

Schedule 6 - NEC Staff Report

Niagara Escarpment Commission

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Niagara Escarpment Commission
An agency of the Government of Ontario

A2 Staff Summary Report

Proposed Niagara Escarpment Plan Amendment Dufferin Milton Quarry East Expansion

Date: November 21, 2024

File: NEPA PH 224 21

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Proposed Niagara Escarpment Plan Amendment:

Niagara Escarpment Plan Amendment (NEPA) PH 224 21

Property Legal Address:

Part Lots 8-10, 13 & 14, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton, and Lots 8-14, Concession 7 (former geographic Township of Nassagaweya), Town of Milton, Region of Halton

Executive Summary

Dufferin Aggregates has made an application to the Niagara Escarpment Commission (NEC) seeking amendments to the Niagara Escarpment Plan (NEP). Dufferin seeks to re-designate lands currently designated Escarpment Rural Area to Mineral Resource Extraction Area to facilitate an expansion to the existing aggregate extraction operation. They seek additional amendments to provide site specific policy to enable (1) the placement of equipment related to the water management system within significant woodlands and wetlands to mitigate ground water impacts on natural features; (2) to add a site-specific permitted use to allow the installation and operation of the water management system in the Escarpment Natural Area and the Escarpment Rural Area; and (3) for the adjacent existing licensed quarry to allow for the processing of material from the expansion lands within the existing facility and to utilize other support aspects of the existing quarry (office, truck washing etc.).

The NEC conducted a fulsome review of the application in partnership with members of the Joint Aggregate Review Team which included the Region of Halton, Town of Milton, Town of Halton Hills and Conservation Halton. The JART process included a fulsome peer review by independent experts, as well as review by agency staff which resulted in changes and updates to the technical documents, site plans, etc.

All members of JART are satisfied with the results of the various technical studies and the peer review and are satisfied that the proposal satisfies the policies of the member agencies.

NEC staff undertook agency and public consultation which did not result in any formal public objections, and all agency concerns have been resolved. The Public Interest Advisory Committee reviewed the application and recommended that the Commission recommend approval. NEC, in conjunction with MNR Aggregate and District Staff, undertook Indigenous engagement. The Crown is of the view that it has satisfied its duty

to consult obligations with respect to impacts to aboriginal and treaty rights under Section 35 of the Constitution Act arising from the proposed expansion.

NEC Staff are recommending that the Commission endorse the proposal and recommend that the Minister of Natural Resources approve the requested amendments.

Recommended Motion

Staff recommend that the Niagara Escarpment Commission recommends to the Minister of Natural Resources that the Niagara Escarpment Plan be modified as follows:

- 1) Map 3 of the Niagara Escarpment Plan be amended as shown on Schedule A (See Appendix 1).
- 2) That NEP Part 1.9.3.25 be added as follows:

Notwithstanding the policies of Part 2.9.1 of this Plan, water lines, recharge wells, diffuse discharges and associated minor equipment related to the water management system associated with the quarry located in the Mineral Resource Extraction Area approved under Amendment PH 224 21 to the Niagara Escarpment Plan may be installed, operated and serviced within significant woodland and wetlands on the properties located at Part of Lots 11 & 12, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton;

- 3) That the following permitted use is added to Part 1.3.3, Escarpment Natural Area, Permitted Uses:

The Niagara Escarpment Area lands located at Part of Lots 11 & 12, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton may be used for the installation of, access to, and servicing of the water management system associated with the quarry located in the Mineral Resource Extraction Area approved under Amendment PH 224 21 to the Niagara Escarpment Plan. Extraction shall not be permitted on these lands;

- 4) That the following permitted use is added to Part 1.5.3, Escarpment Rural Area, Permitted Uses:

The Niagara Escarpment Area lands located at Part of Lots 11 & 12, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton may be used for the installation of, access to, and servicing of the water management system associated with the quarry located in the Mineral

Resource Extraction Area approved under Amendment PH 224 21 to the Niagara Escarpment Plan. Extraction shall not be permitted on these lands; and

5) That NEP Part 1.9.3.26 be added as follows:

Notwithstanding the policies of Part 1.9.3, and the definition of *Accessory Use* in Appendix 2 of this Plan, for the quarry operating on the subject property described as Part Lots 8-10, 13 & 14, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton, and Lots 8-14, Concession 7 (former geographic Township of Nassagaweya), Town of Milton, Region of Halton, that the aggregate processing facility composed of an office, maintenance buildings, facilities for washing, processing and stockpiling of aggregate, truck washing facility, recycling facilities and the entrance may be used for the purpose of supporting the extraction of aggregate from the area approved under Amendment PH 224 21 to this Plan located at Part of Lots 11 & 12, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton, provided and only while the two sites are actively operated by a single Aggregate Resources Act (ARA) licensee, as an integrated operation, and after which rehabilitation will be effected and the aggregate processing facility removed.

1.0 Proposal

Dufferin Aggregates has made an application to the NEC seeking amendments to the NEP. Dufferin seeks to re-designate lands currently designated Escarpment Rural Area (ERA) to Mineral Resource Extraction Area (MREA) to facilitate an expansion to the existing aggregate extraction operation. They seek additional amendments to provide site specific policy to enable (1) the placement of equipment related to the water management system within significant woodlands and wetlands to mitigate ground water impacts on natural features, (2) to add a site-specific permitted use to allow the installation and operation of the water management system in the Escarpment Natural Area, and the Escarpment Rural Area; and (3) to permit the use of the adjacent existing licensed quarry for the processing of material from the expansion lands within the existing facility and to utilize other support aspects of the existing quarry (office, truck washing etc.).

1.1 Applicant/Owner

Applicant: Dufferin Aggregates

Owners: CRH Canada Group Inc.,
747752 Ontario Inc.,
Peninsula Ready-Mix Inc.,
1336811 Ontario Inc.

