relevant text to “property taking*”. (FYI: This is because expropriation is a measure of last resort and is typically avoided, due to high cost and longer procurement timelines. Willing buyer – willing seller is the preferred method of property acquisition for City of Hamilton).	Report updated to replace the term in question
3	It is appreciated that the intersection clarity has been improved after our previous discussions, and a technical term definition was provided. It is suggested that also Functional Service Report could also be defined in in the ESR (not a term typically understood by the public).	Noted; zoomed-in intersection design is included
4	Please advise if you have any questions and confirm timing of when you anticipate finalizing the ESR.	Noted
Public		

5	Every new piece of infrastructure must be viewed from the lens of climate change and this arterial road falls into that category. In order to adapt to and mitigate the destruction through severe weather events, e.g. flooding, erosion, extreme heat, Hamilton and the surrounding area needs to value the natural features which can prevent or alleviate these events. This means that every woodlot, thicket, stream, wetland, is of significance in maintaining balance in the watershed. Each natural feature requires consideration and must be maintained, not only to reduce flooding or landslides, but also to provide habitat for wildlife, including fish, bats, and bees, which contribute to our well-being. The Biodiversity Action Plan which Hamilton has just published clearly indicates that the City of Hamilton recognizes the importance of biodiversity and is willing to act to retain it. The presentation mentions that there are crossings. I assume these are crossings over streams or wetlands. Any crossing will disrupt the ecosystem within that wetland and the flora and fauna which depend on it. Please consider ways to mitigate the damage or cancel the project. The road is 2.9 km long and will cost approximately \$30 million which is roughly \$10 million/km. That's a lot of money for a little road that demonstrates no benefit at this time. Since it is unknown what will be built adjacent to or surrounding this road, be it residential, institutional or future employment development, no cost benefit analysis can be done, nor an estimate of jobs created. It's impossible to justify this expense, especially at a time when Hamilton taxpayers are feeling the heavy burden of high taxes and inflation. The whole concept of the AEGD represents the past - not the future. It assumes that our shopping trends will remain unchanged for the next 30 years and we will always rely on warehouses. This is myopic; we have already seen many changes in shopping trends over the last 50 years: department stores > open air malls > closed in malls > big box	Written response provided to the concerned resident
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stores>online ordering and warehouses. It is foolish to think that a new development is not around the corner. It could be a 3D printer in every local print shop. Just take in the specifications for your order and it can be picked up in 2 days. No cargo delivery. No warehouses. No need for the AEGD and the TMP and arterial roads. Obviously this is just an hypothesis but an easy illustration of how quickly shopping ideas change and the old warehouses will be left moldering on the pavement. As a consultant, it is your responsibility to warn the City of Hamilton about the pitfalls of following an old, outdated plan. In fact, by adhering to this plan from 1987, Hamilton will become firmly stuck in the past, with old fashioned transportation plans, roadways, and antiquated multimodal pathways. In a separate communication, I will send photos of advanced methods of highway transportation already in use in other provinces and other countries. Ontario is lagging behind; we should be leading the way. Using this old 1987 plan will certainly solidify the idea that Canada and particularly Ontario is falling far behind our trading partners. This is economic suicide. We must remain competitive in transportation and high tech and the energy sector. These 3 entities share infrastructures and assets and if we are to remain competitive with the US and Japan, we must move forward urgently, move away from carbon and race toward electrification!!! Rather than designing fossil fuel based roadways, we must embrace electrification which means EV charging stations and hydrogen stations for the medium to heavy haul trucks. Our whole mode of transportation has to change if we are to adapt to the climate crisis. Determine where these charging stations should be. Decide where we have the power. Where's the closest grid to energize the stations? The US is moving quickly to EVs which could use a wireless dynamic charging	
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	infrastructure and to the heavy duty commercial trucks which will need hydrogen fuel cells. We must keep pace with the US or trade stops at the border. Our vehicles and fuel needs must be compatible with theirs or we become isolated from our largest trading partner. We know the grid isn't ready yet but building outdated highways is not the answer. Canada also needs to think about going underground, under the highways to put in high voltage lines and underground fiber optics to promote communications and the driving of autonomous vehicles. Please re-think the whole premise of the TMP and plan for a future of sustainable, smart transportation.	
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6	I am strongly opposed to any further development in this area. I believe this position reflects the interests of many residents who value the rural character, environmental integrity, and quality of life that define this community. Unfortunately, there is a widespread perception that public input in matters such as this is not given meaningful consideration. Too often, rezoning and development decisions appear to primarily benefit developers and political interests, while offering little to no tangible benefit to local residents. This lack of trust is deeply concerning. The Ancaster/Glanbrook area is a unique and irreplaceable landscape, characterized by quiet rural communities, productive farmland, natural wildlife habitats, underground spring fed water tables, and interconnected creeks and streams. Large scale industrial development and roadway expansion would permanently disrupt these natural systems. Such disruption increases the risk of flooding, eliminates fertile agricultural land, destroys wildlife habitats, and interferes with natural groundwater recharge cycles that cannot be replicated once lost. This area is widely regarded as one of the most beautiful and environmentally sensitive regions in Hamilton. Excavation and alteration of underground spring fed systems would have cascading impacts on surrounding ecosystems, many of which would be irreversible. Once these natural features are destroyed, they cannot be restored. I am also concerned by assurances that environmental impacts can be mitigated through engineered solutions designed to “mimic nature.” Natural ecosystems developed over centuries cannot be recreated through development provisions or infrastructure. These assurances do little to address the permanent loss that would result. It is disheartening to see decisions that appear to place economic gain ahead of community well being, environmental stewardship, and the preservation of family livelihoods. Many of those involved in decision making may not have spent time walking around this area, particularly along Southcote Road south of	Written response provided to the concerned resident
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	Book Road to fully appreciate its ecological and cultural value. I respectfully ask whether resident feedback will be genuinely considered and whether it has the potential to influence or alter the direction of airport related and industrial development in this area. Without meaningful engagement and transparency, it is difficult not to conclude that profit driven development, rather than long term sustainability, remains the primary objective. This development will also significantly devalue surrounding properties, wiping out home equity that families depend on for retirement and future financial security. The profits will benefit developers, while residents absorb the losses. If this development proceeds the affected homeowners in this area should be fairly compensated for the financial, environmental, and personal losses imposed on them. I urge City Council and all decision makers to reconsider the long-term consequences of this rezoning and to prioritize environmental protection, agricultural preservation, and the voices of the residents who call this area home.	
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Following completion of PIC #1 and #2 and a review of comments received the preferred design for the alignment (Alternative C) was confirmed to be Alternative Design 3.

Additional comments were received from the City of Hamilton following the circulation of the draft version of this report. The report has since been updated to include the feedback. Table 18 below tracks the comments received and the project team's responses.

Table 18: City of Hamilton Comments on Archeology and Cultural Heritage

Comment #	Comment	Response
Archeology		
1	The subject area meets three (3) of the ten criteria used by the City of Hamilton and Ministry of Citizenship and Multiculturalism for determining archaeological potential: 1) Within 250 metres of known archaeological sites; 2) Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary	Letters from Ministry of Citizenship & Multiculturalism for the Stage 1 and Stage 2 Archaeological Assessments were included in the ESR. The ESR indicates that Stage 3 and 4 Archaeological Assessments were completed but they are not included in the ESR. These assessments and the letters from the Ministry are beyond the scope of the Class EA but they are required prior to ground breaking

	watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody; and, 3) Along historic transportation routes. Staff acknowledge that several archaeological assessments have been undertaken in the subject area, however there are a number of ministry letters and reports still outstanding within the Study Area. As such staff request copies of the ministry letters for the following reports when available; - A Stage 4 report (P1037-0215-2023) submitted to the Ministry of Citizenship and Multiculturalism in a report dated March 3, 2025; - A Stage 4 report (P1037-0207-2023) submitted to the Ministry of Citizenship and Multiculturalism in a report dated March 4, 2025; - A Stage 4 report (P1037-0197-2023) submitted to the Ministry of Citizenship and Multiculturalism in a report dated March 6, 2025; - A Stage 4 report (P1037-0189-2023) submitted to the Ministry of Citizenship and Multiculturalism in a report dated December 18, 2024; - A Stage 3 report (P1037-0217-2023 and P1037-0221-2023) submitted to the Ministry of Citizenship and Multiculturalism in a report dated January 18, 2023; and - A Stage 3 report (P321-0342-2022, P321-0347-2022, P321-348-2022, P321-0349-2022, P321-0350-2022, P321-0356-2022, P321-0364-2022, P321-0365-2022, P321-0377-2022, P321-0385-2022, P321-0387-2022, P321-0388-2022, P321-0382-2022, and P321-0389-2022) submitted to the Ministry of Citizenship and Multiculturalism in a report dated March 26, 2025.	
2	Additionally, staff require that the following Archaeological Assessments and Ministry Letters be submitted to the City of Hamilton and Ministry of Citizenship and Multiculturalism for approval, prior to clearing the archaeological condition for the Study Area; - Stage 4 archaeological assessments for sites AhGx-869, AhGX-872 AhGx-876, and AhGx-879 and require these reports be submitted to the City of Hamilton and Ministry of Citizenship and Multiculturalism for approval, prior to clearing the archaeological condition. - Stage 4 archaeological assessment for site AhGx-911	These will be provided to address any archaeological conditions associated with the development application and are not specific to completion of the ESR under the EA Act

	- Stage 1-2 assessment (P344-0505-2026) which is being undertaken at 1209 Glancaster Road, Glanbrook.	
3	The circulated document titled Arterial Road 1N – Dickenson Road West to Glancaster Road Environmental Study Report prepared by CGH Transportation, does not make reference to specific archaeological assessments or sites. Staff request that the document is updated to accurately reflect the archaeological assessments and sites located on the subject property. (LC/KR 2026-04-17)	Due to the sensitivity of the information Stage 2 Archaeological Assessments that specifically identify archaeological sites are not released to the public and as such are not included in an ESR which is posted for public comment. The ESR includes a reference to completion of the Stage 1 and Stage 2 Archaeological Assessments and that resources were located and subsequent studies will be done outside of the Class EA process and prior to ground breaking activities in the area. Due to the sensitivity of the information the ESR will only include the letters from MCM for Stage 1 and Stage 2
Built Heritage/Cultural Heritage Landscapes		
4	For a summary of background information and previous Cultural heritage concerns please see the previous Cultural Heritage comments regarding Draft Plan of Subdivision and Zoning By-law Amendment application (25T-202203 and ZAH-22-021) dated April 22, 2022.	This is applicable to the development application and not the Class EA for Arterial Roadway 1N
5	As part of a previous circulation (FC-20-061), staff required that a Cultural Heritage Impact Assessment (CHIA) be submitted to the satisfaction and approval of the Manager of Heritage and Urban Design prior to any development approvals.	The CHIA for site 1205 Glancaster Road was completed in November 2023 and is referenced in Section 5.2.3 Cultural Heritage of the ESR
6	A Cultural Heritage Impact Assessment for the subject property was completed by WSP dated April 30, 2021. The report assessed the impact of a development project located at 9517, 9541, 9569, 9579, 9593, and 9867 Dickenson Road West, Glanbrook. Staff reviewed and provided comments on April 14, 2022, which are as follows: Conditions – Based on the recommendation of WSP within the CHIA, it appears that there may be items worth salvaging from the subject property. As such, if this application is approved, staff require that the following conditions be attached to the application (please see updates below in red):	These sites are not located near Arterial Roadway 1N and are part of the development application and not the Class EA

	1) That the applicant shall submit detailed documentation of the building on the subject property to the satisfaction and approval of the Manager of Heritage and Urban Design, prior to any demolition. Cleared – on April 6, 2026, WSP submitted a technical memorandum indicating there are no salvageable materials, staff concur with this evaluation. 2) Any historic fabric to be removed, including windows and doors, be salvaged for re-use, where feasible. Documentation regarding the salvage of these features shall be submitted to the satisfaction and approval of the manager of Heritage and Urban Design. Cleared – the report has indicated that there is no material to be salvaged and therefore, this condition no longer applies. A Cultural Heritage Impact Assessment for 1205 Glanaster Road was completed by WSP Canada Inc. on November 7, 2023. The report assessed the impact of the proposed development on the built heritage resource at 1205 Glanaster Road. Staff do not require a Documentation & Salvage report related to the property at 1205 Glanaster Road.	
7	Staff have reviewed the Cultural Heritage Impact Assessments submitted with the subject application and find them to be comprehensive and complete. Both reports were forwarded to the Policy and Design Working Group of the Hamilton Municipal Heritage Committee on January 22, 2024, for their review of the Cultural Heritage Impact Assessments. Staff have no further comment on the application as circulated. The subject property is adjacent to 9445 Twenty Road, a property listed on the City's Municipal Heritage Register as a non-designated property. Additionally, the subject property is located near a concentration of properties of cultural heritage value or interest listed on the City's Inventory of Heritage Properties, including: • 9300 Airport Road; • 555 Glanaster Road; and, • 9511 Twenty Road.	Noted and these sites are not located near Arterial Roadway 1N and are part of the development application and not the Class EA

8	The circulated document titled Arterial Road 1N – Dickenson Road West to Glancaster Road Environmental Study Report prepared by CGH Transportation, does not refer to the adjacent cultural heritage, or summarize the previous Cultural Heritage Assessments undertaken on the property. Staff request that the document is updated to accurately reflect the cultural heritage surrounding the subject property and acknowledge the Cultural Heritage Assessments previously undertaken. (LC/KR 2026-04-17)	Section 5.2.3 Cultural Heritage of the ESR was updated
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11.3 Indigenous Communities Consultation

Indigenous community consultation was undertaken to ensure that effective communication was undertaken with those with potential interest. Consultation activities, comments and responses have been summarized below. The following initiatives were undertaken to notify Indigenous communities of the Class EA project:

- Each of the potentially affected Indigenous communities included in the project contact list, was emailed notices to ensure that they were kept apprised of the project's progress and methods for providing input.
- In addition to the emailing notices, the communities were contacted (through emails and phone calls) to provide an opportunity to follow-up.

Under the consultation obligations with Canada's Indigenous Peoples, in response to Notice of Study Commencement, the Ministry of the Environment, Conservation and Parks (MECP) provided a list of potentially affected Indigenous groups with the intention of engaging and consultation. Accordingly, the following Indigenous communities or associations were provided a copy of all project notices and will also receive the Notice of Completion.

- Mississaugas of the Credit First Nation
- Six Nations of the Grand River
- Haudenosaunee Confederacy Chiefs Council / Haudenosaunee Development Institute

The Notice of Completion with a link to the Environmental Study Report will be provided to the Indigenous communities by email with follow-up to confirm they have received the information and to discuss whether they have any comments or concerns related to the project.

Six Nations of the Grand River (SNGR)

Discussions with the Six Nations of the Grand River (SNGR) and specifically with the Consultation and Accommodation Process (CAP) Team have been ongoing and will continue through completion of the Class EA and Draft Plan of Subdivision processes. The following is a summary of the meetings held in 2025.

April 2025

Broccolini met with SNGR CAP Team on April 8 and April 24, 2025. The purpose of the meetings was to review and answer questions related to:

- **Project Particulars** – differentiate between the Class EA process and Draft Plan of Subdivision and understand the timelines of both processes.
- **Project Timeline** – timeline for the Class EA process and the City of Hamilton's AEGD TMP Update were provided which extend from May 2021 to June 2024. In addition, provided a review of the project timeline with a focus on the ecological fieldwork and Stage 2 Archaeological Assessment that both commenced in 2020 through to August 2024. In addition, Stage 3 and Stage 4 Archaeological Assessments were completed however these are in areas not impacted by construction of Arterial Roadway 1N.
- **Proposed Alignment** – reviewed the alignment provided in the AEGD TMP Update and the options considered by Broccolini with the proposed alignment that was provided in PIC #1.
- **Review of SNGR Previous Comments** – comments on the Draft Plan of Subdivision were reviewed with highlighting of items agreed upon, unable to address and additional notes on topics such as integrating indigenous perspectives, sufficiency of studies, buffers, bats, fencing, stormwater management, effectiveness of mitigation measures, restoration and monitoring.

In addition to the meetings, the SNGR CAP Team was provided with a copy of the Environmental Impact Study (EIS) on December 12, 2024 that was developed for the Draft Plan of Subdivision process. The EIS Impact Assessment did review the potential impacts of proposed Arterial Roadway 1N, since the road is part of the Draft Plan of Subdivision. During these meetings many of the comments received from SNGR were noted to be beyond the Class EA process and pertain to the Draft Plan of Subdivision.

May 2025

A summary from the meetings that were held on April 8 and April 24, 2025 with the SNGR CAP Team was compiled that reviewed the key items raised by SNGR. It was noted that many of the issues discussed were more specifically related to the Draft Plan of Subdivision and not to the Class EA process for Arterial Roadway 1N.

October 2025

Broccolini also met with SNGR on October 31, 2025 to inform them that the Draft Plan of Subdivision had received approval, that Broccolini was providing wetland replication at a 1.5:1 ratio and woodland at a 1.38:1 ratio and that the watercourse crossing, previously identified as a bridge, was now planned to be a culvert but that it would still be sized to provide for deer passage. Broccolini discussed a number of other items including:

- Plant salvage and utilizing the SNGR plant list when preparing landscaping plans;
- Tree planting ratios - SNGR wanted a 10:1 ratio; but were advised that Broccolini could not commit to that ratio. SNGR would like Broccolini to commit to off-site planting to achieve 10:1. This commitment was not made but Broccolini did indicate that they could look at how many trees could realistically get planted based on the proposed restoration plans once they were available;
- Wetland re-creation ratio - SNGR wanted 3:1 however Broccolini can only provide 1.5:1 and cannot go higher given concerns expressed by the airport; and
- Determining whether any of the wetlands within the watercourse corridor could be designed with appropriate hydroperiod to support salamanders.

June 2026

Emails were exchanged with SNGR to review the time lapse from October 2025. The had been focused on the development application process and the Draft Plan of Subdivision. A meeting will be held with SNGR in July 2026 to review the ESR.

Appendix A

Public Information Centre Presentation Materials

Arterial 1N (Glancaster Road to Dickenson Road West) Municipal Class Environmental Assessment, Phase 2

Public Consultation #1

Welcome

- This is Public Information Centre #1 for the Municipal Class Environmental Assessment (MCEA or EA) being conducted for Arterial Roadway 1N between Dickenson Road West and Glancaster Road
- This Municipal Class Environmental Assessment (EA) is being coordinated with the Draft Plan of Subdivision for a new industrial development adjacent to the John C. Munro International Airport

Project website: cghtransportation.com/planning/Arterial1NEA

Your input is important to us. Following this open house, please provide your comments to us:



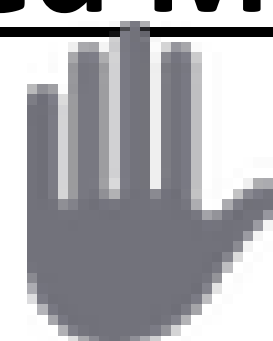
Christopher Gordon, P.Eng.

CGH Transportation Inc.

P: 343-999-9117

E: Christopher.Gordon@CGHTransportation.com

Housekeeping Items

- This Virtual Public Information Centre will be recorded and posted to the project web page
 - All participants are automatically muted and off camera for the duration of the meeting
 - Please **remain on Mute**  during the presentation. There will be an opportunity to ask questions at the end
 - Please try to be brief to allow all participants the opportunity to ask a question.
 - There are two methods to ask a question:
 1. Type the question into the Chat  window at any time – **Preferred Method**
 2. In the meeting controls, click **Reactions** , then click **Raise Hand** . The host will be able to unmute your microphone to enable you to ask your question
 - We will be combining responses to any frequently asked questions where possible
- After the meeting, a Question and Answer matrix will be prepared and posted to the project webpage

Land Acknowledgement

The City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation.

Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.

Presentation Outline

Welcome & Introduction

Housekeeping Items

Land Acknowledgement

Municipal Class Environmental Assessment Process

Consultation Process Timeline

Background and Study Area Overview

Technical Studies Completed

Existing Conditions and Constraints

Possible Cross-Section

Evaluation of Alternative Alignments

Preferred Alternative Alignment

Consultation Process Timeline

Why are we here?

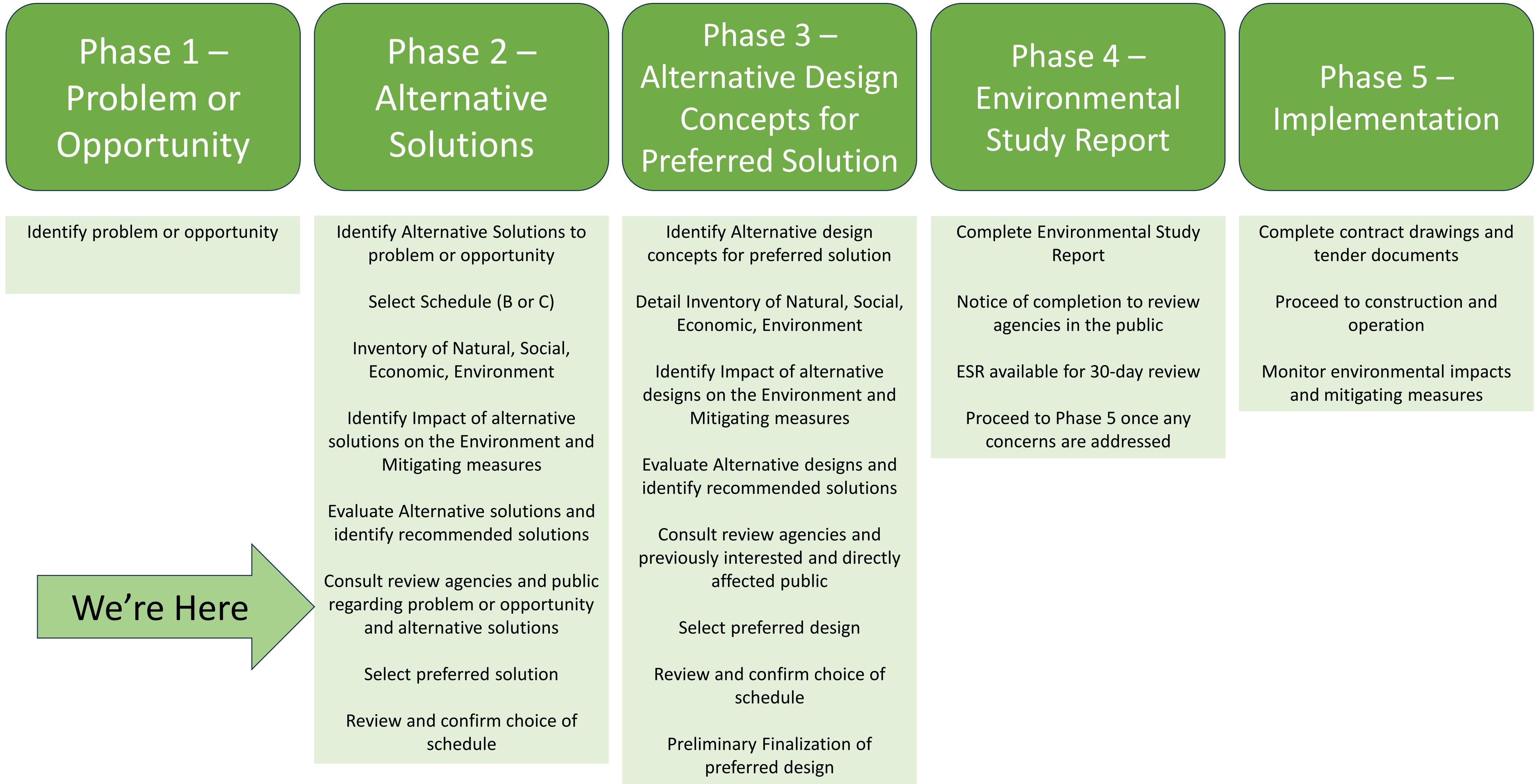
Dickenson Limited Partnership has initiated a Draft Plan of Subdivision process for a new industrial development adjacent to the John C. Munro Hamilton International Airport (JCMHIA) within the City of Hamilton's Airport Employment Growth District (AEGD) Secondary Plan lands.