Agent: Brian Zeman of MacNaughton, Hermsen, Britton, Clarkson Planning Ltd (MHBC)

1.2 Related Files

Development Permit Application H/E/2020-2021/859 was made concurrent with the application to amend the NEP, to permit the aggregate extraction and associated development activities associated with the operation of the expanded quarry. Review of the Development Permit application has been conducted concurrent with review of the plan amendment, however, a decision on the Development Permit will not be made unless and until the amendment is approved by the Minister. The Director has the delegated authority to approve the Development Permit, and the application will not need to return to the Commission.

2.0 Niagara Escarpment Plan Designation

The lands proposed for re-designation to MREA are currently designated ERA. Consideration of re-designation to MREA is permitted per Part 1.5.1.7.

3.0 Site Description

The subject lands are located in Halton Hills, just north of the 401 on the Nassagaweya-Equesing Townline which separates Halton Hills and Milton. The area on both sides of the 401 has seen considerable aggregate development with many retired and restored aggregate sites now associated/owned/managed by Conservation Halton. The Dufferin Aggregates Milton quarry has been active since 1962. Dufferin has lands in aggregate extraction above and below the Escarpment (Map 1, Appendix 2), which are connected by a gap in the Escarpment face.

Most of the lands surrounding Dufferin's active aggregate activities are designated Escarpment Natural or Escarpment Protection Area except for the lands being proposed to be redesignated to MREA (which are currently ERA). These adjacent lands are also designated as Areas of Natural and Scientific Interest (ANSI), including the Provincially Significant Halton Forest North and Halton Forest South life science ANSI's. The Halton Forest North ANSI extends onto the subject property proposed for re-designation to MREA but does not extend into the area proposed for redesignation or for extraction (Map 2, Appendix 3).

Much of the land to the south of the existing operation and a strip along the Escarpment Brow are designated as properties within the Niagara Escarpment Parks and Open Spaces System (NEPOSS) including sites owned by Conservation Halton and Halton Region (Map 2, Appendix 3).

4.0 Background

4.1 Existing Aggregate Operation

The Dufferin Aggregates Milton Quarry has been in operation since 1962 and is somewhat infamous in that Dufferin blasted through the Escarpment face creating the “gap” in the Escarpment at Milton. The “gap” is often cited as a major impetus to the creation of the *Niagara Escarpment Planning and Development Act*, and the creation of the NEC.

The Dufferin Milton Quarry is currently operated under two licenses under the Aggregate Resources Act (ARA). The original Milton Quarry (established pre-NEP) included a licensed area of 467.7 ha with an extraction area of 381.5 ha. The second license includes an additional 84.5 ha of land of which 70.6 ha is subject to extraction. This license was issued following approval of NEP Amendment PH 135 01 and related Development Permit #8784 H/E/2000-2001/314 in 2007 (see details next section) (Map 3).

The current total operation occupies lands within Part of Lots 8 to 14, Concession 7, in the Town of Milton (former geographic Township of Nassagaweya) and Part of Lots 8 to 10, 13 and 14, Concession 1, in the Town of Halton Hills (former geographic Township of Esquesing) (Map 1, Appendix 2).

Dufferin considers the Milton Quarry to be their flagship operation and characterizes the operation as one of the closest-to-market sources of high-quality crushed stone within the province’s highest demand area for aggregates (Greater Toronto Area).

4.2 Previous Niagara Escarpment Plan Amendments

In 2001, Dufferin submitted an application to add an additional 68.6 ha (169.5 acres) of land designated ERA to the existing quarry through NEP Amendment PH 135 01. The lands are located on Part Lots 12 & 13, Concession 7, Town of Milton and Part Lots 13 & 14, Concession 1, Town of Halton Hills (Map 3, Appendix 4). This application met with substantial public opposition, and NEC staff had concerns because the proposal would result in the almost complete fragmentation of the open landscape corridor whereby aggregate extraction would effectively create a break in the continuous natural

Escarpment environment from the Brow north to the extent of the NEP area. In this instance, the ability of lands in the vicinity of the Escarpment to be protected and maintained as a "substantially continuous natural environment" would be severely compromised.

To address this concern, Dufferin proposed the addition of lands to the NEP (which they owned) in Part Lots 14 and 15 Concession 7, Town of Milton, northwest of the existing and proposed quarry (Map 3, Appendix 4), and to designate the lands mostly as Escarpment Natural Area (ENA) with some ERA. It was acknowledged that the proposal would require the support and approval of Cabinet to amend the regulation designating the outer limits of the Niagara Escarpment Planning Area. It was also proposed that Dufferin re-designate lands in the southwest portion of their existing operation where extraction was complete and rehabilitation close to complete including Parts of Lots 7 to 11, Concession 7, Town of Milton, from MREA to ENA and ERA.

Additional concerns were raised due to the proposed water management plan which would require perpetual pumping to maintain adequate ground water levels in adjacent key hydrologic features including wetlands. At the time, some use of this water management system had been tested in part of the existing northern quarry, but concerns remained as to whether the system could be implemented in perpetuity. The Commission did endorse the proposal, with the added proposals related to re-designating current MREA lands, and the addition of lands to the north of the current Niagara Escarpment Planning Area (subject to approval by the Legislature) and the designation of these added lands as ENA and ERA.

Based on public opposition, the amendment was referred to the Joint Board (now Ontario Land Tribunal where it was consolidated for a joint hearing along with the Official Plan amendments for Halton Region, the Town of Halton Hills, and the Town of Milton. Following a lengthy hearing process, the Joint Board approved the amendment subject to conditions, including those suggested by the Commission.

Following the Joint Board decision, two applications were made by objectors to the Lieutenant Governor in Council (LGIC) seeking review of the Order of the Joint Board. As a result, the LGIC reviewed the Joint Board decision, and confirmed the decision on December 1, 2006, including the redesignation of the lands from MREA to ENA and ERA, and conditions (among others) that Dufferin would apply to add the approximately 70 hectares of lands adjacent to the proposed quarry expansion area and seek to have them designated ENA and ERA (Map 3, Appendix 4).

Following approval of Niagara Escarpment Plan amendment 135, Dufferin made application to add lands to the Niagara Escarpment Planning Area (Amendment PH 169 07). With the agreement of Dufferin, site specific policy related to the lands being

designated as ERA was included that would prohibit any future application to re-designate the lands to MREA. The Minister approved amendment PH 169 07 on December 13, 2011.