In parallel with the Draft Plan of Subdivision process, the Municipal Class Environmental Assessment process will be completed for Arterial Roadway 1N, by CGH Transportation Inc. and Morrison Hershfield on behalf of Dickenson Limited Partnership.

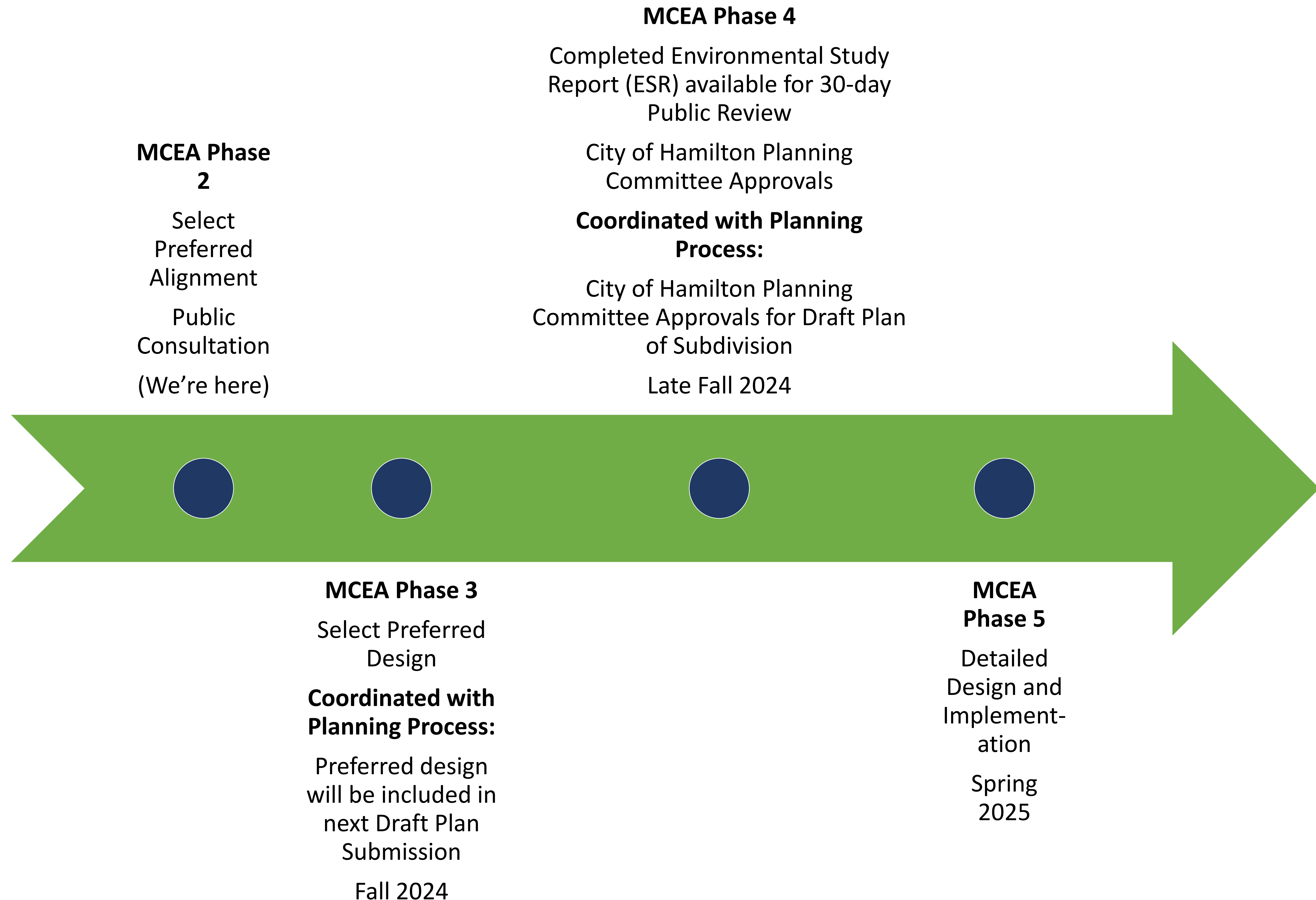
The AEGD TMP Update specified a roadway location for Arterial Roadway 1N closer to the north limit of the developable area than other options being considered. To increase the developable block sizes and align with market demands, the EA process will analyze and evaluate the potential alignment locations

Municipal Class Environmental Assessment (MCEA) Process

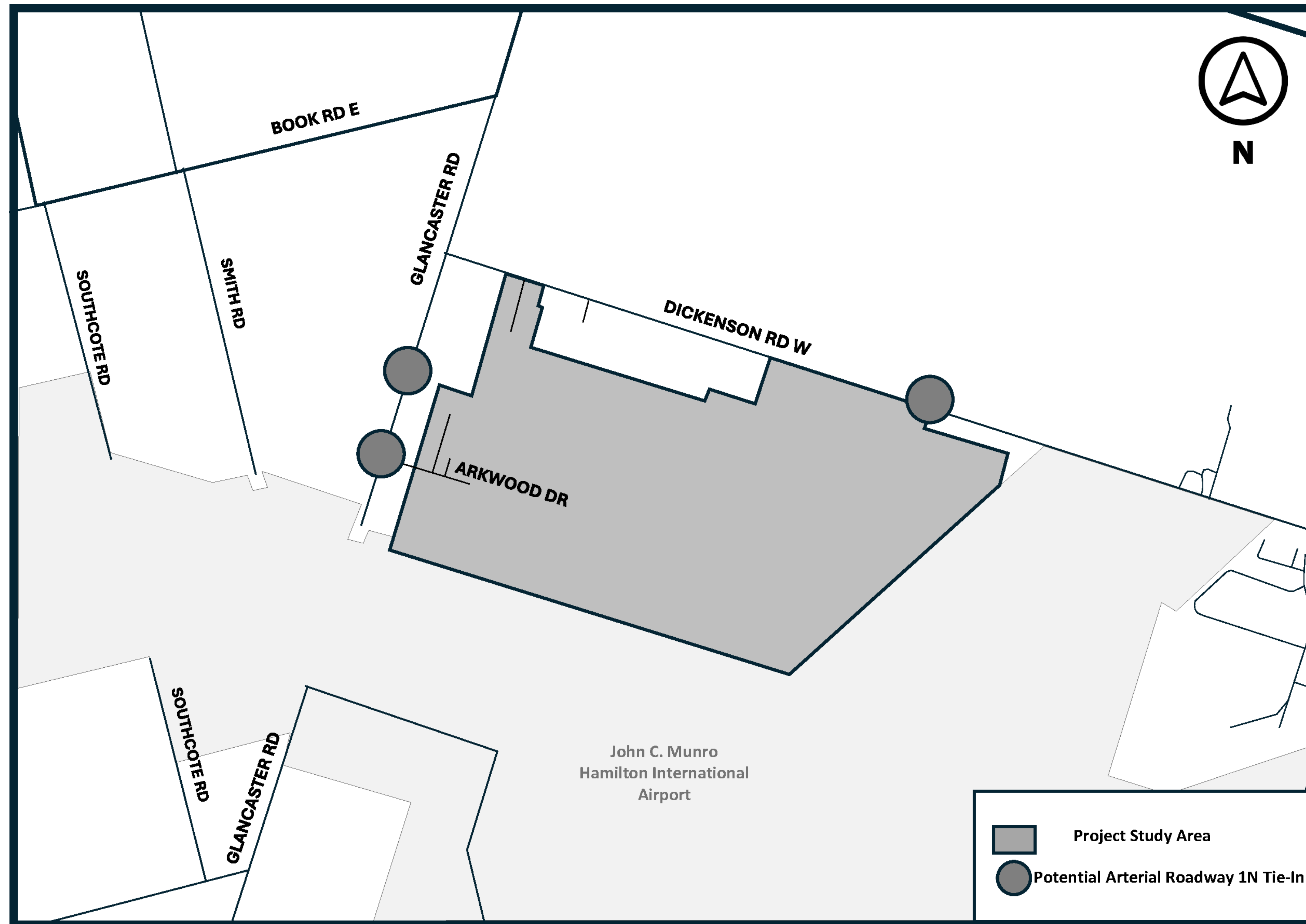
The proponent is undertaking Phases 2, 3, and 4 (Schedule ‘C’) of the MCEA process to refine alignment details and identify environmental impacts and mitigation. The current stage of the process is indicated below.



Consultation Process Timeline



Study Area Overview



Study Area is bordered by Dickenson Road West in the north, Glancaster Road in the west, and the John C. Munro Hamilton International Airport (JCMHIA) in both the east and south.

The future Arterial Roadway 1N alignment will connect Dickenson Road West and Glancaster Road, and service the lands adjacent to the JCMHIA.

Study Area Overview

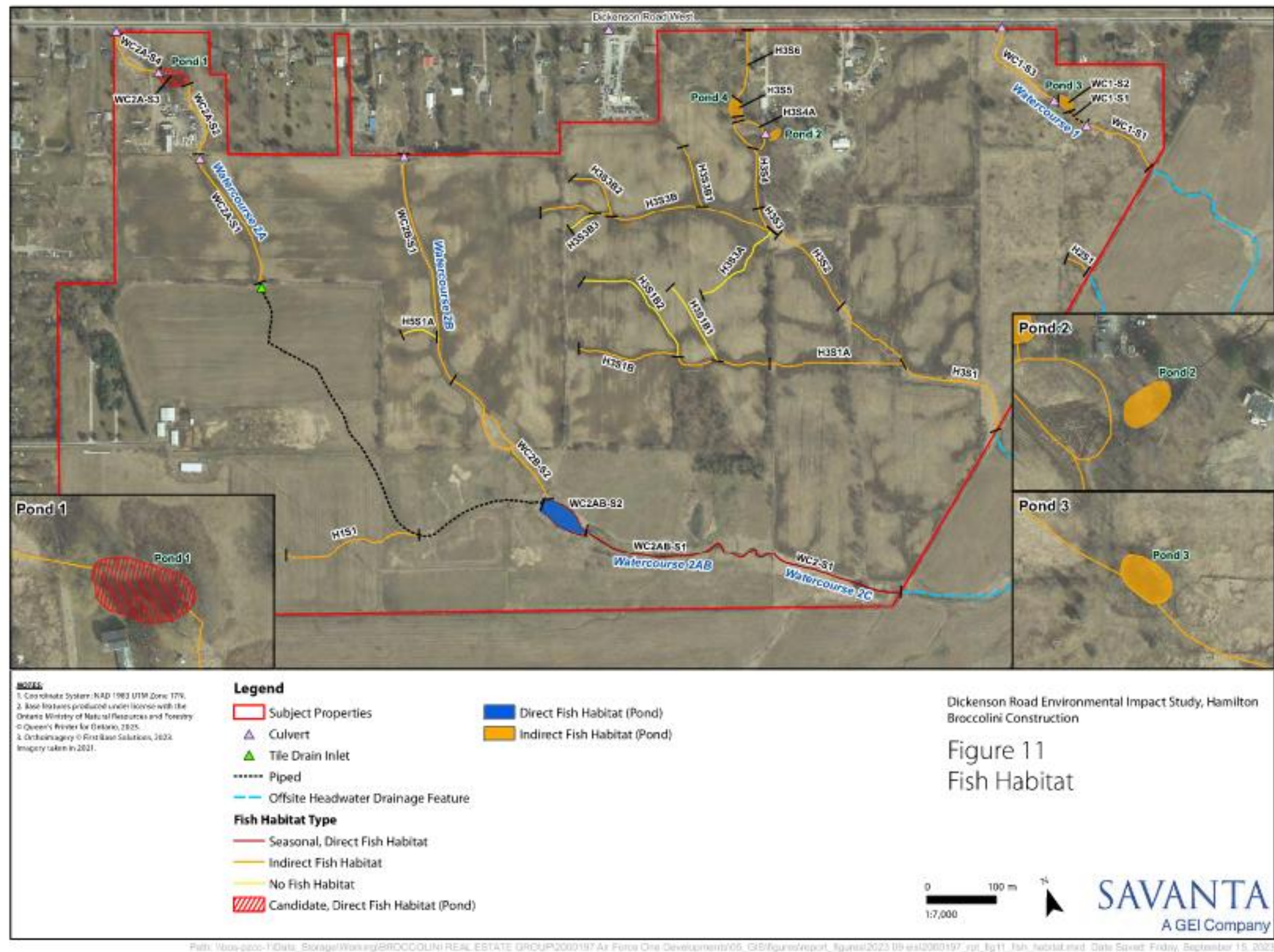


Study Area Existing Conditions Inventory

To understand any impacts to the study area features, the existing conditions have been researched and surveyed for:

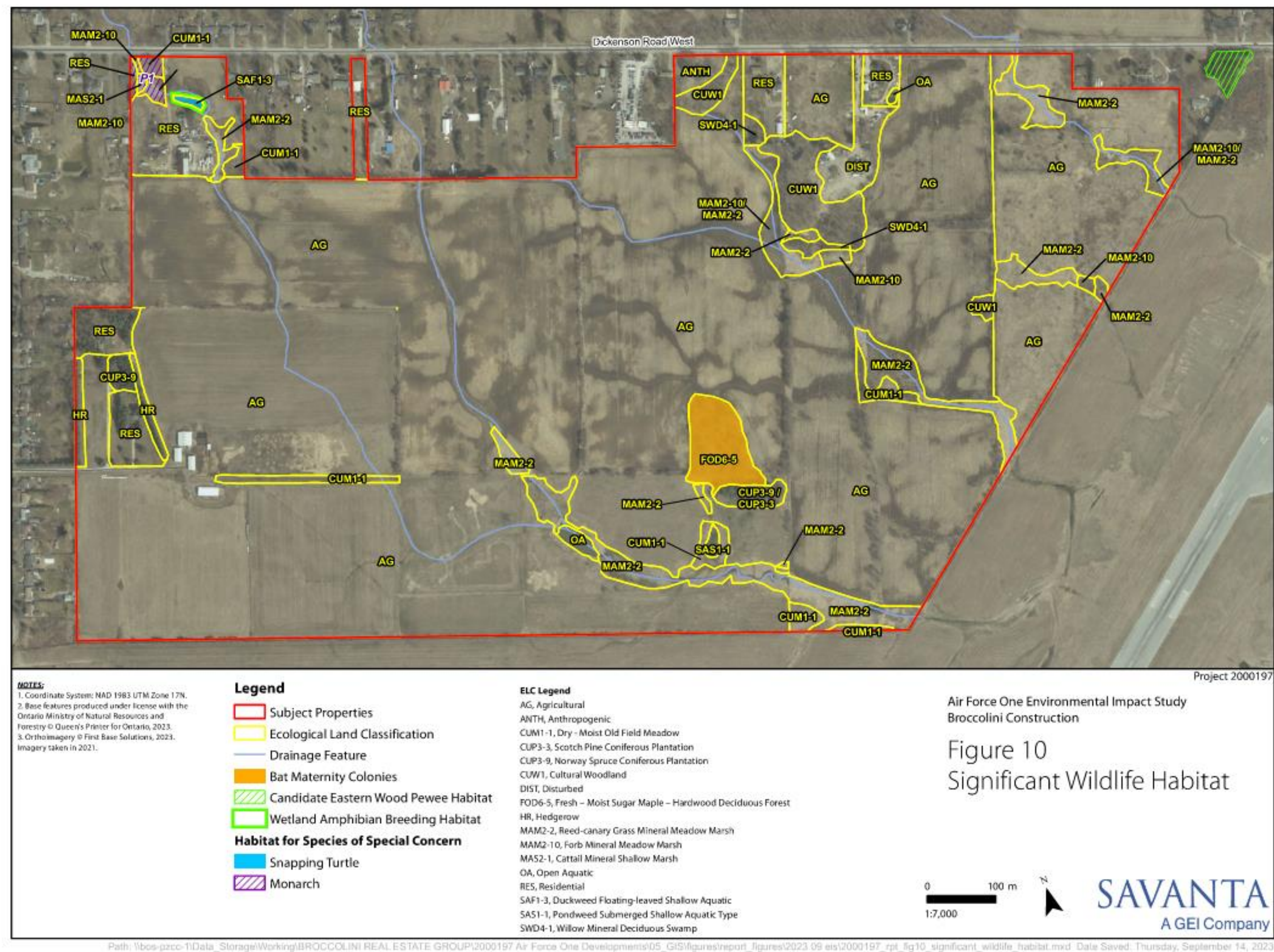
- Natural Environment
 - Biological
 - Hydrogeologic
- Social Environment
 - Cultural Heritage
 - Archeological
- Transportation/Physical Environment
- Economic Environment