4.3 Proposed Niagara Escarpment Plan Amendments

Dufferin's current application is for an extension to the existing Milton Quarry, referred to as the Milton Quarry East Extension (MQEE), through an amendment to redesignate a portion of Part Lots 11 & 12, Concession 1 in the Town of Halton Hills from ERA to MREA. In addition, the existing buffer (setback) area on the south-east portion of the existing east cell on Part Lot 13 would be removed and re-designated to MREA to allow for an integrated operational and rehabilitation plan. The extension would include a licensed area of approximately 30.5 ha, and a proposed extraction area of 16.3 ha (Map 4, Appendix 5). The proposed extension is generally contiguous with the existing Milton Quarry East Cell and separated from the existing North Quarry by the Nassagaweya-Equesing Townline. The proposal is to extract the addition lands as an extension to the existing East cell.

To support the extension, Dufferin proposes to expand the existing water management system to maintain groundwater levels adjacent to the new extraction area and to maintain water levels in adjacent wetlands. To enable this, water lines and recharge wells will be required to be installed within significant woodland and wetlands, which is contrary to Part 2.9.1 of the NEP, therefore site-specific amendments are required to enable it. In addition, site specific permitted uses would need to be included to permit the construction of the water management system in the Escarpment Natural Area.

The existing Milton Quarry recycles concrete and asphalt, and this use is proposed to continue in conjunction with the proposed MQEE. As part of the application, Dufferin proposes to utilize accessory and associated uses currently located in the Milton Quarry and Milton Quarry Extension, in conjunction with the proposed MQEE. In addition to the use of the water management system, processing areas, aggregate recycling area, internal haul routes and the entrance/exits, other uses such as the office, maintenance buildings and facilities for washing are also proposed to be utilized to support the proposed expansion.

4.4 Supporting Technical Studies, JART and Peer Review

Dufferin provided over twenty technical documents to support its application ranging from geology, natural environment, and archaeological studies to air quality, noise and agricultural impact assessments.

Halton Region utilizes a Joint Agency Review Team (JART) protocol for reviewing and commenting on technical documents prepared in support of new aggregate applications or applications to expand existing aggregate operations. This JART protocol has been in place since 2001 (with updates), and is comprised of a Chair, agency-appointed staff and experts from the Region, applicable local municipalities, conservation authority and the NEC. Other relevant ministries and staff including those from the Ministry of Natural Resources, Ministry of the Environment, Conservation and Parks (MECP), and Ministry of Agriculture, Food and Agribusiness, (OMAFRA) were invited to participate. The JART Protocol covers review requirements under three Provincial Acts:

- *Planning Act, R.S.O. 1990, c. P.13*
- *Aggregate Resources Act, R.S.O. 1990, c. A.8*
- *Niagara Escarpment Planning and Development Act, R.S.O. 1990, c. N.2*

The JART provides streamlined comments to both the applicant and the MNR (for the ARA application). The JART identifies technical issues and concerns regarding the submission and discusses approaches appropriate for consideration. Third party peer reviewers are retained (by the Region with funds obtained from the applicant) to support the review of the technical submissions. Comments from the peer review are provided to the applicant for a response and updates, where appropriate, to various reports and plans. The JART process is completed by the preparation of a final JART report, which outlines any remaining concerns based on the initial technical studies, peer review and updates from the applicant.

5.0 Summary of Indigenous, Agency and Public Comments

The NEC engaged with the local municipalities, Region of Halton, Conservation Halton, various ministries and interested stakeholders for a 60-day review period from September 1 to October 31, 2022. Notice was sent by mail and email. In addition, a posting was placed on the Environmental Registry of Ontario (ERO) for the same 60-day comment period. Indigenous communities were also provided notice and an invitation to comment or more fully engage with the NEC.

5.1 Agency Comments:

In response to the formal request for comments from agencies, Halton Region, the Town of Halton Hills, the Town of Milton and Conservation Halton all submitted comments indicating either that they objected to or were withholding comments on the amendment until such time as JART had completed its analysis. These agencies work together with the NEC in the formal JART review process. All these agencies have since removed their objections following the final JART report. The Town of Halton Hills

will need to amend its official plan to enable the proposed development, and staff from Halton Hills will recommend approval for the requested official plan amendment following approval of the NEP amendment.

NEC also received input from MECP (both the Environmental Assessment Branch and the Species at Risk Branch) and the Ministry of Citizenship and Multiculturalism (MCM). MECP Environmental Assessment Branch provided a technical response outlining additional information or edits that would be required, but indicated no objection to the proposal other than indicating a more detailed review would be undertaken during its review of the applications for Permit to Take Water and the Environmental Compliance Approval amendment.

MECP Species at Risk Branch provided a number of comments and questions that would need to be addressed before a final letter of advice could be provided but offered no objections.

MCM reviewed the technical reports related to cultural heritage and indicated no outstanding concerns.

Following the final JART report, there were no outstanding agency objections to the proposal.

5.2 Public Comments:

Two comments were received from members of the public expressing opposition to the application by Dufferin. The comments were generally “opposing” the development due to noise, air and traffic impacts as well as impacts to the environment and human health. When asked if their objections were intended to be formal objections whereby, they would participate in a hearing at the Ontario Land Tribunal, both indicated that they were not formally opposing.

5.3 Indigenous Communities:

A letter notifying of the application was sent to the Mississauga’s of the Credit First Nation (MCFN) in September 2022 by the NEC. No response was received from MCFN.

At the outset of consultation, the NEC was advised by the Indigenous Relations Advisor in MNR that MCFN was the only community that would require notice and consultation in relation to this application. In early 2023, however, MNR realized that changes to the accepted traditional territory of the Six Nations of the Grand River (SNGR) meant that this community as well as the Haudenosaunee Confederacy Chiefs Council (HCCC) should also be engaged, and MNR directed Dufferin to engage directly with these communities.