Natural Environment - Biological



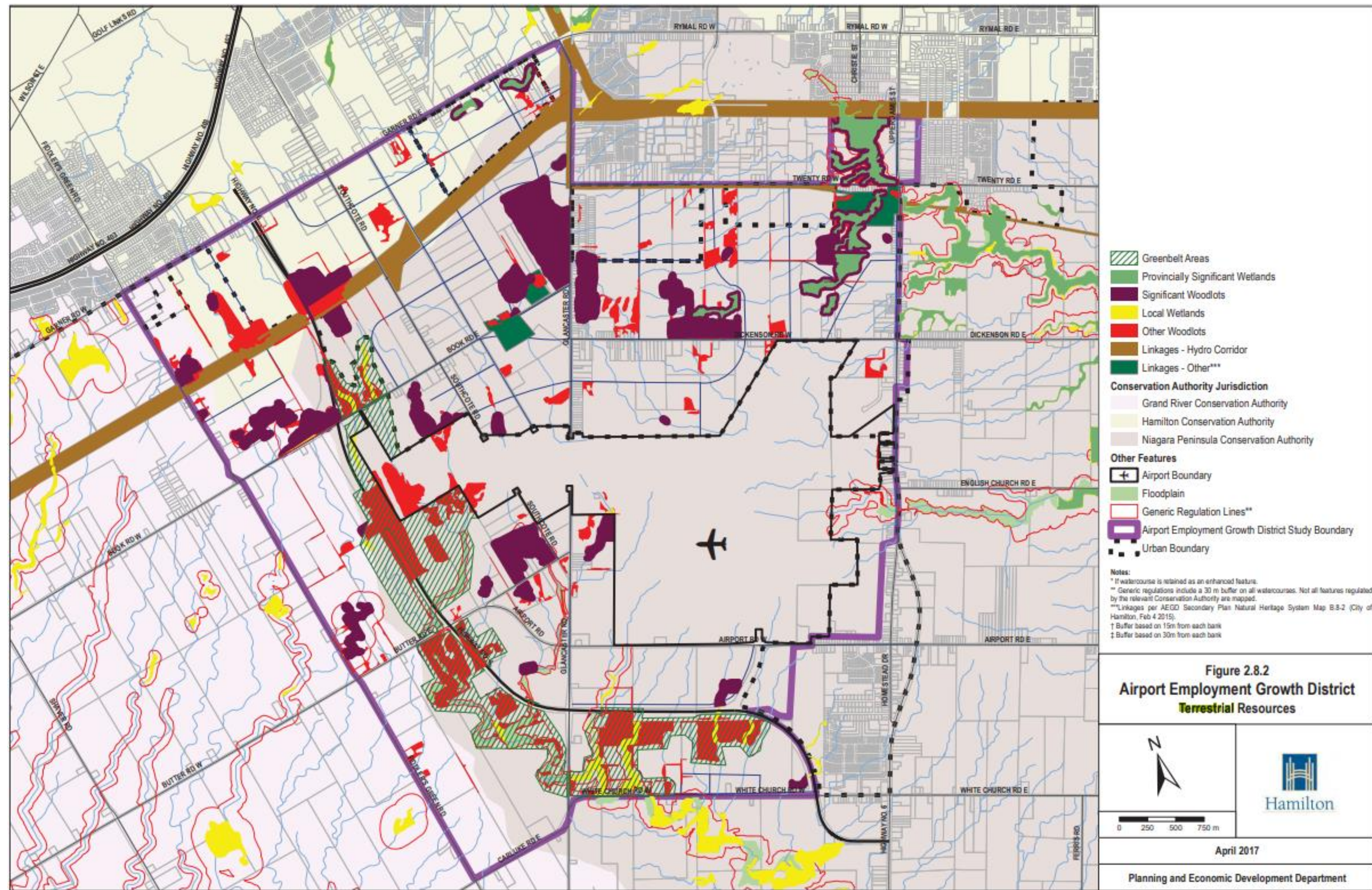
Fish and fish habitat

Natural Environment - Biological



Significant wildlife habitat

Natural Environment - Biological



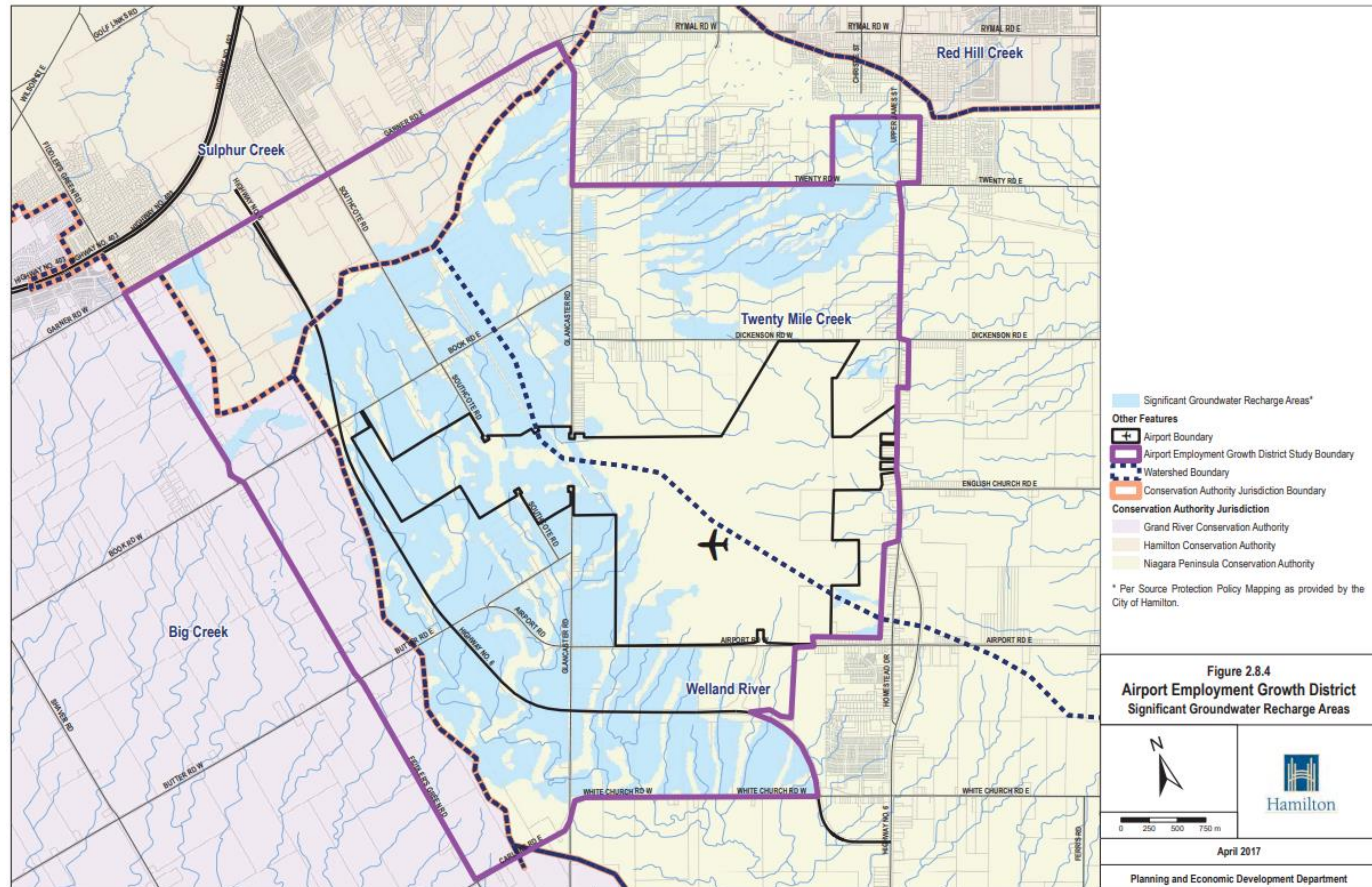
Terrestrial Resources

Biological – Constraints and Considerations

Species		Designations		Legislation*		
Common Name	Scientific Name	Federal (SARA)	Provincial (SARO**)	Federal	Provincial	Comments
Bobolink	Dolichonyx oryzivorus	Threatened	Threatened	SARA	ESA	Eleven territories were found in suitable breeding habitat within the Subject Lands. Mostly located on the east side of the study area.
Eastern Meadowlark	Sturnella magna	Threatened	Threatened	SARA	ESA	Has one territory within the south-east portion of the study area.
Eastern Wood Pewee	Contopus virens	Special Concern	Special Concern	SARA	-	One individual was heard in the north-east part of the study area during the first-round breeding bird surveys; however, it was not heard during subsequent visits.
Eastern Small-footed Myotis	Myotis leibii	-	Endangered	-	ESA	Bat Maternity colony located in the central west portion of the study area.
Little Brown Myotis	Myotis lucifugus	Endangered	Endangered	SARA	ESA	Bat Maternity colony located in the central west portion of the study area.

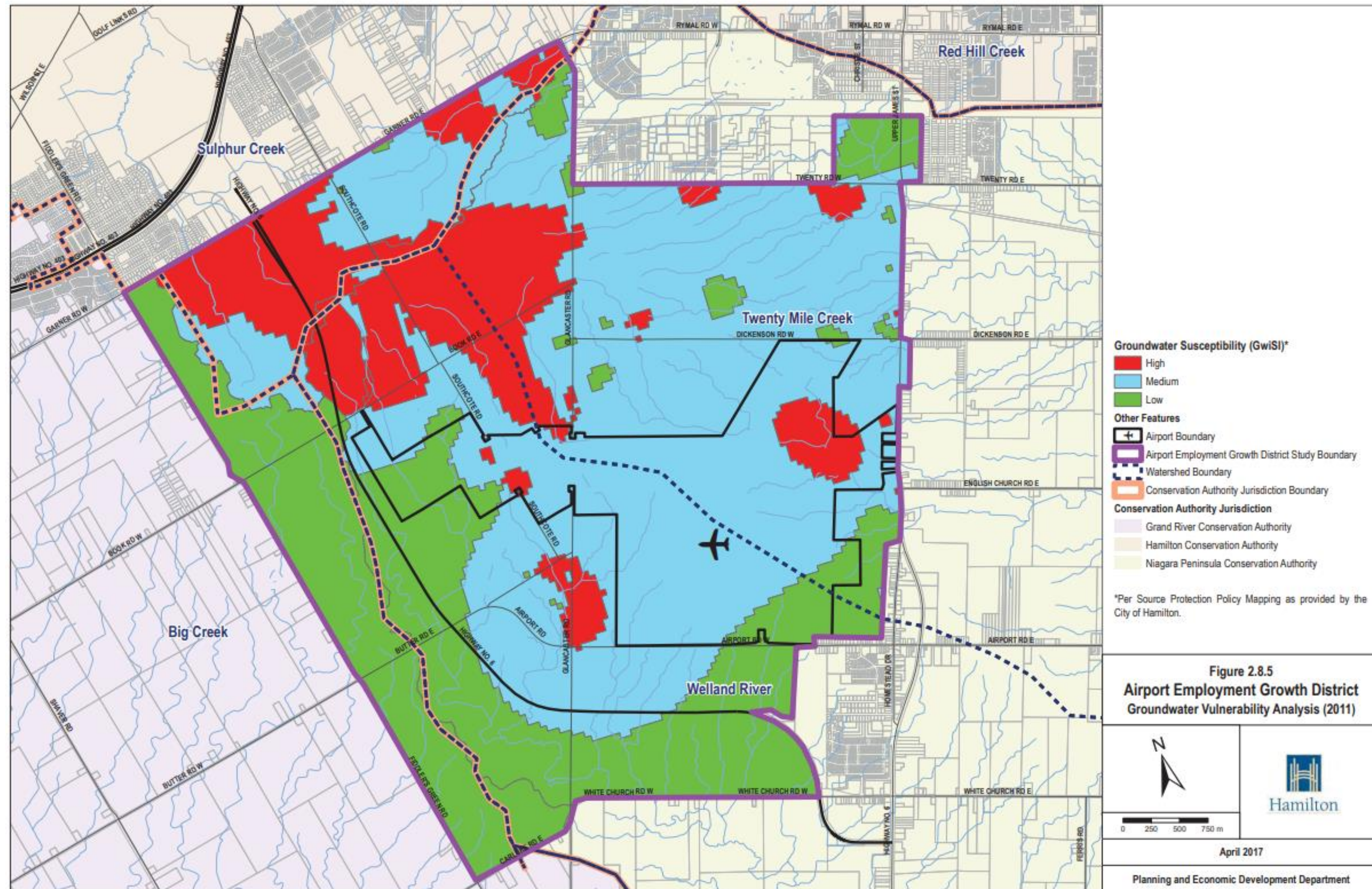
Terrestrial Species at Risk
* Legislation: **SARA**: Species at Risk Act; **ESA**: Endangered Species Act;
****SARO**: Species at Risk Ontario

Natural Environment - Hydrogeologic



Significant Groundwater Recharge Area

Natural Environment - Hydrogeologic



Groundwater Vulnerability Analysis

Natural Environment - Hydrogeologic

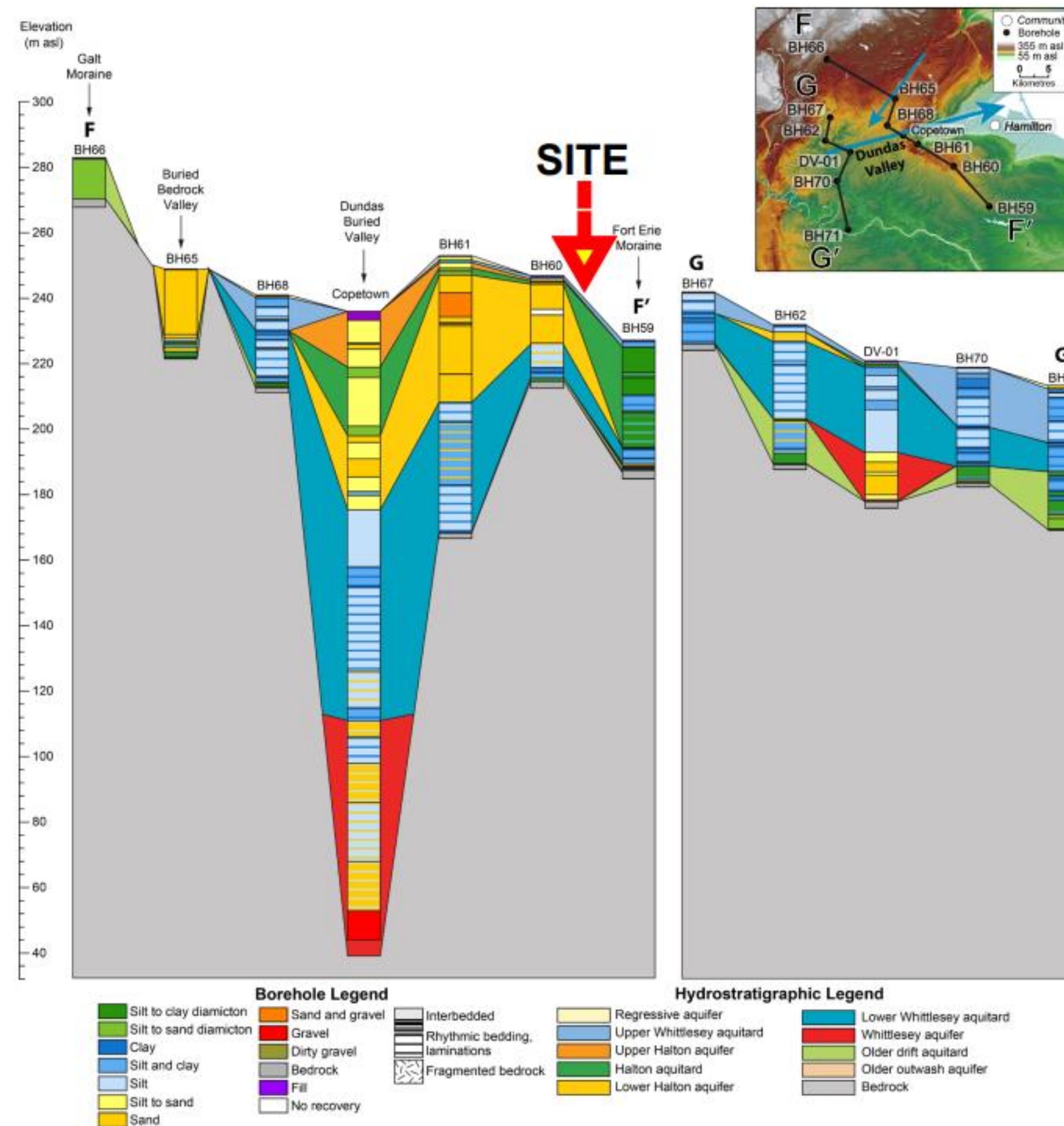


Figure 30.5. Summary logs and preliminary hydrostratigraphy of boreholes drilled in the Dundas Valley area of the Niagara Peninsula area; for information on borehole locations, see figure inset, Figure 30.1 and Table 30.1. Boreholes DV-01 and Copetown were drilled as part of the Dundas Valley project (Marich et al. 2011). Summarized versions of the boreholes are shown. Inset map shows the general area, the locations of cross sections F–F' and G–G' and the boreholes used for the cross sections, overlain on digital elevation model (DEM) image (hillshade) (from Ministry of Natural Resources 2010).

Natural Environment - Hydrogeologic/Soils Constraints and Considerations

- Private water wells are common in proximity to the Site
 - Private water well survey will be completed as part of site plan approval
- Groundwater levels are shallow and trend with the seasons
 - Levels are highest (0.4 m below ground) in the spring
- Soils have low permeability and ground water levels inhibit infiltration

Social Environment



Urban Hamilton Official Plan
Schedule E
Urban Structure

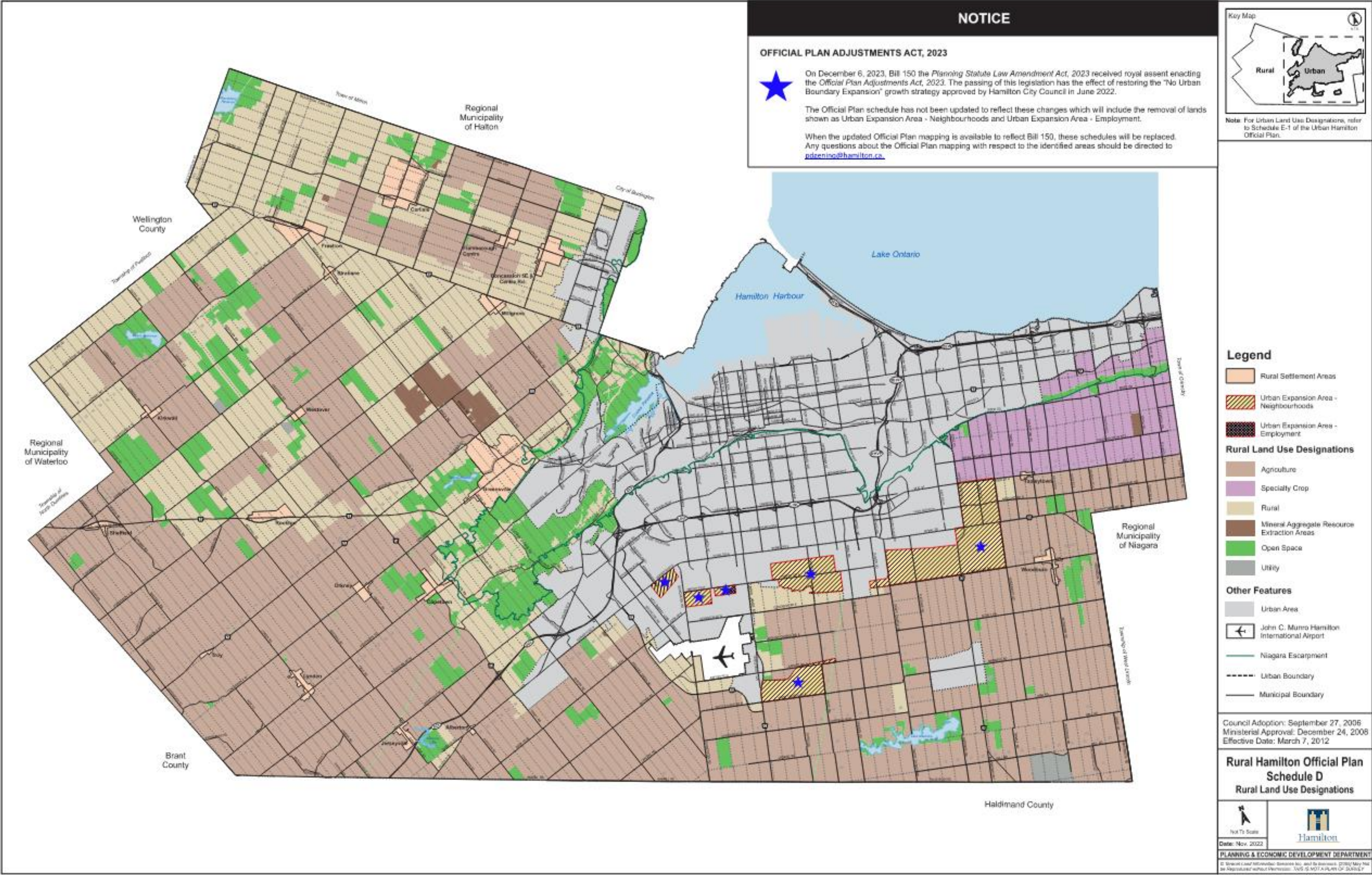
LEGEND

- Airside Industrial
- Airport Prestige Business
- Airport Light Industrial
- Natural Open Space
- John C. Munro Hamilton International Airport

SUBJECT LANDS
9451, 9517, 9569, 9579, 9593 & 9867
Dickenson Road and 1199 & 1205
Glancaster Road
Hamilton, ON

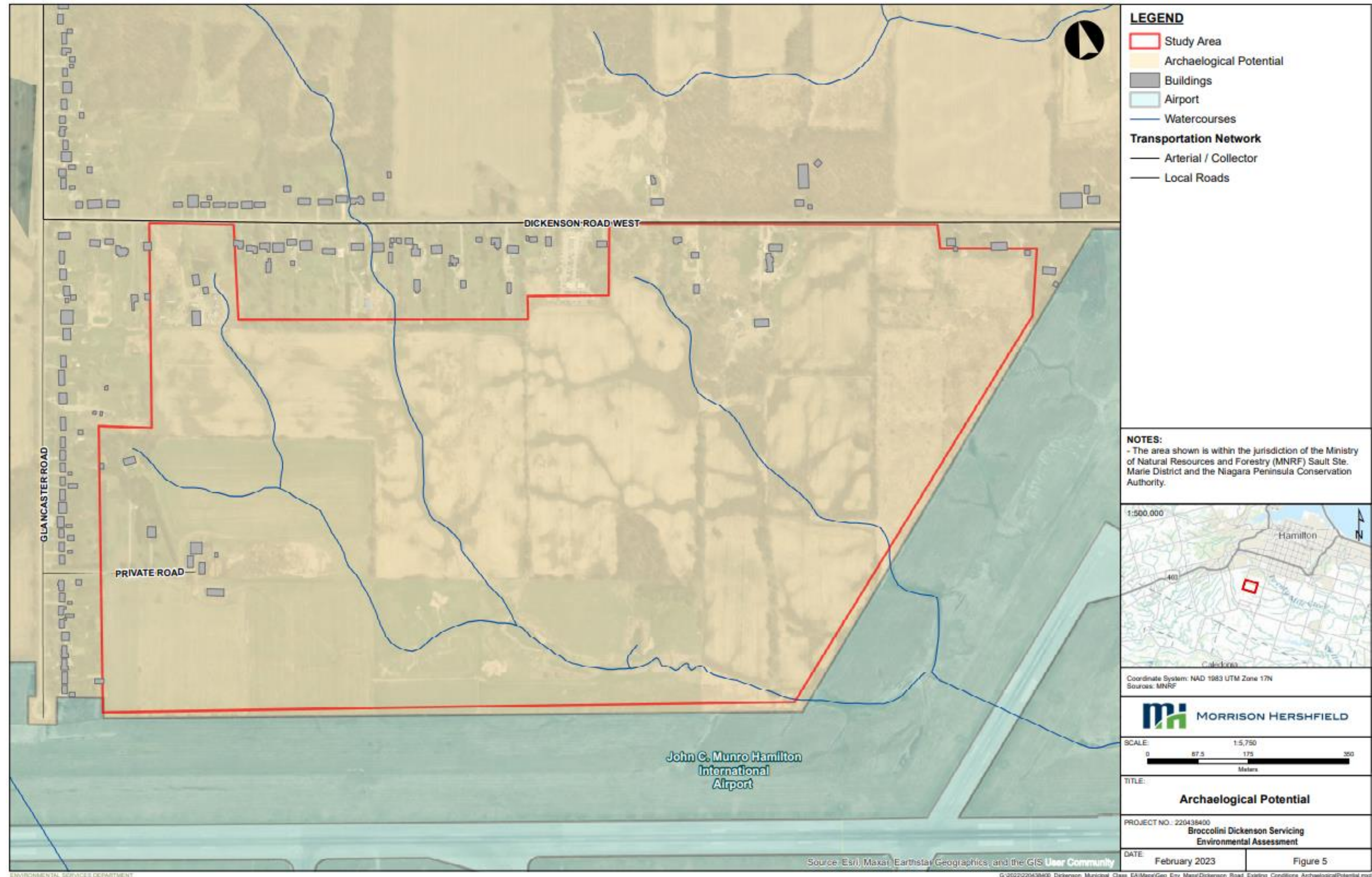
Land Use

Social Environment



Rural Land Use Designation

Social Environment

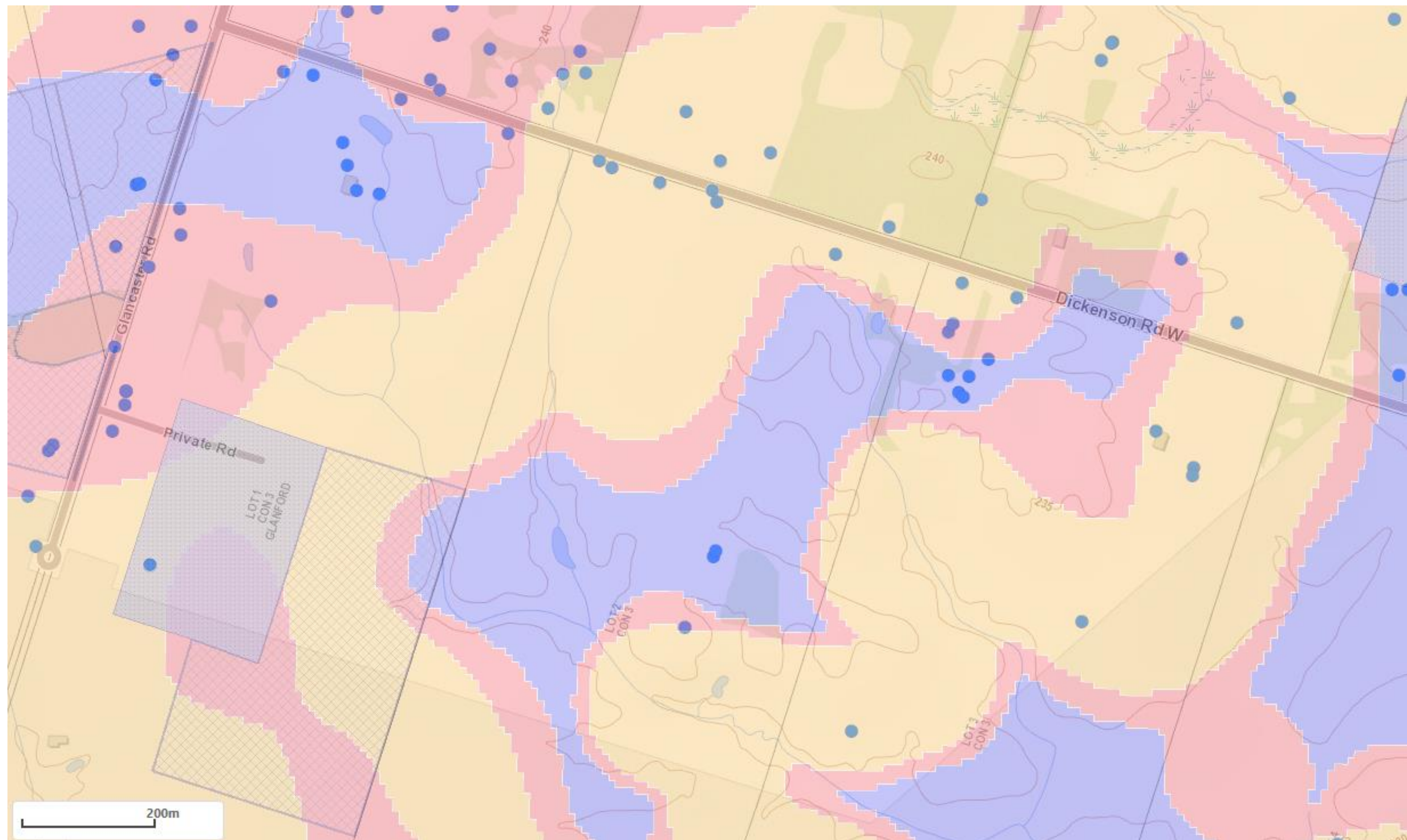


Archaeological Potential

Social Environmental Constraints and Considerations

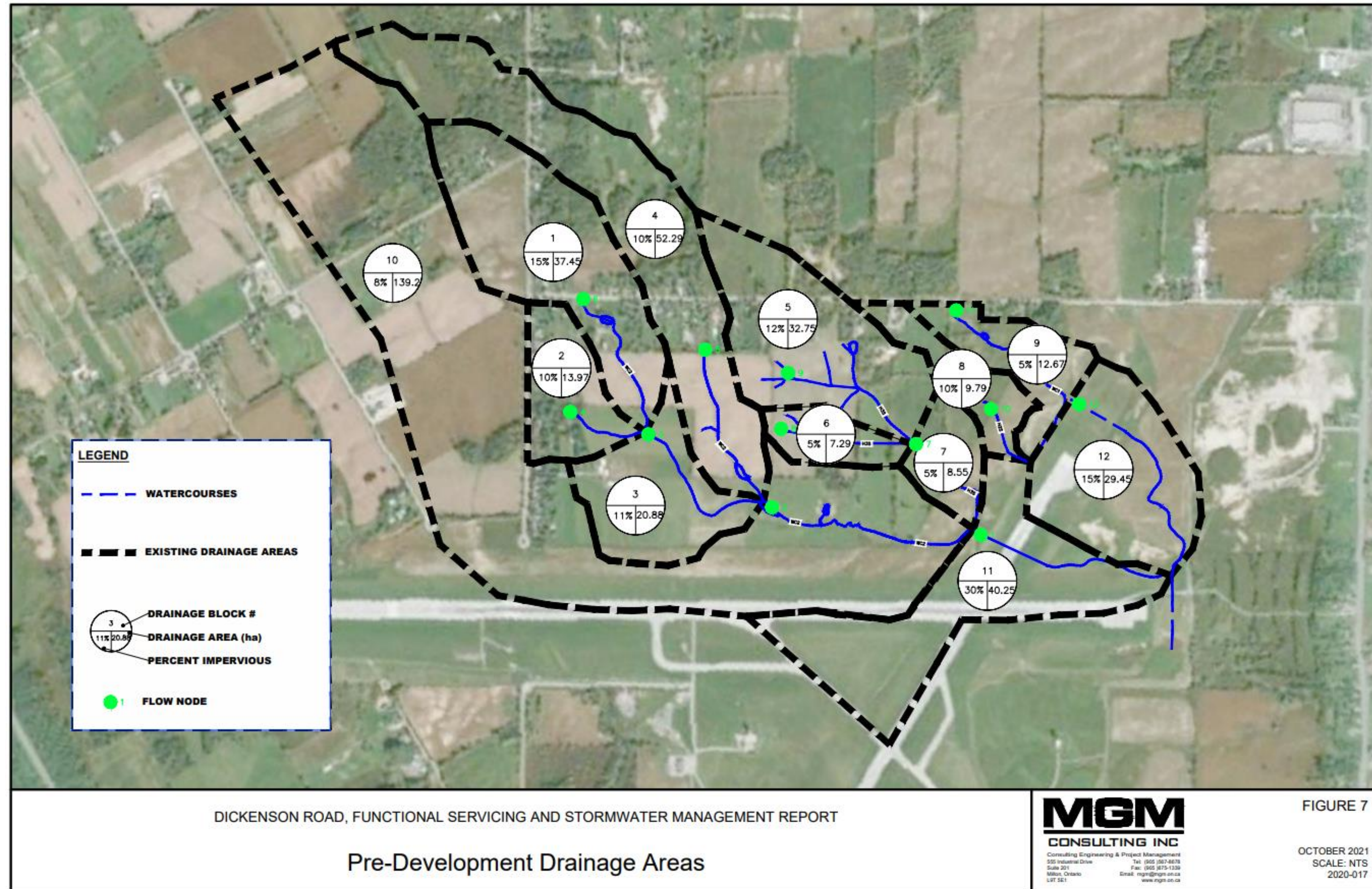
- Existing land use for the area involves natural open spaces, rural and agricultural land
- The lands are designated for employment uses in the Urban Hamilton Official Plan
- Their site is surrounded by:
 - Clusters of rural residential lots
 - Many of the homes, especially to the west of the airport, are situated on large estate lots
- Stage 1 and 2 Archaeological Assessments were prepared in September 2021, July 2023, with Stage 3 to follow
- Study area contains 13 archaeological sites that have cultural heritage value and interest

Physical Environment



Municipal Drains and Wells According to the Agricultural Information Atlas

Physical Environment



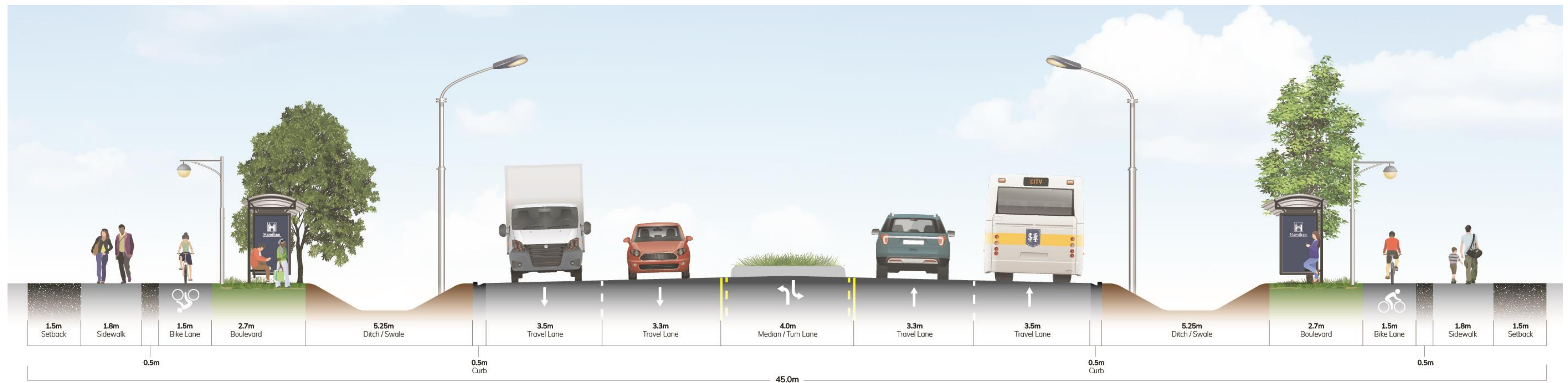
Predeveloped Drainage Areas

Physical Environment – Constraints and Considerations

- Surrounding stormwater is managed through storm sewers and municipal drains
 - Functional Service Report (FSR) dated September 2023 concluded that the municipal rights-of-way can be adequately serviced with storm, water and sanitary servicing
- The 2011 AEGD Transportation Master Plan and area development projects have resulted in additions and removals of stormwater projects driven by land use and road network changes

Cross Section

- The AEGD TMP Update (2024) identified the roadway as a minor arterial roadway with a 45-metre ROW to accommodate swales on both side of the roadway

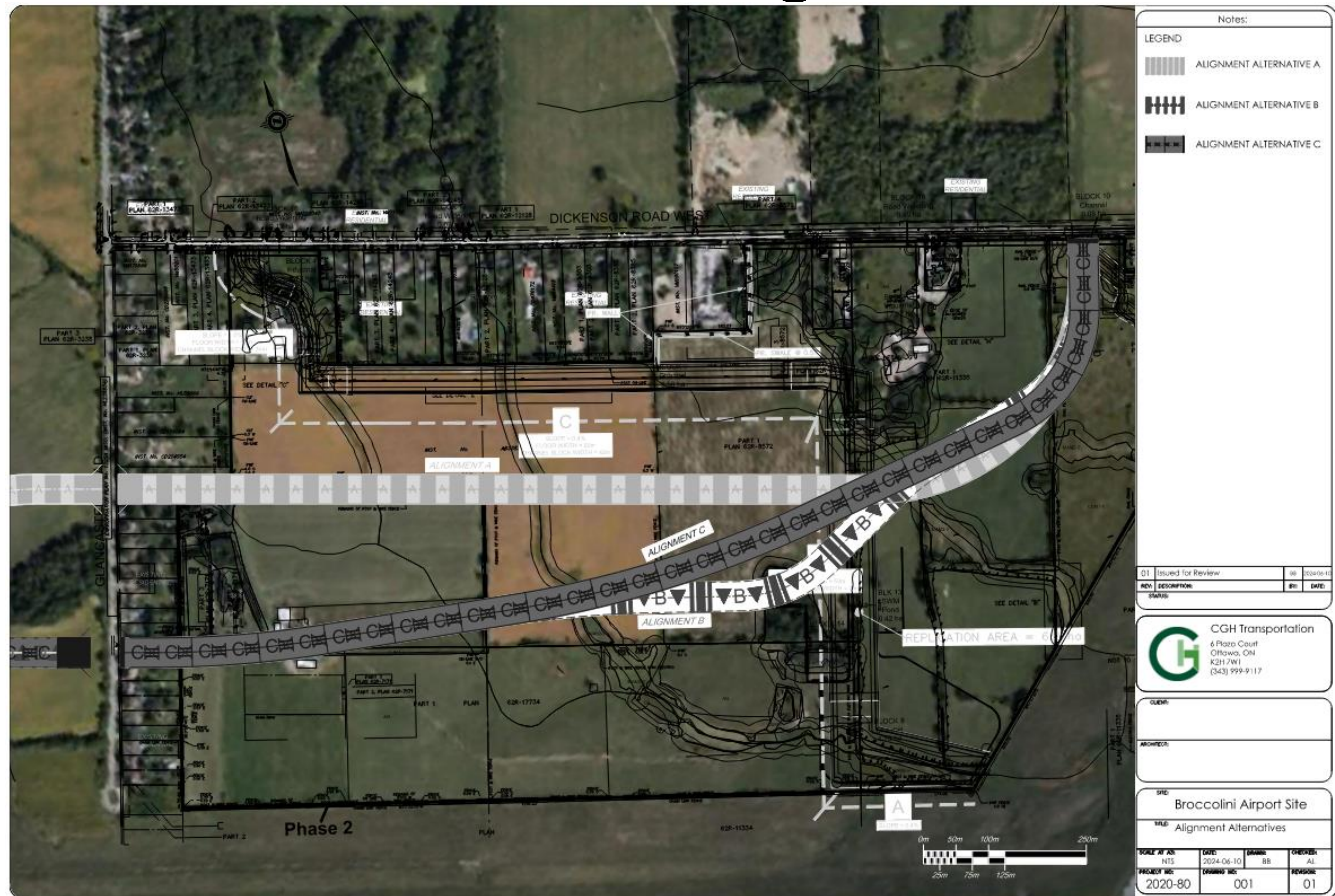


NOTE: The cross section configuration is conceptual, context sensitive and, where applicable, subject to refinements at phases 3 & 4 of the Municipal Class Environmental Assessment or Planning Applications. All cross section elements shall conform to the City master plans, policies and standards, including street lighting, stormwater, landscaping, etc.

Alternative Alignments

- All three alignments are similar (i.e. alignment length, right-of-way width, cross-section, cost)
- All three alignments are similar from a social environment perspective (i.e. archaeology, noise, air quality, heritage buildings/landscapes, vibration)
- Lands need to develop as per the AEGD Secondary Plan
- Existing Conditions includes the realigned channel corridors
- Same number of watercourse crossings for each alignment

Alternative Alignments



Alternative Design Concepts for Preferred Solution

- Alternative A: This alignment was prescribed in the AEGD TMP Update (2024) for Arterial Roadway 1N
- Alternative B
- Alternative C

Alternative A – AEGD TMP Alignment



- One reverse curve, no superelevation*
- Maintaining both woodland communities
- Results in excess fill

*Superelevation is the banking of a roadway along a curve so motorists can safely and comfortably maneuver the curve at reasonable speeds. Superelevation increases as vehicular speeds increase, or as curves become tighter.

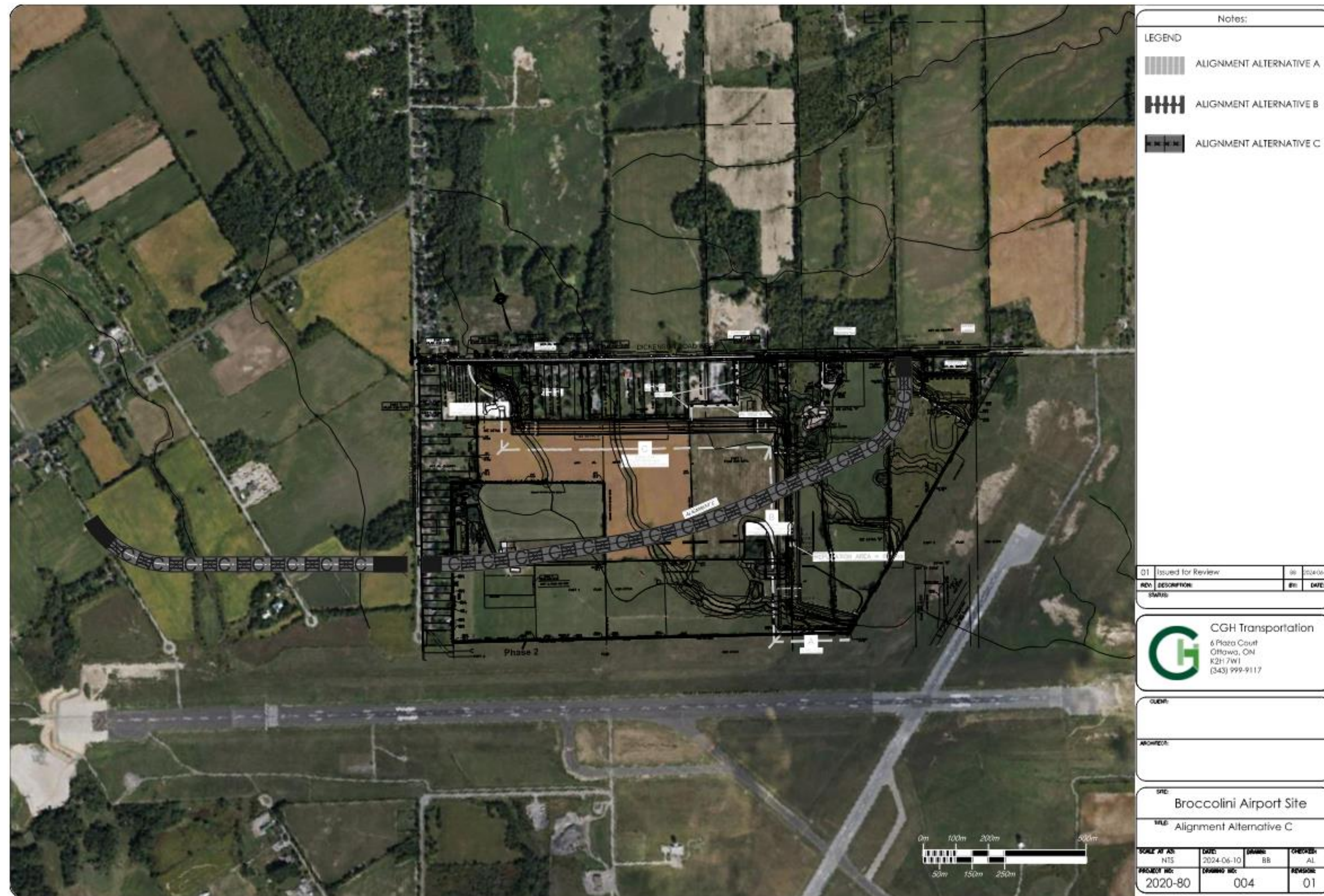
Alternative B



- Five horizontal curves, two with superelevation*
- Partial removal of the deciduous forest
- Minimizes grading impacts

*Superelevation is the banking of a roadway along a curve so motorists can safely and comfortably maneuver the curve at reasonable speeds. Superelevation increases as vehicular speeds increase, or as curves become tighter.

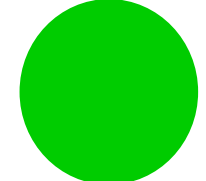
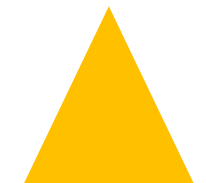
Alternative C



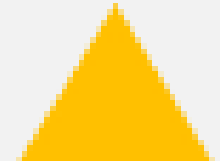
- Conventional roadway geometry
- Maintaining both woodland communities
- Grading challenges around woodlot

*Superelevation is the banking of a roadway along a curve so motorists can safely and comfortably maneuver the curve at reasonable speeds. Superelevation increases as vehicular speeds increase, or as curves become tighter.

Analysis and Evaluation – Scoring System

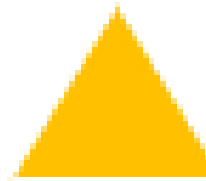
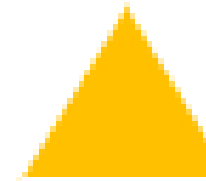
-  Lowest negative impacts or greatest benefits
-  Moderate negative impacts and benefits
-  Highest negative impacts or lowest benefits

Analysis and Evaluation – Transportation Design

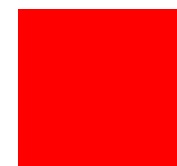
Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Transportation Design	Horizontal Geometry	Total number of horizontal curves and their complexity	One reverse crown curve, no superelevation* is required	Five horizontal curves, superelevation is required on two curves	Three horizontal curves, superelevation is required for one
	Total Criteria Category Score				

*Superelevation is the banking of a roadway along a curve so motorists can safely and comfortably maneuver the curve at reasonable speeds. Superelevation increases as vehicular speeds increase, or as curves become tighter.