In December 2023, SNGR indicated concerns with the proposal to MNR in the course of consultations, including general opposition to any further aggregate development within the Greenbelt as a whole. SNGR sought funding to conduct an independent peer review of Dufferin's technical reports and findings. Dufferin provided financial support for the peer review and SNGR contracted Shared Value Solutions to conduct the technical review. Shared Value Solutions identified several technical concerns and provided a table of 78 comments, issues, questions and recommendations for Dufferin to address. Dufferin provided a fulsome response to these questions with a substantial detailed report directly addressing the concerns raised by Shared Value Solutions.

Following the report MNR and NEC staff reached out to SNGR several times to determine if there were any remaining concerns related to the proposal to extend the Milton Quarry. At the time, SNGR had not indicated any further specific concerns related to the Dufferin proposal but continued to express their general position with respect to aggregate development in the Greenbelt.

On July 19 and September 24, 2024, joint letters from MNR District/Region staff and the NEC were sent to SNGR to respond to additional concerns which had been raised in relation to the project and to provide information on how those concerns have been addressed and considered in assessing the adequacy of consultation. These letters confirmed that the Ministry and the NEC were of the view that the project can proceed with the decision-making processes associated with the applications on the basis that the requirements of the duty to consult Indigenous communities had been fulfilled.

5.4 Public Interest Advisory Committee:

The Public Interest Advisory Group (PIAC) is a committee established through the *Niagara Escarpment Planning and Development Act* (NEPDA), with the members being appointed by the Minister pursuant to section 4(1) of the NEPDA to make recommendations to the NEC and the Minister on amendments proposed to the NEP. PIAC's recommendations must be considered by the NEC, hearing officers (where relevant) and the Minister when a decision is being made.

Three of the five members of PIAC (meeting quorum) attended a meeting with NEC staff on August 30, 2023, to discuss the Dufferin proposal. The members of PIAC made particular note of the extensive review process undertaken by JART and voted to support the application.

PIAC Members Present

Susan Robertson (Chair) Ontario Nature
Sean Morrison Ontario Real Estate Association
Kevin Nichol Ontario Snow Resorts Association

Regrets

Drew Spoelstra Ontario Federation of Agriculture
Melanie Horton Ontario Stone, Sand and Gravel Association

6.0 Planning Analysis

6.1 Overview

The proposed Dufferin MQEE requires several approvals including a NEP amendment, a Development Permit from the NEC, an Official Plan amendment for the Town of Halton Hills, and a license under the *Aggregate Resources Act*. An amendment to the Region of Halton Official Plan may also be required, however it would mirror the change to the Town of Halton Hills Official Plan and be completed by the Town. The planning analysis below focuses on how the proposal meets the policies of the NEP. Approval of regional and lower tier official plan amendments (as necessary) will follow the NEP amendment (in accordance with s. 24(3), NEPDA) and are the responsibility of the Town of Halton Hills. As the official plan amendment(s) must follow a decision on the NEP amendment, staff will ensure that the amendments do not conflict with the NEP at the time of approval.

A decision on the ARA license must also follow approval of the NEP amendment and issuance of the Development Permit (in accordance with s. 24(3), NEPDA). NEC staff will seek to ensure that the ARA licence conditions are consistent with the NEC decisions.

The proposal must also comply with the Greenbelt Plan and the Provincial Planning Statement (PPS). The NEP, however, takes precedence over both of these to the extent of any conflict. The NEC review of the Greenbelt Plan and the PPS will focus on these other policies.

6.2 NEP Part 1: Permitted Uses – Aggregate Extraction

Aggregate extraction can be undertaken in both the Escarpment Rural Area and the Mineral Resource Extraction Area land use designations. Extraction in the ERA,

however, is limited to 20,000 tonnes annually (Per ERA permitted use 1.5.3.17). To extract larger annual volumes, the lands must be designated as MREA.

The NEP allows for consideration of lands to be re-designated from ERA to MREA per Objective 7 of the Escarpment Rural Area (Part 1.5.1.7). This allowance is unique among the land use designations, in that there is no ability to consider amending the designation of lands from any other designation to MREA. The lands proposed by Dufferin to be re-designated MREA are currently designated ERA and may therefore be considered for re-designation subject to satisfying all other relevant Part 1 policies, and the relevant Development Criteria policies in Part 2 of the plan.

The re-designation of lands in the NEP can only be done through an amendment to the plan, which is subject to the processes for general plan amendments (Part 1.2.1) and the specific requirements for amendments for Mineral Resource Extraction Areas (Part 1.2.2).

6.2.1 Amendment Requirements Part 1.2.1

Part 1.2.1 of the NEP outlines provisions that apply to applications to amend the NEP and require that the amendment demonstrates that:

- Changes to planning policies and land use designations continue to meet the Purpose and Objectives of the NEPDA and the NEP;
- The amendments are justified which shall include the rationale for the amendment, as well as reasons, arguments or evidence in support of the change to the plan;
- The proposed amendments and the expected impacts resulting from the proposed amendment do not adversely affect and be consistent with the purpose and objectives of the NEPDA and be consistent with other relevant Provincial policies; and,
- The proposed amendments satisfy the Development Criteria set out in Part 2 of the NEP.

The application and planning justification report submitted by Dufferin in support of their application provide adequate justification and rationale to satisfy the second bullet under Part 1.2.1. The remaining provisions in this policy including that the proposal will continue to meet and not adversely affect the Purpose and Objectives of the NEPDA and NEP, and that the amendments satisfy Part 2 of the plan, are reviewed in the following sections. Conclusions with respect to these will be made in the NEP Summary section (section 6.5).

6.2.2 Amendment Requirements Part 1.2.2

In addition to the considerations for all amendments to the NEP (Part 1.2.1), Part 1.2.2.3 requires that amendments to redesignate lands to MREA must also specifically consider how the following matters are considered:

- a) Protection of the Escarpment environment;
- b) Opportunities for achieving the objectives of the NEPDA through the final rehabilitation of the site;
- c) The protection of prime agricultural areas, the capability of the land for agricultural uses, and its potential for rehabilitation for agricultural uses; and,
- d) Opportunities to include rehabilitated lands in the NEPOSS.