Analysis and Evaluation – Land Use – Pt 1

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Compatibility with Existing/Planned Communities and Land Uses	Compatibility with Existing/Planned Communities	Displacement of, or loss of access to, existing and planned land uses	Potential loss of up to three (3) existing residential lots fronting Glancaster Road, that are not owned by developer and/or City of Hamilton	Utilizes an existing City owned right-of-way, namely, Arkwood Drive to connect to Glancaster Road. Potential loss of up to three (3) existing residential lots fronting Glancaster Road which are not currently owned by developer and/or City of Hamilton	Utilizes an existing City owned right-of-way, namely, Arkwood Drive to connect to Glancaster Road. Potential loss of up to three (3) existing residential lots fronting Glancaster Road which are not currently owned by developer and/or City of Hamilton
			Aligns with overall Urban Hamilton Official Plan (UHOP) AEGD Transportation Master Plan (TMP), however, it does not align with intended development of adjacent landowner west of Glancaster Road	Requires modifications to planned Arterial Roadway 1N alignment west of Glancaster Road and overall AEGD TMP and UHOP however, it is aligned with the intended development of adjacent landowner west of Glancaster Road	Requires modifications to planned Arterial Roadway 1N alignment west of Glancaster Road and overall AEGD TMP and UHOP however, it is aligned with the intended development of adjacent landowner west of Glancaster Road
					

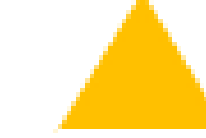
Analysis and Evaluation – Land Use – Pt 2

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Compatibility with Existing/Planned Communities and Land Uses	Compatibility with Existing/Planned Communities	Compatibility with existing use of land	Impacts to existing residential fronting Glancaster Road in result of shallow development blocks on the north side of Arterial Roadway 1N, and inability to establish appropriate setbacks and buffers from employment uses	Creates opportunity for larger buffers between existing residential fronting Glancaster Road and employment uses, by way of setbacks.	Creates opportunity for larger buffers between existing residential fronting Glancaster Road and employment uses, by way of setbacks.
			Shallow block depths will not facilitate feasible "Prestige Industrial" development that can accommodate required gross floor area, parking areas, loading bays, landscaping, etc.	Is aligned with intended development of lands on the west side of Glancaster Road	Is aligned with intended development of lands on the west side of Glancaster Road
			Results in "Airside Industrial" development blocks that are too large/deep to meet current market demands, resulting in an inefficient use of urban lands		
					

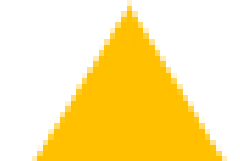
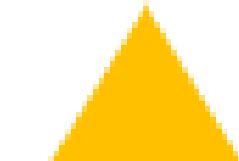
Analysis and Evaluation – Land Use – Pt 3

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Compatibility with Existing/Planned Communities and Land Uses	Urban Design Potential	Ability to incorporate streetscaping improvements, public art	Shallow development blocks would constrain the ability to provide streetscaping improvements, including planting strips, and screened parking and loading 	Larger development blocks allow for more flexible end user design and streetscaping improvements, including planting strips, and screened parking and loading 	Larger development blocks allow for more flexible end user design and streetscaping improvements, including planting strips, and screened parking and loading 
		Ability to link private and public spaces and communities	Provides a fully urbanized cross-section, including sidewalks, and bike lanes 	Provides a fully urbanized cross-section, including sidewalks, and bike lanes 	Provides a fully urbanized cross-section, including sidewalks, and bike lanes 
		Development efficiency for land use	Shallow block depths will not facilitate feasible "Prestige Industrial" development that can accommodate required gross floor area, parking areas, loading bays, landscaping, etc.	Allows for opportunity for larger building footprints within the "Prestige Industrial" to meet current market demands	Allows for opportunity for larger building footprints within the "Prestige Industrial" to meet current market demands
			Results in "Airside Industrial" development blocks that are too large/deep to meet current market demands, resulting in an inefficient use of urban lands 	Results in more logical block size for "Airside Industrial" lands 	Results in more logical block size for "Airside Industrial" lands 
		Total Criteria Category Score			

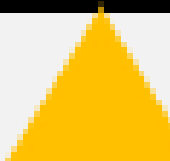
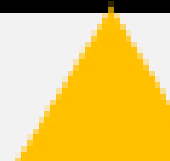
Analysis and Evaluation – Natural Environment – Pt 1

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Natural Environment	Effects on aquatic habitat	Permanent effects on aquatic habitat and species (e.g. habitat removal, increased shading, etc.)	Potential effects include two watercourse crossings and local decrease in habitat quality 	Potential effects include two watercourse crossings and local decrease in habitat quality 	Potential effects include two watercourse crossings and local decrease in habitat quality 
		Temporary effects on aquatic habitat and species (e.g. temporary disturbance during construction, sedimentation, etc.)	A temporary decrease in habitat quality and effects to fish passage due to temporary flow diversion, localized loss of natural heritage features such as riparian vegetations (e.g. wetlands)	A temporary decrease in habitat quality and effects to fish passage due to temporary flow diversion, localized loss of natural heritage features such as riparian vegetations (e.g. wetlands)	A temporary decrease in habitat quality and effects to fish passage due to temporary flow diversion, localized loss of natural heritage features such as riparian vegetations (e.g. wetlands)
			Increase in impervious surfaces affecting runoff patterns, and increased erosion, scouring and deposition during the installation of the culverts	Increase in impervious surfaces affecting runoff patterns, and increased erosion, scouring and deposition during the installation of the culverts	Increase in impervious surfaces affecting runoff patterns, and increased erosion, scouring and deposition during the installation of the culverts
					
	Effects on terrestrial habitat	Effects to vegetation (e.g. woodlands, wetlands, meadows/thickets, etc.), wildlife and migratory birds	Moderate loss of meadow/thicket habitat resulting in the potential displacement of wildlife and migratory birds	Highest loss of meadow/thicket and woodland habitat resulting in the potential displacement of wildlife and migratory birds	Moderate loss of meadow/thicket habitat resulting in the potential displacement of wildlife and migratory birds
			No loss of woodland habitat 	No loss of woodland habitat 	No loss of woodland habitat 

Analysis and Evaluation – Natural Environment – Pt 2

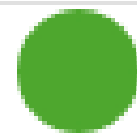
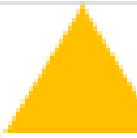
Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Natural Environment	Effects on natural heritage features and functions	Loss/impact on significant species (flora/fauna)	No impacts to threatened and endangered species (and their associated habitats) are expected	No impacts to threatened and endangered species (and their associated habitats) are expected	No impacts to threatened and endangered species (and their associated habitats) are expected
			No impact to locally rare and uncommon species or vegetation communities are expected	No impact to locally rare and uncommon species or vegetation communities are expected	No impact to locally rare and uncommon species or vegetation communities are expected
					
		Potential impact on significant natural features (e.g. Provincially Significant Wetland, Significant Wildlife Habitat, Areas of Natural and Scientific Interest, Urban Natural Features, Core Areas and Linkages)	Moderate loss of the following significant natural heritage features: Habitat for Species of Conservation Concern (Monarch) within Cultural Meadows	Highest loss of the following significant natural heritage features: including Bat Maternity Colonies and Habitat for Species of Conservation Concern (Monarch) within Cultural Meadows	Moderate loss of the following significant natural heritage features: Habitat for Species of Conservation Concern (Monarch) within Cultural Meadows
			Moderate loss of short length of watercourse (Core Area) as a result of the watercourse crossing	Moderate loss of short length of watercourse (Core Area) as a result of the watercourse crossing	Moderate loss of short length of watercourse (Core Area) as a result of the watercourse crossing
					

Analysis and Evaluation – Natural Environment – Pt 3

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Natural Environment	Effects on natural heritage features and functions	Potential impacts to terrestrial linkages	No impacts to known terrestrial linkages 	No impacts to known terrestrial linkages 	No impacts to known terrestrial linkages 
		Potential impacts to natural heritage buffers	No impacts to existing or proposed buffers: 15 metre buffer provided to southern woodland	Road traverses the northern half of the southern woodland: proposed alternative does not provide for a buffer along the northern limit of the southern woodland	No impacts to existing or proposed buffers: 15 metre buffer provided to southern woodland
			Road traverses wetland near Dickenson Road West 	Road traverses wetland near Dickenson Road West 	Road traverses wetland near Dickenson Road West 
					
		Total Criteria Category Score			

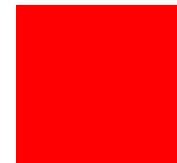
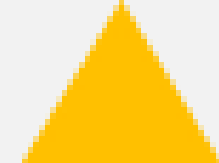
Analysis and Evaluation – Utility Impact

– Pt1

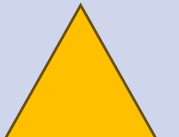
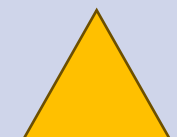
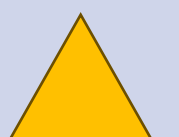
Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Utility Impact	Effects on Municipal Services and Utilities	Effects on infrastructure and utilities including new water crossings	Requires the most stormwater management infrastructure	Requires the least stormwater management infrastructure	Requires intermediate stormwater management infrastructure
			Shortest servicing/utility crossing at proposed watercourse crossing	Longest servicing/utility crossing at proposed watercourse crossing	Intermediate servicing/utility crossing at proposed watercourse crossing
					
		Effects on existing and new crossings	Existing crossings remain unchanged	Existing crossings remain unchanged	Existing crossings remain unchanged
			Shortest proposed crossing length	Moderate proposed crossing length	Moderate proposed crossing length
					
		Effects on stormwater quality and quantity	Longest and most costly overland flow path for all development blocks and right-of-way drainage	Shortest and least expensive overland flow path for all development blocks and right-of-way drainage	Intermediate length and mid-level costs for the overland flow path for all development blocks and right-of-way drainage
			Requires the highest easement land dedications needed to convey major flows	Requires the least easement land dedications needed to convey major flows	Requires an intermediate level of easement land dedications for major flow conveyance
			Provides the least quality control for the development blocks due to the shortest flow paths in stormwater management facilities	Provides the most quality control for the development blocks due to the longest flow paths (in stormwater management facilities and drainage swale easements)	Provides moderate quality control for the development blocks
					

Analysis and Evaluation – Utility Impact –

Pt 2

Criteria Category	Criteria	Indicators	Alternative A	Alternative B	Alternative C
Cost	Capital Cost	Estimated construction costs (including excavation/filling, lighting, signals, landscaping, associated infrastructure, construction complexity)	Largest Fill requirement	Moderate fill requirement	Moderate fill requirement
			Largest storm sewer capital cost resulting from the long minor system flow path of drainage block 2	Moderate storm sewer capital cost resulting from the long minor system flow path of drainage block 2	Moderate storm sewer capital cost resulting from the long minor system flow path of drainage block 2
			Moderate right-of-way sanitary sewer cost	Moderate right-of-way sanitary sewer cost	Moderate right-of-way sanitary sewer cost
			Moderate right-of-way watermain sewer cost	Moderate right-of-way watermain sewer cost	Moderate right-of-way watermain sewer cost
					
		Potential throw away costs	Potential watermain flushing stations at dead end	None	None
					
Total Criteria Category Score					

Analysis and Evaluation - Combined

Criteria Category	Alternative A	Alternative B	Alternative C
Transportation Design			
Compatibility with Existing/Planned Communities and Land Uses			
Natural Environment			
Utility Impact			
SUMMARY SCORE			

Preferred Alignment – Alternative C



- Conventional roadway geometry
- Maintaining both woodland communities
- Grading challenges around woodlot
- Preferred market demand due to larger buildable blocks

We want to hear from you!

Your input is important to us and your comments are welcome at any time during the study, but we kindly ask that you forward any comments by:

July 18, 2024

This is so we can incorporate critical information into the next phase of the study. Following this open house, please provide your comments to us:

Project website: cghtransportation.com/planning/Arterial1NEA



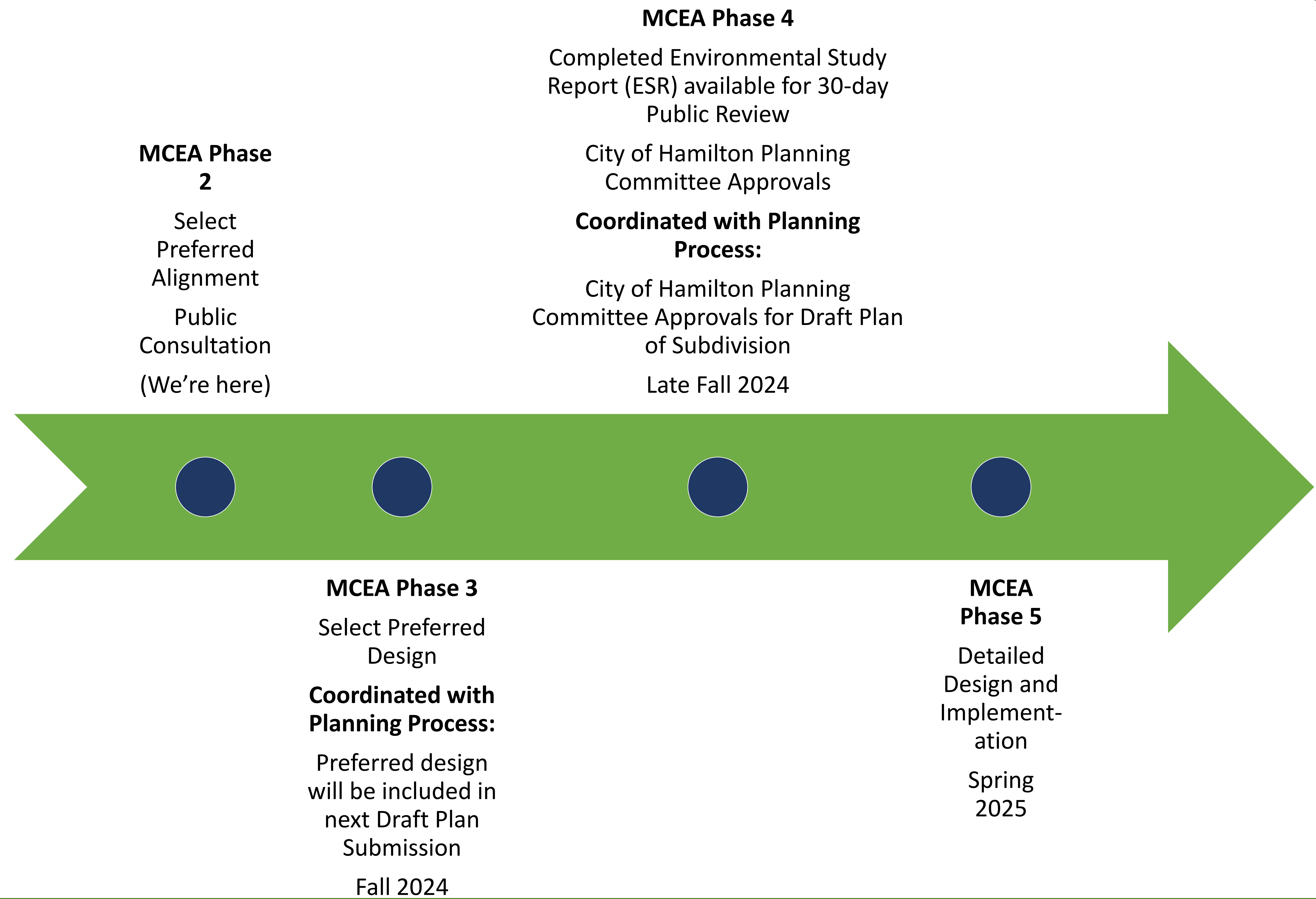
Christopher Gordon, P.Eng.

CGH Transportation Inc.

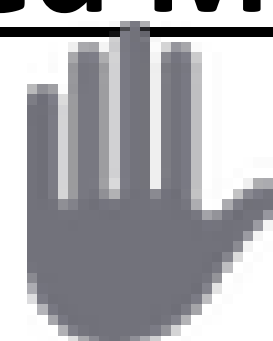
P: 343-999-9117

E: Christopher.Gordon@CGHTransportation.com

Consultation Process Timeline/Next Steps



Housekeeping Items

- This Virtual Public Information Centre will be recorded and posted to the project web page
 - All participants are automatically muted and off camera for the duration of the meeting
 - Please **remain on Mute**  during the presentation. There will be an opportunity to ask questions at the end
 - Please try to be brief to allow all participants the opportunity to ask a question.
 - There are two methods to ask a question:
 1. Type the question into the Chat  window at any time – **Preferred Method**
 2. In the meeting controls, click **Reactions** , then click **Raise Hand** . The host will be able to unmute your microphone to enable you to ask your question
 - We will be combining responses to any frequently asked questions where possible
- After the meeting, a Question and Answer matrix will be prepared and posted to the project webpage

Thank you!

Q & A

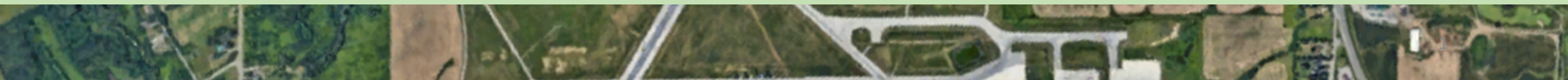


Arterial Roadway 1N (Glancaster to Dickenson Road West)

Municipal Class Environmental Assessment, Schedule C, Phase 3

Public Information Centre #2

2025-01-14



Housekeeping Items

- This Virtual Public Information Centre will be recorded and posted to the project web page
- All participants are automatically muted and off camera for the duration of the meeting
- Please **remain on Mute**  during the presentation. There will be an opportunity to ask questions at the end
- Please try to be brief to allow all participants the opportunity to ask a question.
- There are two methods to ask a question:
 1. Type the question into the Chat  window at any time – **Preferred Method**
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- We will be combining responses to any frequently asked questions where possible

After the meeting, a Question and Answer matrix will be prepared and posted to the project webpage

Presentation Outline

1. Land Acknowledgement
2. Why are we here?
3. Municipal Class Environmental Assessment Process
4. Consultation Process Timeline
5. Background and Study Area Overview
6. Open House #1 Summary
7. Cross-Section
8. Sample Midblock Intersection
9. Evaluation of Alternative Designs
10. Technically Preferred Alternative Designs

Land Acknowledgement

The City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation.

Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.

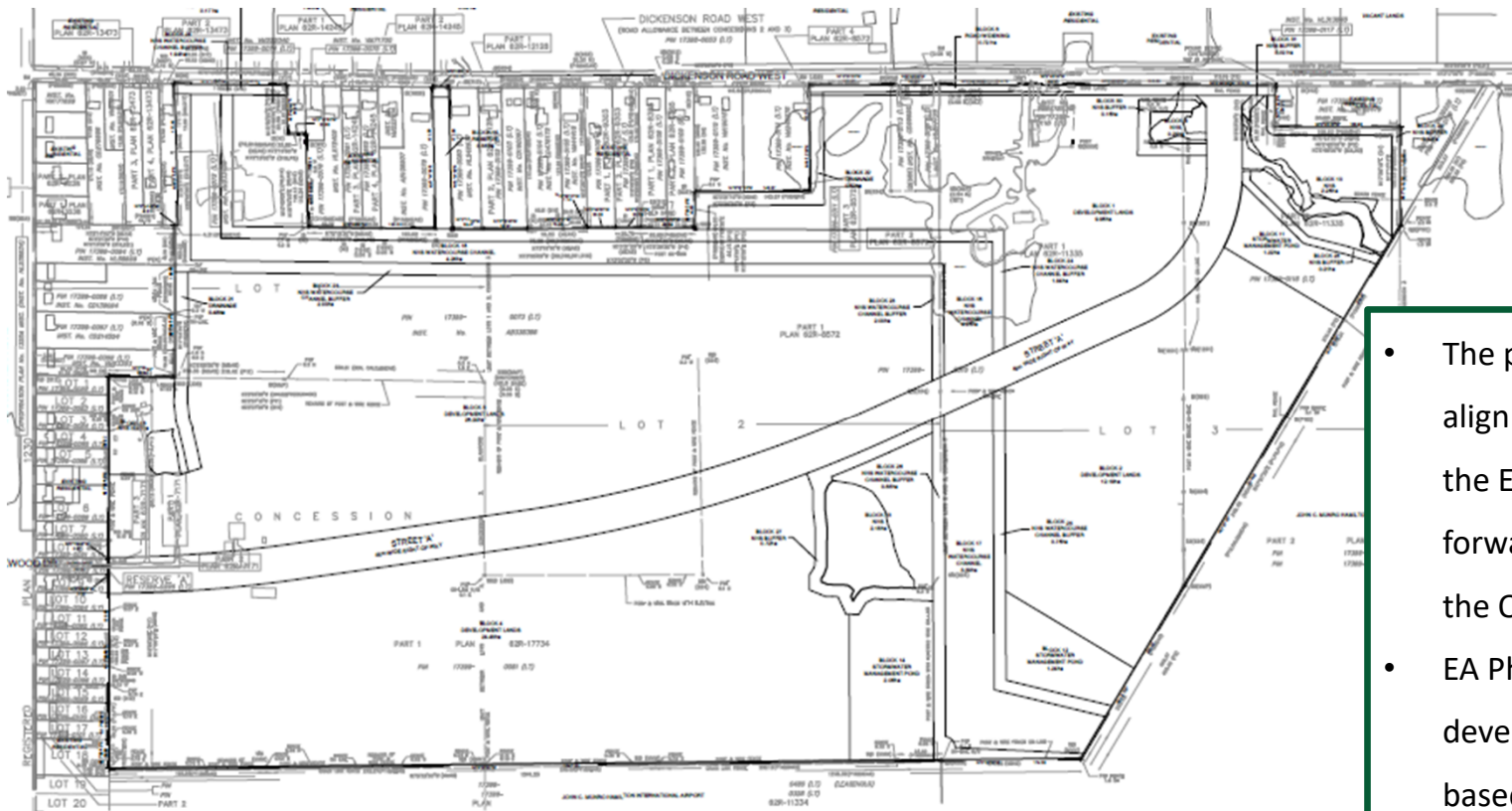
Why are we here?

Dickenson Limited Partnership (Dickenson) is undertaking a Draft Plan of Subdivision process for a new industrial development adjacent to the John C. Munro Hamilton International Airport (JCMHIA) within the City of Hamilton's Airport Employment Growth District (AEGD) Secondary Plan lands. The project recently completed an Ontario Land Tribunal process, which helped establish the land use context that Arterial Roadway 1N will service.

In parallel with the Draft Plan of Subdivision process, the Municipal Class Environmental Assessment process is being completed for a road referred to as "Arterial Roadway 1N", by CGH Transportation Inc. on behalf of Dickenson Limited Partnership (as the proponent). Arterial Roadway 1N is an east-west road that bisects Dickenson's industrial lands.

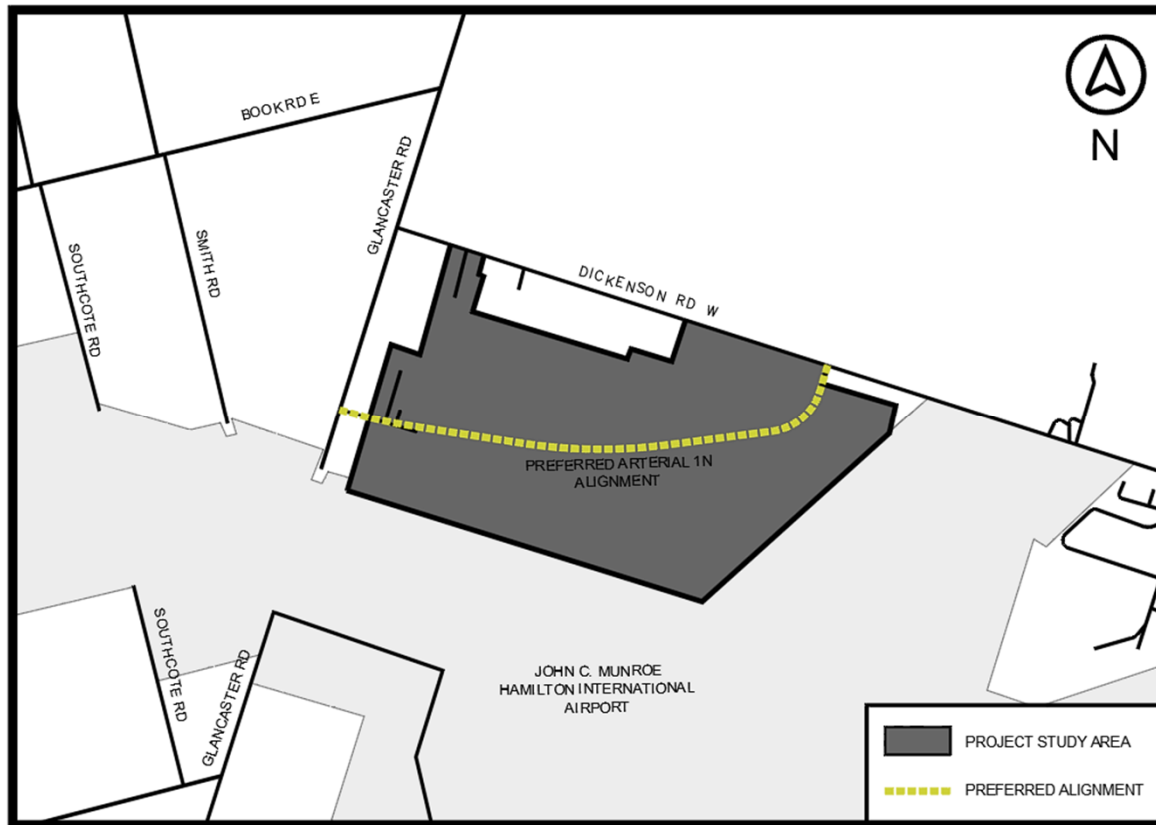
The AEGD Transportation Master Plan (TMP) Update – June 2024 specified a roadway location for Arterial Roadway 1N closer to the north limit of Dickenson's land. To increase the developable block sizes and align with market demands, Phase 2 of the EA process analyzed and evaluated other potential alignments of Arterial Roadway 1N. A preferred alignment has now been identified in Phase 2, and Phase 3 of the process evaluates alternative designs for the alignment.

Plan of Subdivision from the Ontario Land Tribunal Process



- The plan subdivision shows the alignment selected in Phase 2 of the EA, which has been carried forward to, and adopted through the OLT process
- EA Phase 3 (this phase) is developing functional designs based on the outcome of Phase 2

Study Area Overview



The Study Area is bordered by Dickenson Road West to the north, Glancaster Road to the west, and the John C. Munro Hamilton International Airport (JCMHIA) to both the east and south.

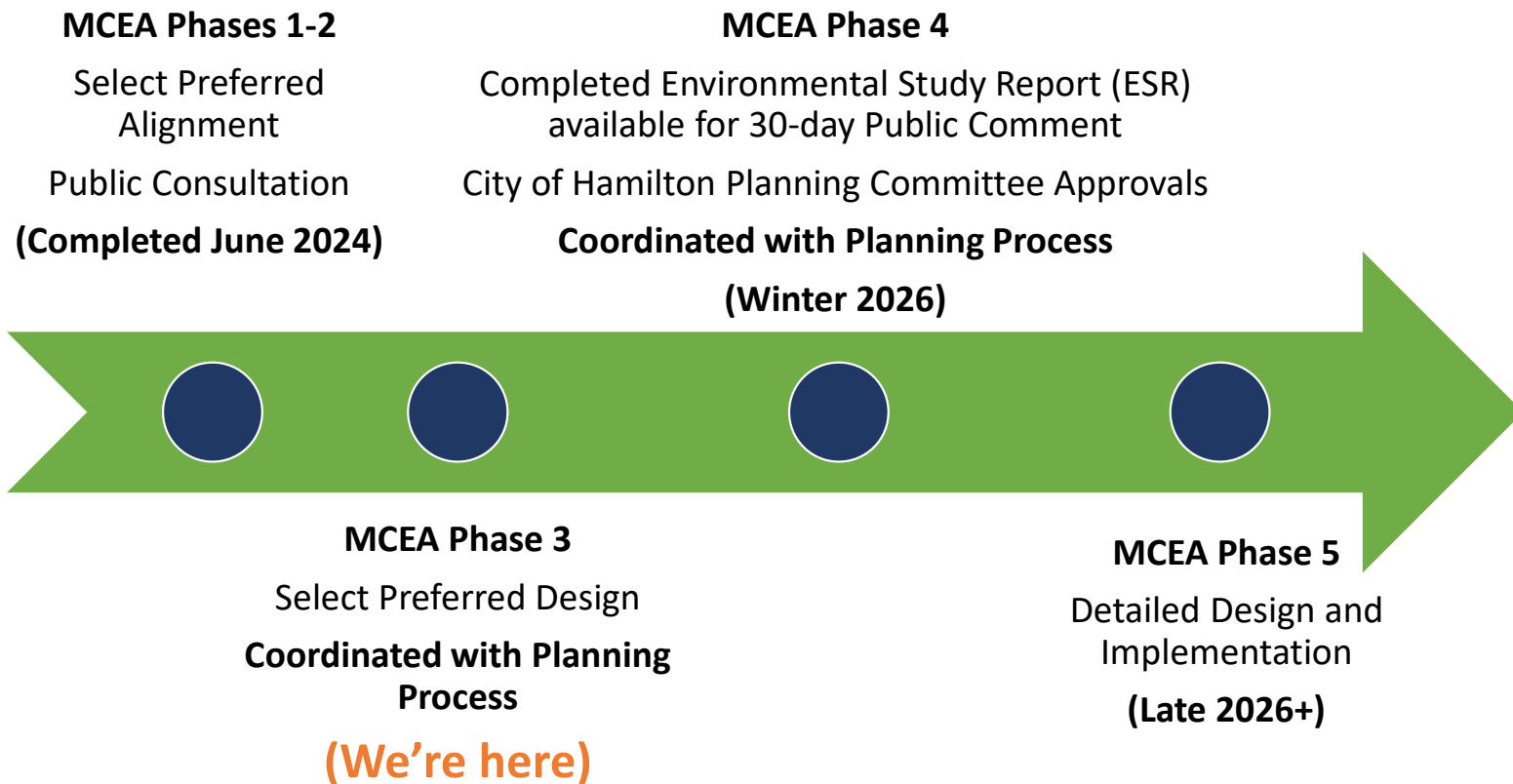
The preferred alignment of Arterial Roadway 1N is an identified link in the City's AEGD TMP Update – June 2024. For this study, it connects Dickenson Road West and Glancaster Road, and services the lands adjacent to the JCMHIA, as shown.

Municipal Class Environmental Assessment (MCEA) Process

The proponent is undertaking Phases 3 and 4 (Schedule 'C') of the MCEA process to refine alignment details and identify environmental impacts and mitigation. The current stage of the process is indicated below.



Consultation Process Timeline



Developing the Preferred Alignment

Public Information Centre (PIC) #1 Summary

- The virtual PIC #1 for Phase 2 of the Environmental Assessment was held on June 27, 2024
- Existing constraints and considerations regarding the natural, social, and physical environment were reviewed
- Three alternative alignments were presented, and were shown to be similar from a social environment perspective (i.e. archaeology, noise, air quality, heritage buildings / landscapes, vibration)
- A preferred alignment was established; the comment period for the virtual PIC ended on July 18th, 2024 and confirmed the result (preferred alignment is shown on the next slide)
- The content presented in PIC #1 can be found on the following project website:
cghtransportation.com/planning/Arterial1NEA

Preferred Alignment Developed from Phase 2



- Intersection design at Dickenson Road is part of the Dickenson Road EA; more details can be found on the project website:
hamilton.ca/environmental-assessments/dickenson-road-upper-james-st-glancaster-rd
- Alignment shown above was developed in Phase 2 and brought forward to the planning process
- Segment west of Glancaster Road is to be confirmed in a future EA study conducted by other proponents

Developing the Preferred Cross Section

Cross Section Analysis and Evaluation

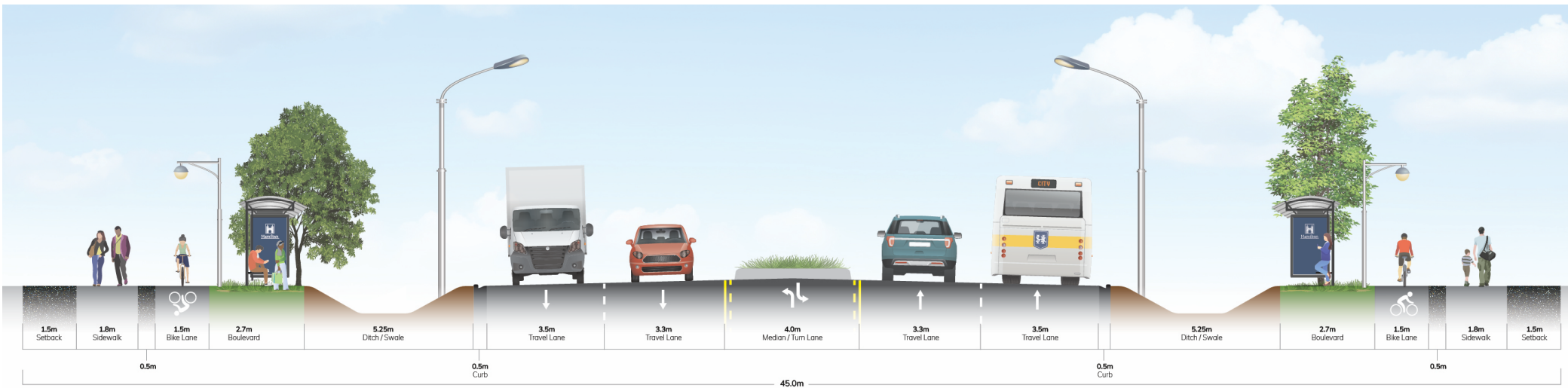
- The AEGD TMP Update (2024) cross sections were developed in accordance with the *Hamilton Complete Streets Design Guidelines (2022)* and the *Eco-Industrial Design Guidelines (2010)*
- Research and consultation were carried out by the City to develop the recommended cross-sections
- The cross section components that fulfill the necessary modal needs (as identified in the AEGD TMP Update (2024) Conceptual Cross Section) for this type of arterial road will be carried forward in the development of the design for Arterial Roadway 1N

Cross Section Screening

Element	AEGD TMP Update Conceptual Cross Section	Carry Forward? (✓ = Yes / ✗ = No)
Pedestrian Realm	3.8 m Multi-Use Path (MUP) with 1.5 m edge zone	✓
Cycling Facilities	1.5 m one way bike lane provided as part of MUP	✓
Transit Service	2.7 m boulevard for transit service	✓
Through Movement	Two lanes per direction with centre median/turn lane with total midblock lane width of 17.6 m	✓
On-Street Parking	No on-street parking provided	✓
Green Infrastructure	Bioswales provided along with boulevard landscaping as low impact development features	✓

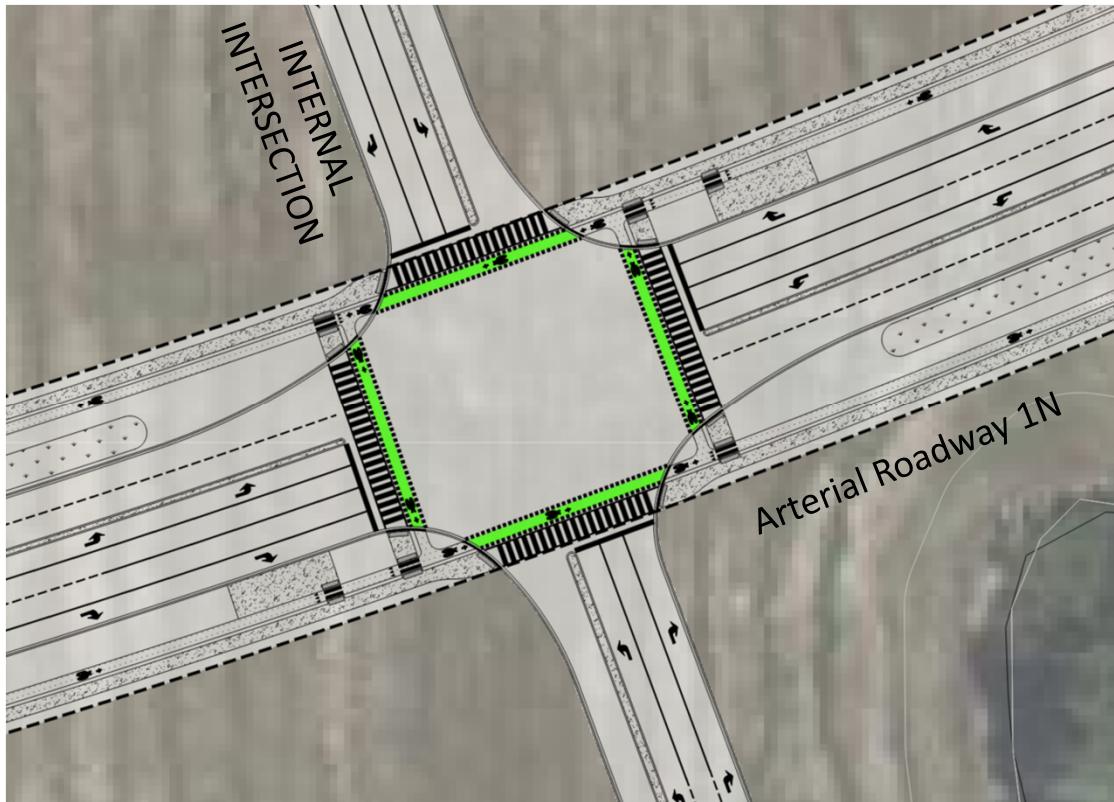
Technically Preferred Cross Section

- Based on the screening results, the following cross-section is identified as the technically preferred alternative
- The technically preferred alternative is consistent with the AEGD TMP Update (2024)
- The cross section at the Glancaster Road intersection may differ depending on the preferred design alternative selected



Developing the Typical Intersection Configuration

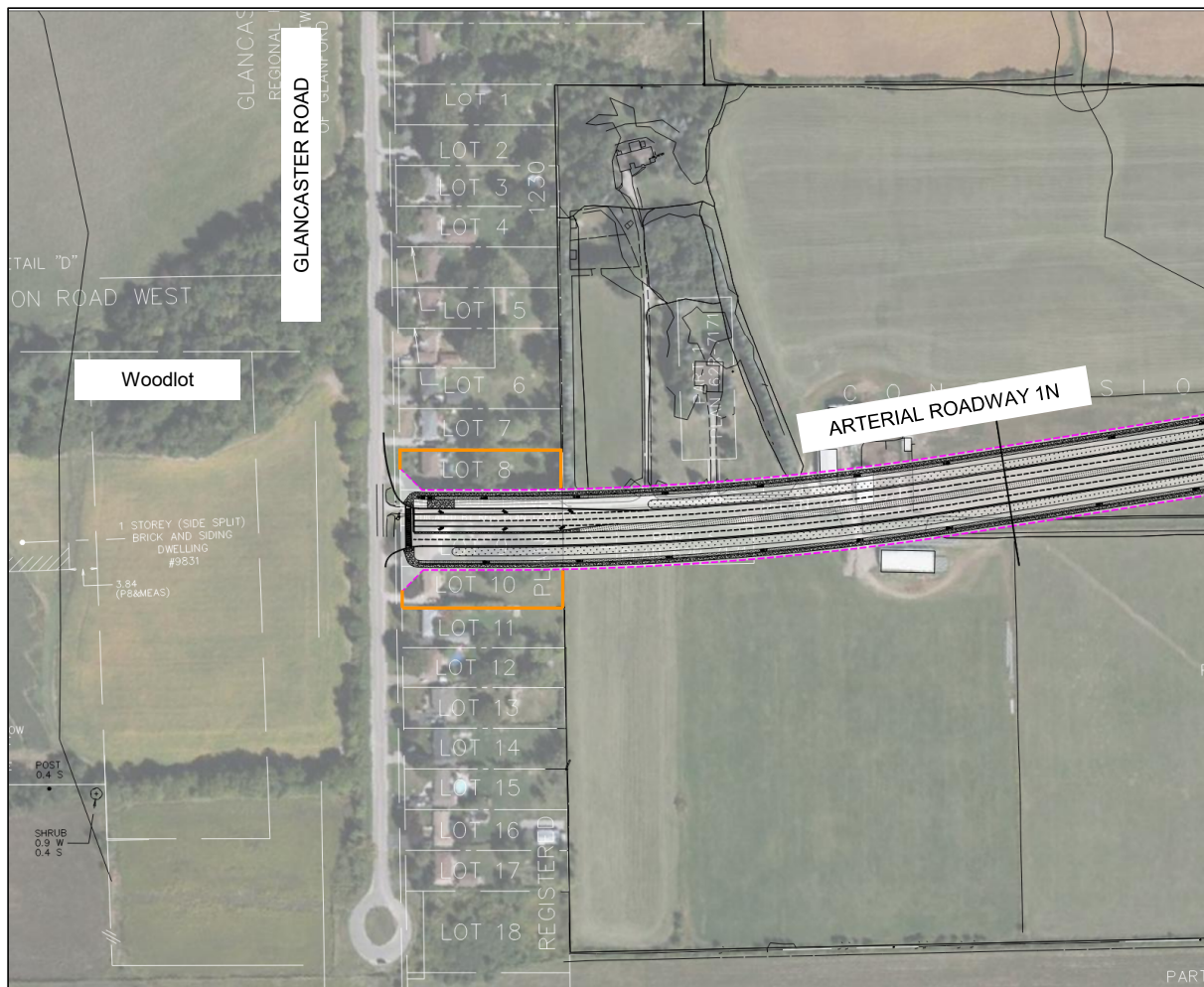
Typical Midblock Intersection



- Pedestrian and cyclist amenities provided
- Bioswales (designed, shallow, vegetated channel to manage stormwater runoff) on both sides of the roadway
- Bus pads are provided near the side
- Signal warrants (a guideline used to determine if an intersection requires traffic signals) are to be determined based on projected traffic volume as part of the detailed design at a later stage
- Preferred location of the intersection(s) will be determined based on the location of side streets required to access adjacent developments

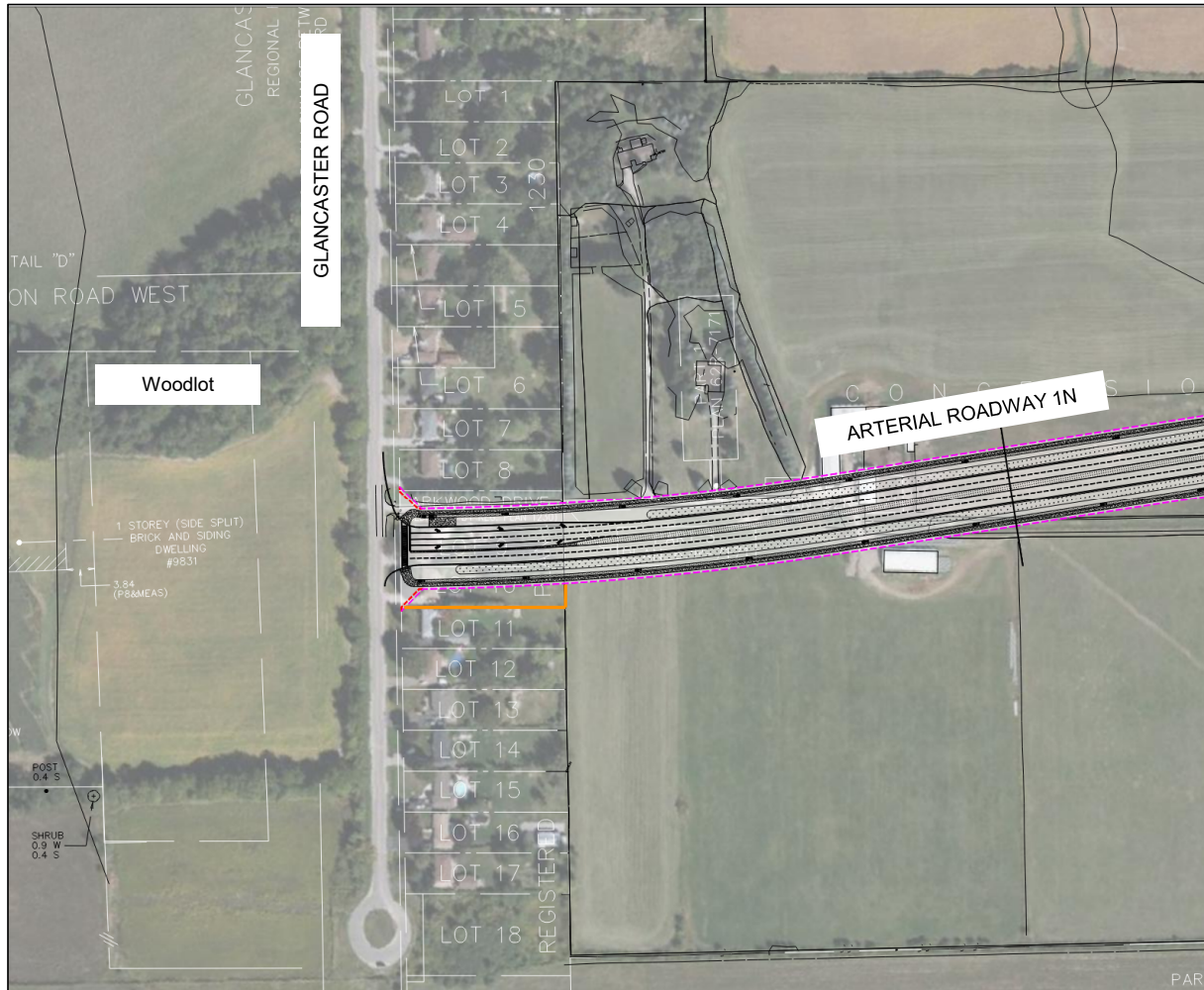
Developing the Roadway Arterial Roadway 1N- Glancaster Intersection