Item c is not relevant in this application as the lands are not within a Prime Agricultural Area. As with Part 1.2.1 above, many of the remaining items in this section also overlap other policies of the NEP including the Development Criteria in Part 2 of the plan and are addressed in the appropriate sections below. Conclusions with respect to these will be made in the NEP Summary Section (section 6.5).

Part 1.2.2.4 also requires that applications to amend lands to MREA be accompanied by:

- a) Information on the location of the site in relation to the Escarpment and to the Escarpment Rural, Protection and Natural area designations;
- b) Information to support the requirements of this Plan, along with information submitted to meet the requirements of the *Aggregate Resources Act*, including site plans and reports submitted under that Act; and,
- c) Information on the ultimate use of the site in conformity with the applicable land use designations.

These criteria have been met as part of the application and technical studies submitted in support of Dufferin's application.

6.3 NEP Part 2 Development Criteria

The following sections are an analysis of the relevant Part 2 Development Criteria that must be satisfied with respect to this proposal.

6.3.1 Analysis of Part 2.2 General Development Criteria

Part 2.2.1 provides that the Escarpment environment shall be protected, restored, and where possible enhanced for the long-term, having regard to multiple or successive development that is likely to occur. This policy is essentially a consideration of

cumulative effects/impacts. Dufferin concluded that the proposed quarry expansion would not result in additional cumulative impacts and in fact will result in a long-term benefit to the Escarpment environment considering the proposed ecological enhancement plan, the rehabilitation plan and proposed invasive species monitoring plan combined with the fact that the area to be subject to extraction is currently in fields and that there would be no impact to the significant woodlands. In addition to these measures, the long-term plan is for the conveyance of the rehabilitated lands to Conservation Halton. The JART peer reviewer had some questions and clarifications, but generally agreed with this conclusion. Part 2.2.1 is satisfied.

Part 2.2.2 identifies that the site should not be prone to natural hazards, and that the development will not impact the control of natural hazards including flooding, erosion and other water related hazards and hazards associated with unstable soil or unstable bedrock. Conservation Halton reviewed the application and the various studies and confirmed that the proposed extension is outside of hazard lands and that karst was not identified within the proposed license area. They concluded that risks related to natural hazards (flooding and erosion hazards as well as hazardous lands) are not anticipated, that there should be no risk to public health or safety or of property damage, and that the proposal will not create new or aggravate existing hazards. The JART peer review concurred with these findings. Part 2.2.2 is satisfied.

The subject property contains both Escarpment Rural and Escarpment Natural Area land use designations under the NEP. The area proposed for redesignation to MREA is restricted to the Escarpment Rural Area, consistent with Part 2.2.5 which requires development to be restricted to the lease restrictive land use designation on a specific property.

The proposal complies with Part 2.2

6.3.1 Analysis of Part 2.5 Development Affecting Steep Slopes

Part 2.5 requires that development on steep slopes is compatible with the Escarpment environment and does not result in unsafe conditions. The site is set back substantially (approximately 1 km) from the Escarpment brow satisfying Part 2.5.2. There are no steep slopes on the subject property and the proposal will not result in unsafe conditions related to slopes.

The proposal complies with Part 2.5.

6.3.1 Analysis of Part 2.6 Development Affecting Water Resources

Consideration of water resources for the proposed Dufferin MQEE includes the potential for impacts of dewatering to wetlands and groundwater resources (which would include potential impacts to private wells). Aggregate development is not proposed within a key hydrologic feature and there are no wetlands within the proposed extraction area. There are, however, Provincially significant and unevaluated wetlands on the adjacent lands within the area that could be impacted by dewatering activities. The application for the proposed amendment and Development Permit included a number of studies that considered water resources, and several peer reviewers were retained by JART to review the various reports, site plans and other documents related to water resources. This included one reviewer for hydrogeology (primarily the geology and water resources assessment report), one to review the hydrologic/hydrogeological modelling, one to review the surface water assessment (issues associated with flooding, erosion, water quality and water balance to sensitive features) and a final reviewer who focussed on karst. In addition, Conservation Halton reviewed the modelling and assessed the risks regarding potential hazards related to flooding. Several discussions occurred between the peer reviewers and specific JART members with knowledge and experience in these areas.

The existing Dufferin quarry, including the licensed area immediately adjacent to the proposed extension (to the north), has utilized a water management system since 2007 to replenish ground and surface water where required. Ground water levels are monitored by test wells. When required, water is pumped into discharge wells, effectively replenishing ground water where needed. Water is also discharged above ground allowing water to diffuse into wetlands to maintain their water levels. Water quality monitoring is conducted to ensure no negative impacts from contaminants. The water management system has been proven to be effective in protecting wetlands and groundwater (including private wells) within the existing operation to the north and is proposed to be expanded to include the extension.

In the long term (post extraction), it is anticipated that local groundwater levels and wetlands will be maintained primarily by passive lake-based mitigation with water entering the water table from the resulting lake. Some ongoing pumping to maintain water levels will be required in perpetuity, however, and Dufferin has entered into an agreement with Conservation Halton to take ownership of the lands post restoration, and to operate the water management system as and when necessary. JART has encouraged Dufferin to consider other practical and feasible alternatives to continuous pumping to maintain groundwater levels and the water levels and hydroperiods of wetlands, however, it is acknowledged that the water management system will need to be used in perpetuity regardless of the current application since the system has been approved for the original east expansion to the north of the current application. JART

has identified the need for additional monitoring with respect to the efficacy of the water management system in enhancing and maintaining wetlands while not causing off-site impacts in terms of erosion and flooding to downstream features. This will be addressed through the final Adaptive Environmental Management and Protection Plan (AMP agreement) and conditions of the Development Permit, should the amendment be approved.

The peer reviewers are generally satisfied with the proposed water management system and mitigation to protect ground and surface water resources. The proposal complies with Part 2.6.

6.3.1 Analysis of Part 2.7 Development Affecting Natural Heritage

Technical reports related to natural heritage submitted with the application included a natural environment report, an ecological enhancement plan, the progressive and final rehabilitation and monitoring study and the AMP agreement. North-South Environmental was retained by JART to review these documents. In addition, Conservation Halton reviewed the reports with a focus on regulated wetlands. These reviews were supported by discussion and collaboration with peer reviewers for water resources due to the overlap, particularly with respect to wetlands.