Alternative Design 1



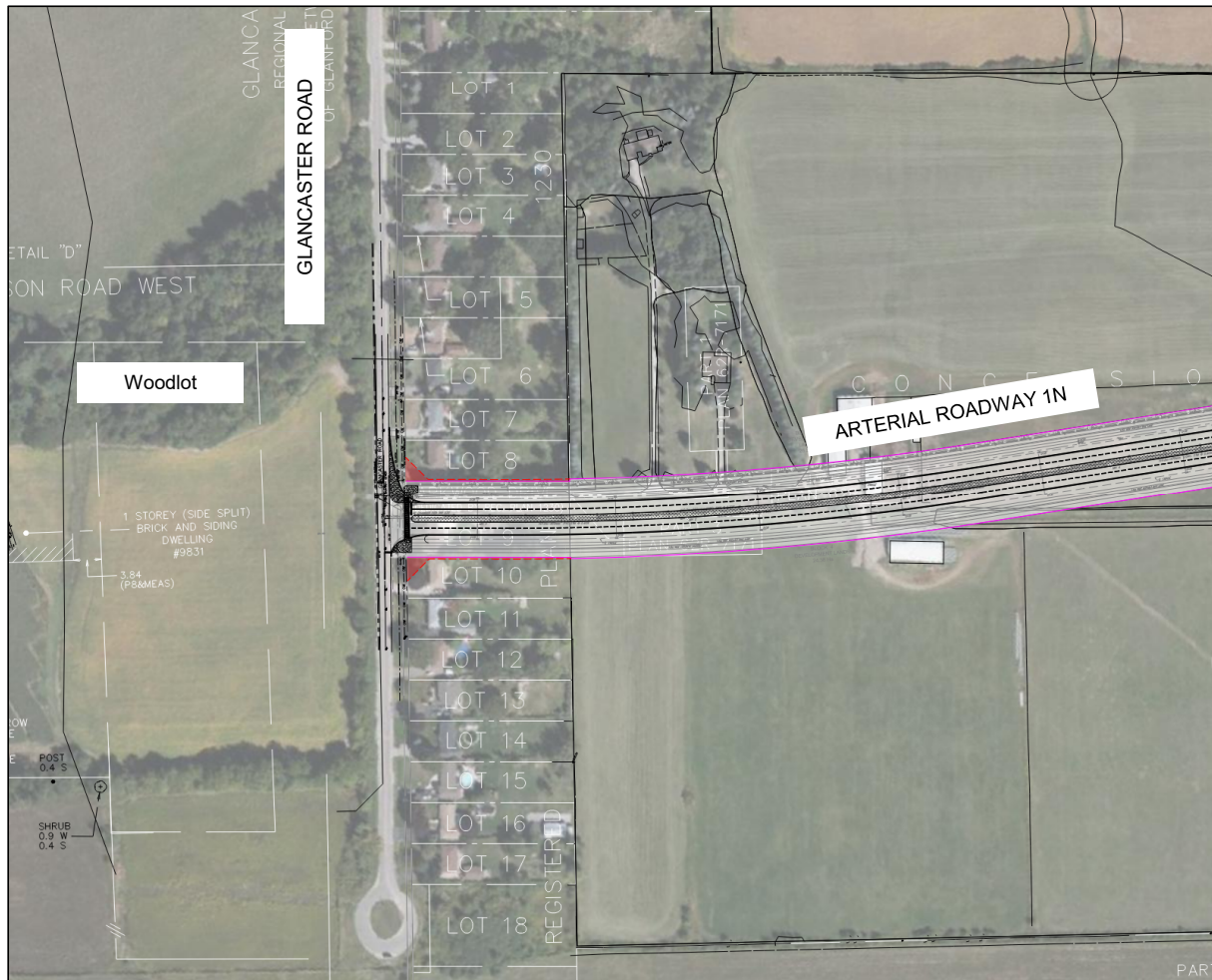
- Incorporates standard (12.9 m x 12.9 m) daylight triangles
- Requires acquisition of three (3) private properties (which are Lots 8, 9 and 10 as shown within the orange outline)
- Provides an approximate 17 m buffer to the woodlot on the west side of Glancaster Road

Alternative Design 2



- Incorporates modified daylight triangles (10 m x 10 m) to minimize property requirements
- Requires acquisition of two (2) private properties (which are Lots 9 and 10 as shown within the orange outline)
- Provides an approximate 28 m buffer to the woodlot on the west side of Glancaster Road

Alternative Design 3



- Standard daylight triangles are not available for this alignment (the issue can be mitigated if the extension of Arterial Roadway 1N to the west is undertaken in the future)
- Requires acquisition of one (1) additional property (which is Lot 9)
- Narrows Arterial Roadway 1N cross-section while maintaining the four-lane configuration within the required property
- Provides an approximate 28 m buffer to the woodlot on the west side of Glancaster Road

Evaluation Criteria

Criteria Category	Criteria	Indicator
Transportation Design	Design Criteria	Ability to provide daylight (sight) triangles
		Ability to provide connectivity to Glancaster Road
		Ability to accommodate required capacity
		Ability to accommodate active modes
		Ability to be staged
Social Environment	Compatibility with Existing/ Planned Communities	Displacement of, or loss of access to, existing and planned land uses

Evaluation Criteria cont.

Criteria Category	Criteria	Indicator
Natural Environment	Effects on aquatic habitat	Permanent effects on aquatic habitat and species (e.g. habitat removal, increased shading, etc.)
		Temporary effects on aquatic habitats and species (e.g. temporary disturbance during construction, sedimentation, etc.)
	Effects of terrestrial habitat	Effects to vegetation (e.g. woodlands, wetlands, meadows/thickets, etc.), wildlife and migratory birds
	Effects on natural heritage features and functions	Loss/impact on significant species (flora/fauna)
		Potential impact on significant features (e.g. Provincially Significant Wetland, Significant Wildlife Habitat, Areas of Natural and Scientific Interest, Urban Natural Features, Core Areas and Linkages)
		Potential impacts to terrestrial linkages
		Potential impacts to natural heritage buffers

Evaluation Criteria cont.

Criteria Category	Criteria	Indicator
Technical Considerations	Effects on Municipal Services and Utilities	Effects on infrastructure and utilities including new water crossings
		Effects on existing and new crossings
		Effects on stormwater quality and quantity
Cultural Environment	Presence of known Archeological resources	Impacts on known Archeological resources
	Presence of Built Cultural Heritage resources	Impacts on Built Cultural Heritage resources
Cost	Capital Cost	Estimated construction costs (including excavation/filling, lighting, signals, landscaping, associated infrastructure, construction complexity)

Analysis and Evaluation – Ranking System



- Lowest negative impacts or greatest benefits



- Moderate negative impacts and benefits



- Highest negative impacts or lowest benefits

Analysis and Evaluation – Transportation Design

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Transportation Design	Design Criteria	Ability to provide sight triangle	Incorporates standard daylight triangles of 12.9 x 12.9 metres	Incorporates modified daylight triangles of 10 x 10 metres to minimize property requirements	Standard daylight triangles are not available. Extension and widening to the west through future EA studies by other proponents will mitigate the issue
		Ability to provide connectivity to Glancaster Road	Connectivity to Glancaster Road provided		
		Ability to accommodate required capacity	Full capacity can be accommodated		
		Ability to accommodate active modes	Sidewalk and bike lanes are provided and separated from the roadway		
		Ability to be staged	Can be staged and protects for the potential extension of Arterial Roadway 1N		
Transportation Design Ranking					

Analysis and Evaluation – Social Environment

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Social Environment	Compatibility with Existing/ Planned Communities and Land Uses	Displacement of, or loss of access to, existing and planned land uses	Three (3) existing residential lots (Lots 8, 9 and 10) facing expropriation which are not currently owned by the developer and/or City of Hamilton	Two (2) existing residential lots (Lots 9 and 10) facing expropriation which are not currently owned by the developer and/or City of Hamilton	One (1) existing residential lot (Lot 9) facing expropriation which is not currently owned by the developer and/or City of Hamilton
Social Environment Ranking					

Analysis and Evaluation – Natural Environment

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Natural Environment*	Effects on aquatic habitat	Permanent effects on aquatic habitat and species (e.g. habitat removal, increased shading, etc.)	- All alternatives require two watercourse crossings (culverts) - No direct fish habitat present; only impacts are on indirect fish habitat - Watercourse crossing of the central watercourse corridor will likely take place in the dry due to the construction taking place at the same time as the watercourse realignment (i.e., prior to flows being directed to the new watercourse channel), thereby minimizing impacts to indirect fish habitat - As a result of the above, habitat removal will only take place along the eastern watercourse crossing		
		Temporary effects on aquatic habitats and species (e.g. temporary disturbance during construction, sedimentation, etc.)	Temporary effects will be the same for all alternatives and will include potential for sedimentation during construction and the use of ESC measures		

* Natural heritage impacts are based on the NHS in the draft plan

Analysis and Evaluation – Natural Environment

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Natural Environment*	Effects on terrestrial habitat	Effects to vegetation (e.g. woodlands, wetlands, meadows/thickets, etc.), wildlife and migratory birds	- No encroachment into woodland; alignment will be setback minimum of 15m from woodland - Minimal impact to terrestrial habitat expected; Portion of northeastern wetland required to be removed and replicated at a 1.5:1 ratio (created:removed) through the draft plan of subdivision - local wildlife is accustomed to background noise level from existing land-uses (i.e., Airport)		
	Effects on natural heritage features and functions	Loss/impact on significant species (flora/fauna)	No impacts to threatened and endangered species (and their associated habitats) are expected No impact to locally rare and uncommon species or vegetation communities are expected; salvage plan required as part of draft plan of subdivision		

* Natural heritage impacts are based on the NHS in the draft plan

Analysis and Evaluation – Natural Environment

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Natural Environment	Effects on natural heritage features and functions	Potential impact on significant features (e.g. Provincially Significant Wetland, Significant Wildlife Habitat, Areas of Natural and Scientific Interest, Core Areas and Linkages)	- No impact to significant features will occur - Partial removal of non-significant wetland will be removed and re-created at a 1.5:1 ratio through the draft plan of subdivision - Alignment is proposed adjacent to Core Area (Woodland); however, proposed 15m setback and mitigation measures will minimize disturbance to natural feature and its associated functions		
		Potential impacts to terrestrial linkages	No impacts to terrestrial linkages		
		Potential impacts to natural heritage buffers	No impacts to existing or proposed buffers		
Natural Environment Ranking					

Analysis and Evaluation – Technical Considerations

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Technical Considerations	Effects on Municipal Services and Utilities	Effects on infrastructure and utilities including new water crossings	Negligible additional impacts on stormwater infrastructure	Negligible additional impacts on stormwater infrastructure	Minor addition of intermediate stormwater management infrastructure
		Effects on existing and new watercourse crossings	Moderate proposed crossing length	Moderate proposed crossing length	Moderate proposed crossing length
		Effects on stormwater quality and quantity	Standard requirements of water quality and quantity	Standard requirements of water quality and quantity	Slight reduction in water quantity and quality requirements due to reduced road width
Technical Considerations Ranking					

Analysis and Evaluation – Cultural Environment

Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Cultural Environment	Presence of known Archeological resources	Impacts on known Archeological resources	Three (3) existing properties that could potentially have archeological resources present	Two (2) existing properties that could potentially have archeological resources present	One (1) existing property that could potentially have archeological resources present
	Presence of Built Cultural Heritage resources	Impacts on Built Cultural Heritage resources	No impacts since no resources are present	No impacts since no resources are present	No impacts since no resources are present
Cultural Environment Ranking					

Analysis and Evaluation – Cost

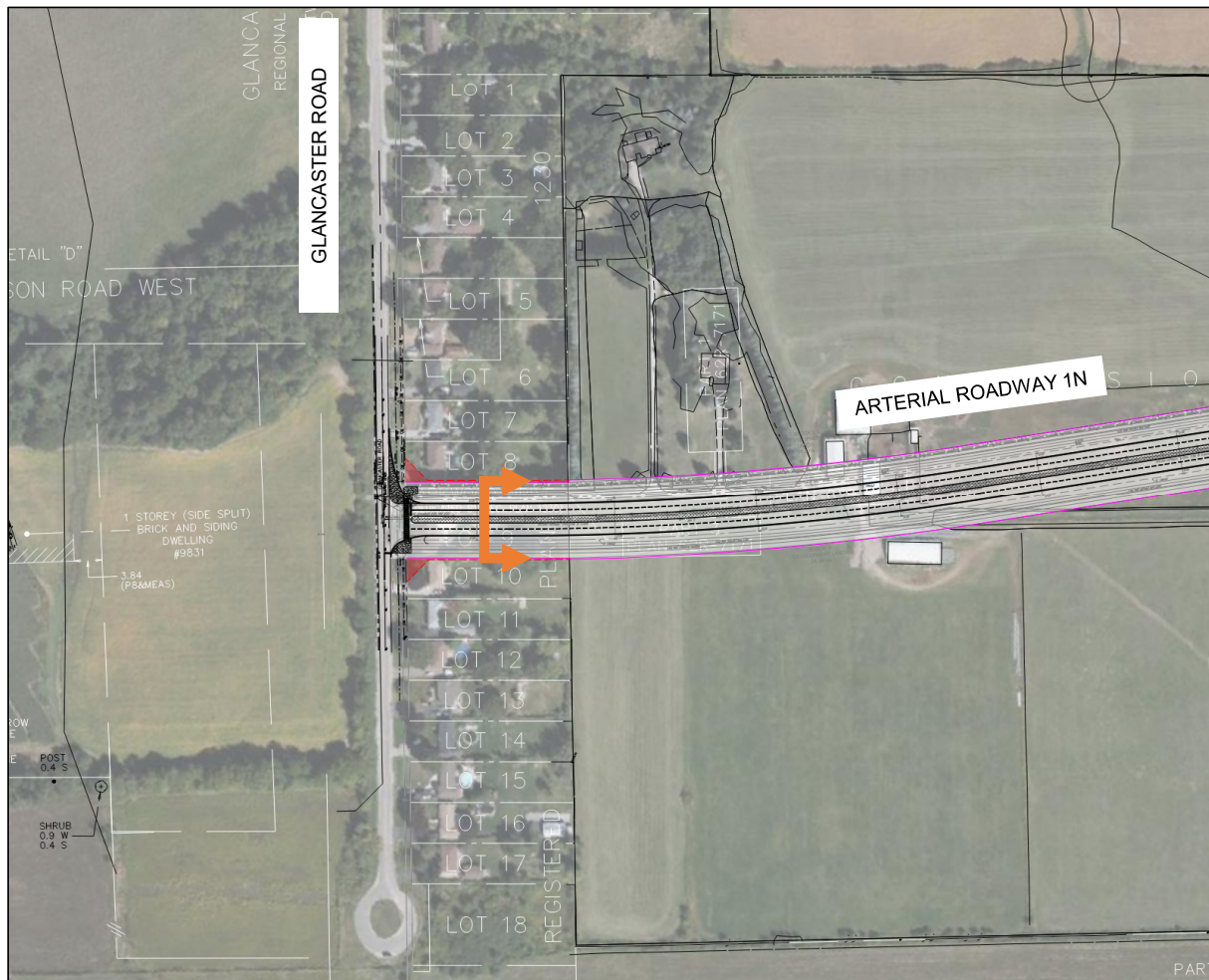
Criteria Category	Criteria	Indicator	Alternative Design 1	Alternative Design 2	Alternative Design 3
Cost	Capital Cost	Estimate construction costs (including excavation/filling, lighting, signals, landscaping, associated infrastructure, construction complexity)	- Moderate fill requirement - Moderate right-of-way sanitary sewer cost - Moderate right-of-way watermain sewer cost - Cost of expropriation of three (3) lots	- Moderate fill requirement - Moderate right-of-way sanitary sewer cost - Moderate right-of-way watermain sewer cost - Cost of expropriation of two (2) lots	- Moderate fill requirement - Moderate right-of-way sanitary sewer cost - Moderate right-of-way watermain sewer cost - Cost of expropriation of one (1) lot
Cost Ranking					

Ranking Summary

Criteria Category	Alternative Design 1	Alternative Design 2	Alternative Design 3
Transportation Design			
Social Environment			
Natural Environment			
Technical Considerations			
Cultural Environment			
Cost			
Overall Ranking			

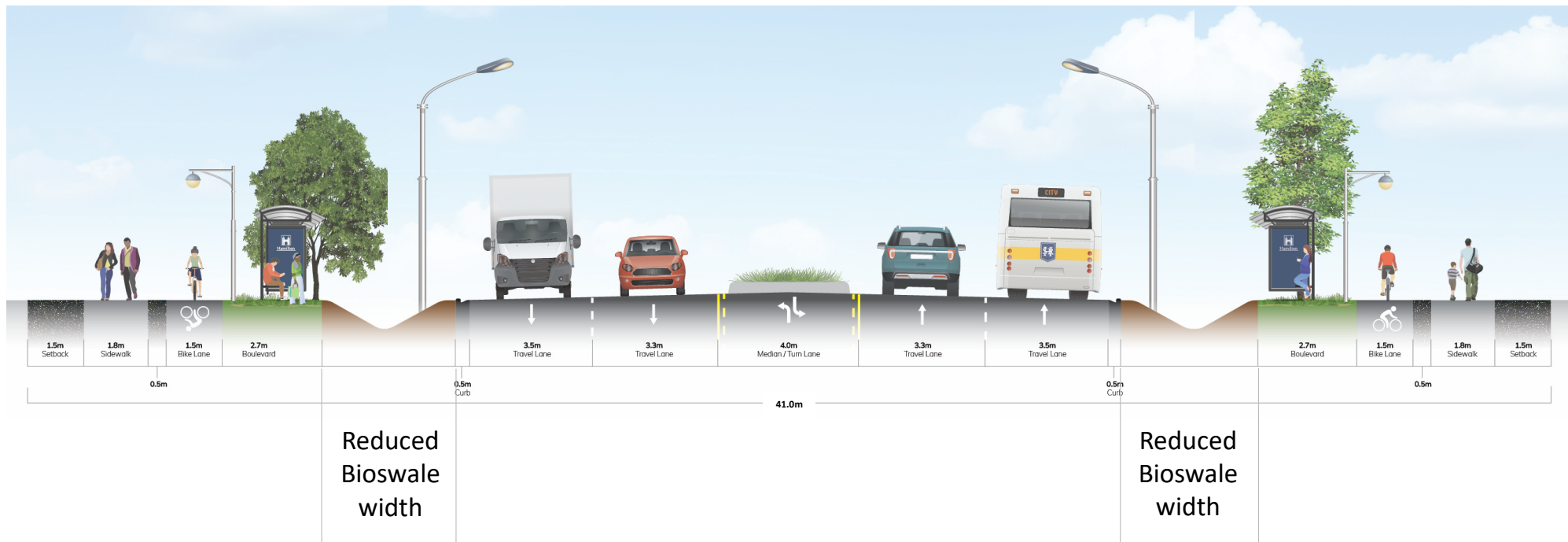
-  Lowest negative impacts or greatest benefits
-  Moderate negative impacts and benefits
-  Highest negative impacts or lowest benefits

Technically Preferred Design – Alternative Design 3



- Requires one (1) additional property (which is Lot 9)
- Narrows Arterial Roadway 1N cross-section while maintaining the four-lane configuration within the required property
- Protects for the potential Arterial Roadway 1N extension at a future date

Technically Preferred Design – Alternative Design 3 Cross Section



Future Build-Out of Arterial 1N (West Extension)

1. While Alternative Design #3 is the preliminary preferred alternative and satisfies the needs of the Dickenson Draft Plan, it is understood that Arterial Roadway 1N is part of the City of Hamilton's overall AEGD TMP.

The City is undertaking the Airport Employment Growth District East-West Arterial Road Network Study to determine the road alignment for any continuation of Arterial Roadway 1N west of Glancaster Road. The Class EA process currently being completed for Arterial Roadway 1N within the Dickenson Draft Plan is separate from the outcome of the City's Class EA study.

2. Glancaster Road north of Arterial Roadway 1N will be studied through a future Class EA process
3. Glancaster Road south of Arterial Roadway 1N was approved through the AEGD TMP (2024) with a future 30 m right-of-way



Note: Blue colouring is not to scale and is only intended to highlight the area associated with each number

We want to hear from you!

Your input is important to us and your comments are welcome at any time during the study, but for comments to be considered in the Environmental Study Report we kindly ask that you forward any comments by:

Wednesday, January 28th, 2026

Following this open house, please provide your comments to us at the website below:

Project website: cghtransportation.com/planning/Arterial1NEA



Christopher Gordon, P.Eng.

CGH Transportation Inc.