The proposed ecological enhancement plan is a key element to the application. Dufferin has committed to immediate and short-term measures (following approval) to increase and improve natural heritage features and function, including connectivity, within the proposed licensed area, outside of the proposed extraction area. These lands are largely composed of retired agricultural fields and enhancements will include reforestation using native species suited to the local landscape, management of existing woody vegetation in some areas, and the placement of habitat features such as rock piles, stumps/root wads and other woody debris. In addition, a wetland within these lands will be enhanced by the addition of habitat features and strategic woody plantings around the wetland margins. This wetland will also benefit from the proposed water management system which will enhance water levels in the wetland into the spring and summer months increasing amphibian breeding success, including for the endangered Jefferson's Salamander. The actions proposed in the ecological enhancement plan are important considerations in the review and satisfaction of the various natural heritage policies including the overall benefit permit that will be required under the *Endangered Species Act (2007)* (ESA).

The study area considered in the various natural heritage evaluations and plans includes the proposed area of extraction, the remainder of the lands to be under an ARA license, lands within 120 m of the proposed extraction area and an additional area

to capture adjacent wetlands within the forested area. Natural heritage values found within the study area included:

- Habitat of endangered and threatened species
- Significant wetlands
- Significant woodlands
- Significant wildlife habitat
- Significant areas of natural and scientific interest
- Potential indirect fish habitat.

The majority of these features are located outside of the proposed licensed area, however, there is a small area of significant woodland within the licensed area (outside of the extraction area) and there is known habitat of endangered and threatened species within both the extraction and remaining licensed areas. Review of impacts and consideration for all the natural heritage features is discussed below.

Habitat of Endangered and Threatened Species

Although Part 2.7.2 of the NEP prohibits development within a key natural heritage feature except for residential development and forest, fisheries and wildlife management, Part 2.9.1 of the NEP provides an exception to allow aggregate development within a key natural heritage feature other than wetlands and significant woodlands (that are not young plantation or early successional habitat). In addition, Part 2.9.2 further provides specific policy with respect to development within the habitat of endangered or threatened species, which is permitted so long as the development complies with the ESA.

Endangered and threatened species with known or potential habitat within the study area include:

- Butternut (Endangered)
- Jefferson Salamander (Endangered)
- Unisexual Ambystoma (Jefferson Salamander dependent population) (Endangered)
- Bobolink (Threatened)
- Eastern Meadowlark (Threatened)
- Chimney Swift (Threatened)
- Eastern Small-footed Myotis (Endangered)
- Little Brown Myotis (Endangered)
- Northern Myotis (Endangered)
- Tri-coloured Bat (Endangered)

Butternut

Five butternut trees were noted within the study area, with one seedling found within the proposed extraction area. This individual will need to be removed for extraction, however, the ESA permits removal of individuals subject to the planting of new butternut in a different location. Dufferin will have the seedling assessed, and if it is considered retainable (healthy), then two butternut trees will be planted elsewhere on Dufferin lands and maintained for at least two years, satisfying the ESA.

Jefferson's Salamander and unisexual *Amybystoma*

Jefferson's salamander and unisexual *Amybystoma* (Jefferson salamander dependent population) utilize wetlands outside of the proposed extraction area. Habitat mapping was conducted following the approved habitat regulation for these species, which resulted in approximately 4 ha of the extraction area being mapped as regulated habitat in addition to a small area within the footprint of the water management system outside of the extraction area. The extraction area is composed largely of open field and is not considered to be good quality salamander habitat. Mitigation to protect individual salamanders within the extraction area will include exclusion fencing to prevent salamanders from entering the extraction area and timing restrictions for the removal of habitat features.

For habitat outside of the proposed extraction area, the potential impacts to salamanders will result from the installation of the water management system. Mitigation will include exclusion fencing around work areas during installation, and timing restrictions to minimize the likelihood that salamanders are in the area during work. In addition, the disturbance footprint will be minimized to the extent feasible and prompt restoration of disturbed areas will occur. It is anticipated that there will be approximately 1.94 ha of habitat disturbed, with 1.45 ha of this area immediately restored. Approximately 0.49 ha of land outside the extraction area will remain disturbed in the form of an access road and watermain, control valve huts and recharge wells.

Breeding ponds outside of the extraction area will be protected from dewatering impacts through the use of the water management system to ensure appropriate seasonal water levels (see Significant Woodlands). This will include groundwater recharge wells and the direct addition of water through diffuse discharges into two wetlands that currently do not maintain water levels long enough into the breeding season to allow successful salamander breeding. This approach was utilized in the existing east extension immediately to the north, with good success.

Concerns were also raised during peer review about potential impacts of blasting on salamanders within the adjacent breeding ponds (wetlands). Although little evidence exists concluding that blasting can result in negative impacts, the reviewers did suggest

additional changes to the existing monitoring program that would serve to determine if there is any salamander mortality during spring breeding. Dufferin has agreed to increase monitoring for salamanders during the spring breeding period concurrent with planned blasting occurrences.

Although Dufferin will mitigate the impacts to individual salamanders, an overall benefit permit will still be required from MECP to compensate for the loss of habitat. As noted above, Part 2.9.2 of the NEP provides for aggregate development to occur in the habitat of endangered or threatened species so long as the proposal complies with the ESA. Dufferin is proposing to achieve an overall benefit through the ecological enhancement plan, which will include the reforestation of 10.3 ha of land, vegetation management in select areas, installation of rock piles and woody debris piles and enhancement of the wetland closest to the extraction area. These activities are anticipated to increase foraging, hibernation and migration habitat and increase breeding success in the wetland resulting in an overall benefit for these salamanders. The final determination of meeting overall benefit rests with MECP.

Species at Risk Birds

Species at Risk birds with known or potential habitat in the study area include bobolink, eastern meadowlark and chimney swift.

Chimney swift was noted within the study area based on the observation of a single individual foraging bird. Since this species is readily detectable and nests colonially, it is unlikely that the observation represents a breeding colony within or immediately adjacent to the proposed licensed area. However, as the forested area of the adjacent ANSI lands could provide suitable nesting trees, it is possible that large-diameter nesting trees are present. Under the ESA, protected habitat in the absence of suitable anthropogenic habitat (e.g., chimneys) is limited to a nest tree and the area within 90 m of the nesting tree. Such trees only exist outside of the proposed extraction and broader licensed area, and as such, there are no anticipated impacts to chimney swift.

A total of 18.7 ha of bobolink and eastern meadowlark habitat has been mapped following MECP guidelines within the proposed extraction area. This habitat will be removed during extraction following exemptions that exist for these species. Since the total habitat area to be removed is less than 30 ha, regulations under the ESA allow for the removal subject to conditions including the creation of new habitat in another location. Dufferin has already initiated work to create suitable grassland habitat on a nearby property. Pending confirmation by MECP that the proposal meets the existing exemptions, development may proceed subject to Part 2.9.2 which allows for aggregate development in the habitat of threatened or endangered species so long as the proposal complies with the ESA.

Bats

The natural environment report concluded that there is potential maternal habitat (tree cavities) within the study area for the four bat species, but that the habitat is primarily located within the adjacent forested ANSI lands. Habitat within the proposed extraction area was identified by the presence of two trees with cavities that could be used for maternal or day roosting. These trees are located within a small woodland that would be removed during excavation. A fulsome review of the habitat preferences for each of the four endangered bat species concluded that these trees could be utilized by Little Brown Myotis but not likely by the other species, and that the small woodland represented poor roosting habitat compared to the substantial high quality bat roosting and foraging habitat found within the large blocks of forest outside of the proposed extraction area. The study concluded that by restricting timing of tree removal, no harm would come to individual bats, and that due to the extensive adjacent bat habitat, removal of the low-quality woodland including the two potential roost trees would not represent loss of bat habitat. The conclusions of the study are that the removal of the small woodland within the proposed extraction area will not impact bat habitat, and that the proposal complies with the ESA.

Wetlands

No wetlands exist within the proposed extraction area; however, a number of wetlands are located in the adjacent lands including one wetland within the broader licensed area. This wetland is located just north of the new proposed extraction area. A 50 m setback has been established for this feature. The Natural Environment Technical Report concluded that this wetland currently does not hold water long enough into the season to support amphibian reproduction, however, based on observations of use by the endangered Jefferson's salamander, Dufferin proposes to enhance this wetland by managing water levels (through the water management system) to ensure water levels are adequate and remain long enough into the summer season to support successful salamander breeding and reproduction. This work is part of the ecological enhancement plan (discussed above) being undertaken as part of the overall benefit permit which will be required to address loss of Jefferson's salamander habitat.

A second wetland, located within significant woodland south of the proposed extraction area, also experiences low water levels that are not sufficient to support amphibian breeding. This wetland will also be supplemented through the water management system so that it can provide functional breeding habitat and contribute to the overall benefit for Jefferson's salamander. Part 2.7.2 prohibits development for aggregate purposes within wetlands, however, site specific amendments are included to enable this work to benefit the wetlands and species at risk habitat (see discussion on Part 2.9).

Fish Habitat.

The natural environment report concluded that fish habitat exists based on observations of baitfish within one wetland outside of the licensed area which has hydrological connections to other wetlands upstream. Baitfish were not noted in the upstream wetlands indicating that barriers in the connecting watercourses may limit fish distribution. The report concluded that since there would be no impacts to the wetlands or hydrologic connections, that there would be no impact to fish habitat regardless of the extent of occupied habitat that exists.

Significant Woodlands, Significant Wildlife Habitat, ANSI

There is substantial overlap between significant woodland, significant wildlife habitat and significant Areas of Natural and Scientific Interest within and adjacent to the study area. Much of the lands outside of the existing and proposed extraction area that are forested, are within the Provincially Significant Halton Forest North ANSI. As the ANSI boundary generally follows the edge of the mature forest, it generally aligns with the boundary of significant woodland and significant wildlife habitat. Much of the proposed extraction area is substantially buffered from these significant forest elements by the remainder of the licensed area which is currently abandoned agricultural fields but that will be subject to tree planting as part of the ecological enhancement plan. Portions of the forested area and significant woodland do, however, come close to the proposed extraction area within the south-eastern portion of the site, for a length of approximately 400 m. In this area a minimum 20 m setback from the significant woodland will be observed with no aggregate development within the buffer except for the water lines associated with the water management system, which will be placed a minimum of 10 m from the edge of the significant woodland. Staff are satisfied that the setbacks will be sufficient to protect significant woodland, significant wildlife habitat and the features of the ANSI.

In addition to the water management system being located within the buffer areas, minor elements of the system will also be installed within significant woodlands (water lines and recharge wells) to supplement ground water levels through recharge wells and to directly supplement water in one of the wetlands. The components of the water management system to be included in significant woodland has been minimized to the extent possible, and most of the disturbance related to installation will be immediately rehabilitated. It is anticipated that only approximately 0.49 ha of significant woodland will be permanently lost to the presence of equipment and access road associated with the water management system (see discussion under Jefferson's salamander above).

This approach was utilized in the existing approved east extension immediately to the north with apparent success and is recommended to be approved here through site

specific amendments to enable the work in significant woodlands and wetlands. Although Part 2.7.2 prohibits development for aggregate purposes in a key natural heritage feature, Part 2.9.1 provides an exception for aggregate development in all but significant woodland and wetlands. Site specific policy amendments are included in the proposed amendment to enable the placement of the water management system in significant woodland and wetlands (see Part 2.9).

The final JART report generally concluded that natural heritage concerns had been adequately dealt with. Remaining concerns identified the need for added monitoring of black ash and water quality within the water management system, which are addressed in the final AMP agreement. Reviewers also continue to have concerns related to the use of the water management system in perpetuity to effectively mitigate impacts to Jefferson's salamander. Dufferin has entered into agreements with Conservation Halton with respect to ongoing (permanent) management of the water management system following extraction and rehabilitation. Dufferin has also agreed to increased monitoring with respect to concerns about blasting impacts on Jefferson's salamander.