P: 343-999-9117

E: Christopher.Gordon@CGHTransportation.com



Appendix B

Compilation of Public Notices

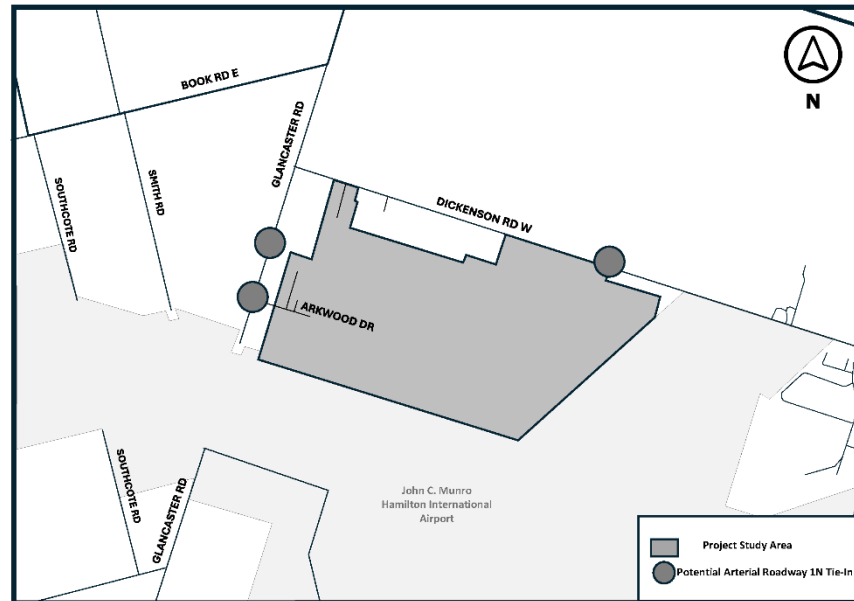
Arterial Roadway 1N – Dickenson Road West to Glancaster Road

Municipal Class Environmental Assessment – Phases 2-4

Notice of Study Commencement and Public Information Centre (PIC) #1

Background

Dickenson Limited Partnership has initiated a Draft Plan of Subdivision process for a new industrial development adjacent to the John C. Munro International Airport within the City of Hamilton's Airport Employment Growth District Secondary Plan lands. In parallel with the Draft Plan of Subdivision process, the applicant is conducting



the Schedule C Municipal Class Environmental Assessment (EA) process for Arterial Roadway 1N, from Dickenson Road West to Glancaster Road, within the private development lands.

Process

The project will fulfill the Schedule C project under the Municipal Engineers Association EA process as described in the Municipal Class Environmental Assessment guide document (October 2000, as amended in 2023). This PIC will fulfill the requirements of Phase 2 of the EA process.

We want your input!

Public consultation is a key component of this study. This PIC will present an opportunity to review the project, impact and mitigation measures and the preliminary preferred alignment.

Members of the public, agencies, Indigenous Nations, communities and other interested persons are encouraged to actively participate in the undertaking by attending consultation opportunities or contacting the project team directly with information, comments or questions. In addition, there will be an opportunity to review the final Environmental Study Report (ESR) when it is complete.

Review Materials Anytime	Join Virtual PIC
Visit the project webpage anytime to view PIC #1 materials and comment from <u>June 20 to July 18, 2024</u>. A comment form will be available until midnight on <u>July 18</u>. Following the live event, a video recording of the presentation will also be posted. Materials are available 24 hours a day, 7 days a week. The project website is: cghtransportation.com/planning/Arterial1NEA	There will be a <u>live</u> virtual meeting held on <u>Thursday, June 27, 2024 from 6:00 pm to 8:00 pm</u>. The project team will provide an overview presentation of the project and will be available to answer questions. The event will be held using the <u>Zoom</u> platform where individuals can participate online or by phone. <u>Pre-registration is required</u> and can be done at the below website: cghtransportation.com/planning/Arterial1NEA

If you have any accessibility requirements in order to be able to review the PIC materials and provide comments, please contact Christopher Gordon below as soon as possible.

If you would like more information prior to the first PIC, or to be included on the mailing list for this project, please contact:

**Arthur Chan – Project Proponent
Broccolini - Development Manager**
2680 Skymark Avenue, Suite 800
Mississauga, ON L4W 5L6
437.220.3715
arthur.chan@broccolini.com

Christopher Gordon – Project Manager
CGH Transportation Inc.
6 Plaza Court, Ottawa ON K2H 7W1
343.999.9117
christopher.gordon@cghtransportation.com

Privacy Notice: All personal information collected during this EA process is gathered in accordance with the Personal Information Protection and Electronic Documents Act (PIPEDA) for public participation purposes. This information may be included in project documentation unless confidentiality is requested. For privacy concerns or to request confidentiality, contact the project manager.

This Notice Issued June 13th and June 20th, 2024 in The Hamilton Spectator.

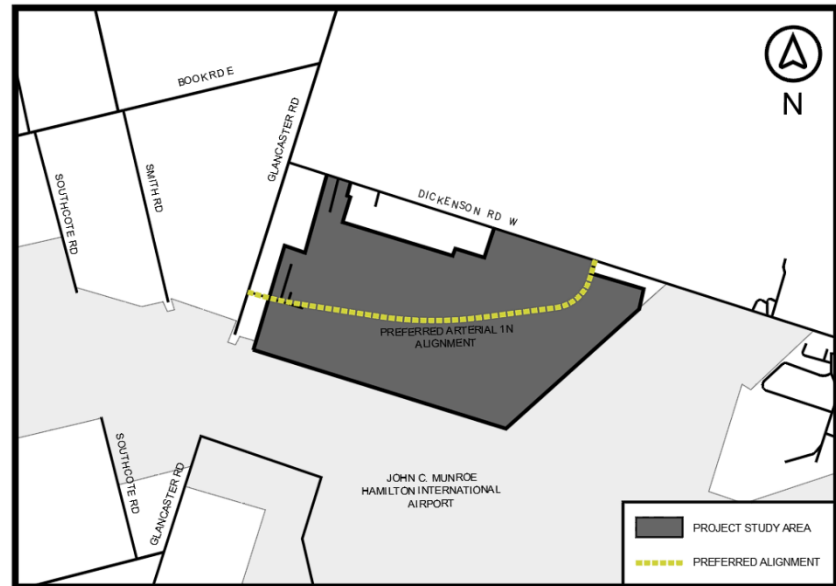
Public Information Centre (PIC) #2

Arterial Roadway 1N – Dickenson Road West to Glancaster Road

Municipal Class Environmental Assessment – Schedule C

Background

Dickenson Limited Partnership has initiated a Draft Plan of Subdivision process for a new industrial development adjacent to the John C. Munro International Airport within the City of Hamilton's Airport Employment Growth District Secondary Plan lands. In parallel with the Draft Plan of Subdivision process, Dickenson Limited Partnership as the proponent is working with the City of



Hamilton as a key stakeholder to conduct the Schedule C Municipal Class Environmental Assessment (EA) process for Arterial Roadway 1N, that extends from Dickenson Road West to Glancaster Road, within private development lands.

Process

The project is meeting the Schedule C requirements under the Municipal Engineers Association EA process as described in the Municipal Class Environmental Assessment guide document (February 2024). This PIC will fulfill the requirements of Phase 3 of the EA process.

We want your input!

Public consultation is a key component of this study. This PIC will provide an opportunity to review the project to date, impacts and mitigation measures and the preliminary preferred road alignment.

Members of the public, agencies, Indigenous communities, stakeholders and other interested persons are encouraged to actively participate in the undertaking by engaging in the consultation opportunities, including contacting the project team directly with information, comments or questions. In addition, there will be an opportunity to review the final Environmental Study Report (ESR) when it is complete.

Review Materials Anytime	Join Virtual PIC
Visit the project webpage anytime to view PIC #2 materials and comment from <u>January 15, to January 29, 2025</u>. A comment form will be available until midnight on <u>January 29</u>. Materials are available 24 hours a day, 7 days a week. The project website is: cghtransportation.com/planning/Arterial1NEA	There will be a <u>live</u> virtual meeting held on <u>Wednesday, January 14, 2026 from 6:00 pm to 8:00 pm</u>. The project team will provide an overview presentation of the project and will be available to answer questions. The event will be held using the <u>Zoom</u> platform where individuals can participate online or by phone. <u>Pre-registration is required</u> and can be done at the website below: cghtransportation.com/planning/Arterial1NEA

If you have any accessibility requirements to be able to review the PIC #2 materials and provide comments, please contact Christopher Gordon below as soon as possible.

If you would like more information or to be included on the mailing list for this project, please contact:

**Alyssa Black – Project Proponent
Broccolini - Development Manager**
2680 Skymark Avenue, Suite 800
Mississauga, ON L4W 5L6
437.220.3715
alyssa.black@broccolini.com

Christopher Gordon – Project Manager
CGH Transportation Inc.
6 Plaza Court, Ottawa ON K2H 7W1
343.999.9117
christopher.gordon@cghtransportation.com

Privacy Notice: All personal information collected during this EA process is gathered in accordance with the Personal Information Protection and Electronic Documents Act (PIPEDA) for public participation purposes. This information may be included in project documentation unless confidentiality is requested. For privacy concerns or to request confidentiality, contact the project manager.

This Notice First Issued on **December 19, 2025**.

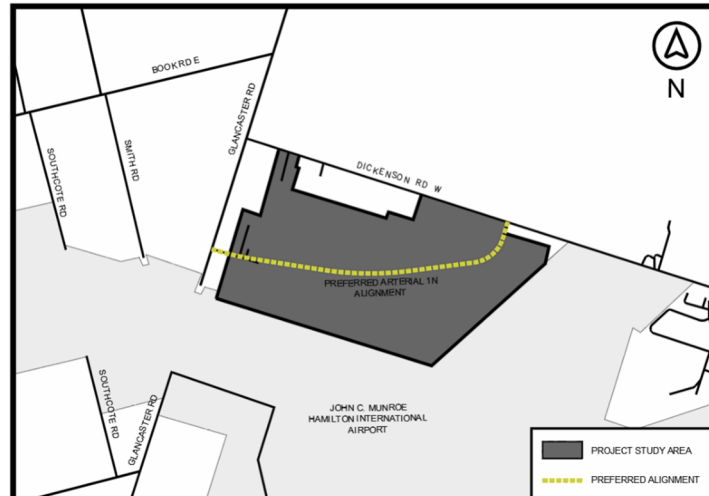
NOTICE OF STUDY COMPLETION

Arterial Roadway 1N – Dickenson Road West to Glancaster Road

Municipal Class Environmental Assessment – Schedule C

Background

Dickenson Limited Partnership initiated a Draft Plan of Subdivision process for a new industrial development adjacent to the John C. Munro International Airport within the City of Hamilton's Airport Employment Growth District Secondary Plan lands. In parallel with the Draft Plan of Subdivision process, Dickenson Limited Partnership (as the proponent) worked with the City of Hamilton (as a key stakeholder) to complete the Schedule C Municipal Class Environmental Assessment (EA) process for Arterial Roadway 1N, that extends from Dickenson Road West to Glancaster Road, within private development lands. The preferred alignment is shown in the figure.



Environmental Study Report

The project followed the Schedule C requirements under the Municipal Engineers Association Municipal Class EA process (February 2024). An Environmental Study Report (ESR) documenting the planning process undertaken, details of the road alignment and design as well as potential impacts and mitigation measures, has been completed and is being made available for public comment. The ESR has been placed on public record for a 30-day comment period starting on **July 10, 2026** and ending on **August 10, 2026**. The report is available for comments online at the project website: cghtransportation.com/planning/Arterial1NEA.

Subject to comments received following this Notice and the receipt of approvals, Dickenson Limited Partnership intends to proceed with construction of the recommended project as outlined in the ESR.

Opportunities for Comment

Interested persons may provide written comments to our Project Team by **August 10, 2026**. All comments and concerns should be sent directly to:

AJ Taylor – Project Proponent
Broccolini - Senior Development Manager
2680 Skymark Avenue, Suite 800
Mississauga, ON L4W 5L6
aj.taylor@broccolini.com

Christopher Gordon – Project Manager
CGH Transportation Inc.
6 Plaza Court, Ottawa ON K2H 7W1
christopher.gordon@cghtransportation.com

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester contact information and full name and be received by **August 10, 2026**.

Requests should specify what kind of order is being requested (request for conditions or a request for an individual/comprehensive EA), how an order may prevent, mitigate or remedy potential adverse impacts on Aboriginal and treaty rights, and any information in support of the statements in the request. This will ensure that the ministry is able to efficiently begin reviewing the request.

The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
Ministry of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
Email: minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
Email: EABDirector@ontario.ca

Requests should also be copied to AJ Taylor (Broccolini Senior Development Manager) and Christopher Gordon (CGH Transportation Inc.), by mail or by email (at the addresses shown above). Please visit the Ministry of Environment, Conservation and Parks website for more information on requests for orders under Section 16 of the *Environmental Assessment Act* at: <https://www.ontario.ca/page/class-environmental-assessments-part-ii-order>.

If you have any accessibility requirements to be able to review the Environmental Study Report and provide comments, please contact Christopher Gordon identified above. .

Privacy Notice: All personal information that you provide in your request – such as name, address, telephone number and property location – is collected, under the authority of section 30 of the *Environmental Assessment Act* and is collected and maintained for the purpose of creating a record that is available to the general public. As this information is collected for the purpose of a public record, the protection of personal information provided in the *Freedom of Information and Protection of Privacy Act* (FIPPA) does not apply (s.37). Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential.

*This Notice Issued: **July 10, 2026**.*

Appendix C

Comment Response Document

Project Number	2020-080
Project	Arterial Roadway 1N Environmental Assessment
Document	Environmental Studies Report
Date Created	07-Apr-26

Comment #	Comment	Response
General		
City of Hamilton		
1a	Request inclusion of: Zoomed-in drawings of intersections at Glancaster Road and Dickenson Road, in the scale and level of detail/colour matching that of the mid-block intersection drawing (suggest for e.g., embedding in the bottom-right quadrants of the existing drawings shown in PIC drawings).	Report updated with the zoomed-in figure
1b	Legends explaining the cross-section elements of intersections. (Descriptions are insufficient for accurate interpretation of drawings for full understanding). Please advise if you need a copy of Dickenson Road intersection for inclusion in your ESR. (suggest for e.g., embedding below the alternative descriptions to save space).	The report has included a cross-section with elements labelled
1c	A copy of georeferenced Microstation files of intersection alternatives at Glancaster Road so that they can be accurately incorporated in adjoining future studies led by the City of Hamilton.	Noted
2	Request replacement of “expropriation” in the evaluation tables and in any relevant text to “property taking*”. (FYI: This is because expropriation is a measure of last resort and is typically avoided, due to high cost and longer procurement timelines. Willing buyer – willing seller is the preferred method of property acquisition for City of Hamilton).	Report updated to replace the term in question
3	It is appreciated that the intersection clarity has been improved after our previous discussions, and a technical term definition was provided. It is suggested that also Functional Service Report could also be defined in in the ESR (not a term typically understood by the public).	Noted; zoomed-in intersection design is included
4	Please advise if you have any questions and confirm timing of when you anticipate finalizing the ESR.	Noted
Public		
5	Every new piece of infrastructure must be viewed from the lens of climate change and this arterial road falls into that category. In order to adapt to and mitigate the destruction through severe weather events, e.g. flooding, erosion, extreme heat, Hamilton and the surrounding area needs to value the natural features which can prevent or alleviate these events. This means that every woodlot, thicket, stream, wetland, is of significance in maintaining balance in the watershed. Each natural feature requires consideration and must be maintained, not only to reduce flooding or landslides, but also to provide habitat for wildlife, including fish, bats, and bees, which contribute to our well-being. The Biodiversity Action Plan which Hamilton has just published clearly indicates that the City of Hamilton recognizes the importance of biodiversity and is willing to act to retain it. The presentation mentions that there are crossings. I assume these are crossings over streams or wetlands. Any crossing will disrupt the ecosystem within that wetland and the flora and fauna which depend on it. Please consider ways to mitigate the damage or cancel the project. The road is 2.9 km long and will cost approximately \$30 million which is roughly \$10 million/km. That’s a lot of money for a little road that demonstrates no benefit at this time. Since it is unknown what will be built adjacent to or surrounding this road, be it residential, institutional or future employment development, no cost benefit analysis can be	Written response provided to the concerned resident

6	I am strongly opposed to any further development in this area. I believe this position reflects the interests of many residents who value the rural character, environmental integrity, and quality of life that define this community. Unfortunately, there is a widespread perception that public input in matters such as this is not given meaningful consideration. Too often, rezoning and development decisions appear to primarily benefit developers and political interests, while offering little to no tangible benefit to local residents. This lack of trust is deeply concerning. The Ancaster/Glanbrook area is a unique and irreplaceable landscape, characterized by quiet rural communities, productive farmland, natural wildlife habitats, underground spring fed water tables, and interconnected creeks and streams. Large scale industrial development and roadway expansion would permanently disrupt these natural systems. Such disruption increases the risk of flooding, eliminates fertile agricultural land, destroys wildlife habitats, and interferes with natural groundwater recharge cycles that cannot be replicated once lost. This area is widely regarded as one of the most beautiful and environmentally sensitive regions in Hamilton. Excavation and alteration of underground spring fed systems would have cascading impacts on surrounding ecosystems, many of which would be irreversible. Once these natural features are destroyed, they cannot be restored. I am also concerned by assurances that environmental impacts can be mitigated through engineered solutions designed to “mimic	Written response provided to the concerned resident
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Project Number	2020-080
Project	Arterial 1N Environemtnal Assessment
Document	Cultural Heritage Comments Regarding Environmental Assessment for Arterial Road 1N – Dickenson Road West to Glancaster
Date	17-Apr-26

Comment #	Comment	Response
General		
Archeology		
1	The subject area meets three (3) of the ten criteria used by the City of Hamilton and Ministry of Citizenship and Multiculturalism for determining archaeological potential: 1)Within 250 metres of known archaeological sites; 2)Within 300 metres of a primary watercourse or permanent waterbody, 200 metres of a secondary watercourse or seasonal waterbody, or 300 metres of a prehistoric watercourse or permanent waterbody; and, 3)Along historic transportation routes. Staff acknowledge that several archaeological assessments have been undertaken in the subject area, however there are a number of ministry letters and reports still outstanding within the Study Area. As such staff request copies of the ministry letters for the following reports when available; -A Stage 4 report (P1037-0215-2023) submitted to the Ministry of Citizenship and Multiculturalism in a report dated March 3, 2025; -A Stage 4 report (P1037-0207-2023) submitted to the Ministry of Citizenship and Multiculturalism in a report dated March 4, 2025; -A Stage 4 report (P1037-0197-2023) submitted to the Ministry of Citizenship and Multiculturalism in a report dated March 6, 2025; -A Stage 4 report (P1037-0189-2023) submitted to the	Letters from Ministry of Citizenship & Multiculturalism for the Stage 1 and Stage 2 Archaeological Assessments were included in the ESR. The ESR indicates that Stage3 and 4 Archaeological Assessments were completed but they are not included in the ESR. These assessments and the letters from the Ministry are beyond the scope of the Class EA but they are required prior to ground breaking
2	Additionally, staff require that the following Archaeological Assessments and Ministry Letters be submitted to the City of Hamilton and Ministry of Citizenship and Multiculturalism for approval, prior to clearing the archaeological condition for the Study Area; -Stage 4 archaeological assessments for sites AhGx-869, AhGX-872 AhGx-876, and AhGx-879 and require these reports be submitted to the City of Hamilton and Ministry of Citizenship and Multiculturalism for approval, prior to clearing	These will be provided to address any archaeological conditions associated with the development application and are not specific to completion of the ESR under the EA Act
3	The circulated document titled Arterial Road 1N – Dickenson Road West to Glancaster Road Environmental Study Report prepared by CGH Transportation, does not make reference to specific archaeological assessments or sites. Staff request that the document is updated to accurately reflect the archaeological assessments and sites located on the subject property. (LC/KR 2026-04-17)	Due to the sensitivity of the information Stage 2 Archaeological Assessments that specifically identify archaeological sites are not released to the public and as such are not included in an ESR which is posted for public comment. The ESR includes a reference to completion of the Stage 1 and Stage 2 Archaeological Assessments and that resources were located and subsequent studies will be done outside of the Class EA process and prior to ground breaking activities in the area. Due to the sensitivity of the information the ESR will only include the letters from MCM for Stage 1 and Stage 2
Built Heritage/Cultural Heritage Landscapes		
4	For a summary of background information and previous Cultural heritage concerns please see the previous Cultural Heritage comments regarding Draft Plan of Subdivision and Zoning By-law Amendment application (25T-202203 and ZAH-22-021) dated April 22, 2022.	This is applicable to the development application and not the Class EA for Arterial Roadway 1N
5	As part of a previous circulation (FC-20-061), staff required that a Cultural Heritage Impact Assessment (CHIA) be submitted to the satisfaction and approval of the Manager of Heritage and Urban Design prior to any development approvals.	The CHIA for site 1205 Glancaster Road was completed in November 2023 and is referenced is Section 5.2.3 Cultural Heritage of the ESR

6	A Cultural Heritage Impact Assessment for the subject property was completed by WSP dated April 30, 2021. The report assessed the impact of a development project located at 9517, 9541, 9569, 9579, 9593, and 9867 Dickenson Road West, Glanbrook. Staff reviewed and provided comments on April 14, 2022, which are as follows: Conditions – Based on the recommendation of WSP within the CHIA, it appears that there may be items worth salvaging from the subject property. As such, if this application is approved, staff require that the following conditions be attached to the application (please see updates below in red): 1)That the applicant shall submit detailed documentation of the building on the subject property to the satisfaction and approval of the Manager of Heritage and Urban Design, prior to any demolition. Cleared – on April 6, 2026, WSP submitted a technical memorandum indicating there are no salvageable materials, staff concur with this evaluation. 2)Any historic fabric to be removed, including windows and doors, be salvaged for re-use, where feasible. Documentation regarding the salvage of these features shall be submitted to the satisfaction and approval of the manager of Heritage and Urban Design. Cleared – the report has indicated that there is no material to	These sites are not located near Arterial Roadway 1N and are part of the development application and not the Class EA
7	Staff have reviewed the Cultural Heritage Impact Assessments submitted with the subject application and find them to be comprehensive and complete. Both reports were forwarded to the Policy and Design Working Group of the Hamilton Municipal Heritage Committee on January 22, 2024, for their review of the Cultural Heritage Impact Assessments.Staff have no further comment on the application as circulated. The subject property is adjacent to 9445 Twenty Road, a property listed on the City’s Municipal Heritage Register as a non-designated property. Additionally, the subject property is located near a concentration of properties of cultural heritage value or interest listed on the City’s Inventory of Heritage Properties, including: •9300 Airport Road; •555 Glancaster Road; and, •9511 Twenty Road.	Noted and these sites are not located near Arterial Roadway 1N and are part of the development application and not the Class EA
8	The circulated document titled Arterial Road 1N – Dickenson Road West to Glancaster Road Environmental Study Report prepared by CGH Transportation, does not refer to the adjacent cultural heritage, or summarize the previous Cultural Heritage Assessments undertaken on the property. Staff request that the document is updated to accurately reflect the cultural heritage surrounding the subject property and acknowledge the Cultural Heritage Assessments previously undertaken. (LC/KR 2026-04-17)	Section 5.2.3 Cultural Heritage of the ESR was updated