Connectivity

Part 2.7.3 requires that the diversity and connectivity between key natural heritage features and key hydrologic features be maintained and where possible enhanced. Dufferin has demonstrated how that despite the removal of some potential species at risk habitat within the proposed extraction area, that all other existing key natural heritage and hydrologic features will be protected. The connectivity and function of these features will be further enhanced through the ecological enhancement plan and water management system which will replace existing retired fields with forested habitat and enhance wetland function. Part 2.7.3 is satisfied.

Subject to site specific amendments to enable installation of elements of the water management system within significant woodlands and wetlands, the proposal complies with Part 2.7.

6.3.1 Analysis of Part 2.8 Agriculture

An agricultural impact assessment was completed by DBH Soil Services Inc. The proposed area of development is identified as being 93% open field, with the remainder being woodland, however, there is no active agricultural operations on the subject lands and no buildings of any kind. The subject property is not identified as being within a prime agricultural area. As such, there will be no loss of agricultural facilities due to the proposed development. Traffic levels and impacts associated with the proposed development are not anticipated to change with the expansion. The study concluded

that there would be no additional impact on surrounding agricultural activities in the area.

Following some clarification, the peer review conducted for JART by Michael Hoffman (AgPlan Limited) concluded that the proposed site is relatively poor from an agricultural perspective and that the conclusions of the DHB report are appropriate, and that there would be no impact on agriculture.

The proposal complies with Part 2.8.

6.3.1 Analysis of Part 2.9 Mineral Aggregate Resources

NEP Part 2.9.1 provides that, notwithstanding the policies of Part 2.7, mineral aggregate operations and accessory facilities *may* be permitted in key natural heritage features, except for wetlands and significant woodlands (that are not young plantations or early successional habitat). The proposal does not suggest extraction in wetlands or significant woodlands but does propose some associated development adjacent to and within such features.

To mitigate impacts to groundwater and wetlands, Dufferin proposes to expand the existing water management system into the proposed licensed area of the MQEE. For the water management system to function properly, elements of the system including water lines and recharge wells will be required to be installed within the larger forested block (including ANSI, significant woodland, significant wildlife habitat). Part 2.7.2 prohibits development within key natural heritage features except for limited uses not including aggregate extraction or activities accessory to aggregate extraction. However, Part 2.9.1 provides that despite Part 2.7.2, development for aggregate extraction may be permitted in a key natural heritage feature other than significant woodlands and wetlands. As the forested area essentially represents several key natural heritage features, it would not be permitted by Part 2.9.1 due to the designation of significant woodland. In addition, development in wetlands would not be permitted. To address this, site specific amendments are proposed to enable the water management system to be installed in the significant woodlands and wetlands to mitigate the effects of dewatering during aggregate extraction. As this approach was permitted in the extension lands to the north, is generally minor in nature, will have a limited area of impact and where most of the disturbance will be restored immediately following installation, staff feel that the installation in this situation is reasonable. In addition, the use of the water management system will provide benefit to two wetlands, likely resulting in enhanced ecological function and successful amphibian breeding, including for Jefferson's salamander.

NEP Part 2.9.2 further permits the consideration of mineral aggregate operations in key natural heritage features which is solely the habitat of an endangered species (and not any other key natural heritage feature), provided the proposal complies with the ESA. As summarized in Part 2.7, five live butternut trees were observed in the study area with one tree located in the proposed extraction area which will need to be removed as part of the proposal. This removal will be done in compliance with the ESA.

The proposed extraction area and the area utilized for the water management system will reduce the habitat of Jefferson salamander and unisexual *Ambystoma*, which will require an overall benefit permit from MECP. Overall benefit is proposed to be accomplished through the ecological enhancement plan and the water management system. If the amendment is approved, then a condition of the Development Permit will be that development is not initiated prior to issuance of an overall benefit permit or the receipt of advice from MECP that the proposal complies with the ESA. With these conditions, the proposal complies with Part 2.9.2.

NEP Part 2.9.3 of the sets out ten general requirements for matters to be demonstrated in all proposals for aggregate operations. These requirements overlap with several other policies and are summarized in the appropriate sections. Those that are not, are summarized here. The requirements are as follows:

a) *demonstrate how key natural heritage features and functions will be protected and where possible enhanced during and after extraction;*

The analysis of Part 2.7 demonstrates that this requirement has been met.

b) *demonstrate how cultural heritage resources will be conserved;*

The analysis of Part 2.10 demonstrates that this requirement has been met.

c) *demonstrate how the Escarpment's scenic resources and open landscape character will be maintained and where possible enhanced during and after the extraction;*

The analysis of Part 2.13 demonstrates that this requirement has been met.

d) *demonstrate how key hydrologic features will be protected and where possible enhanced during and after extraction, including the maintenance of the groundwater and surface water quantity and quality;*

The analysis of Part 2.6 demonstrates that this requirement has been met.

e) *demonstrate how natural heritage features will be avoided and the connectivity between key natural heritage features and key hydrologic features will be*

maintained and where possible enhanced during and after the extraction of mineral aggregates;

The analysis of Part 2.7 demonstrates that this requirement has been met.

- f) *in prime agricultural areas, undertake an Agricultural Impact Assessment to determine how to avoid, minimize and mitigate impacts on agricultural lands and operations;*

The analysis of Part 2.8 demonstrates that this requirement has been met.

- g) *minimize negative impacts of mineral aggregate operations and their accessory uses on surrounding land uses;*

Much of the land surrounding the proposed MQEE is owned and operated by Dufferin and is already in aggregate extraction or has been rehabilitated. There are two parcels of land immediately adjacent to the subject property that are in the NEPOSS and owned by Conservation Halton and the Regional Municipality of Halton. It appears, however, that trails in the NEPOSS properties are set well back from the existing and proposed aggregate site and would not be impacted.

The remaining surrounding lands are largely forested areas designated as ENA by the NEP and are also within a Provincially significant ANSI. These lands are owned by Dufferin and its partners.

Dufferin outlined that the closest sensitive land uses are approximately 1.1 km from the proposed extension lands. Impact assessments were completed related to air quality, blasting and noise which concluded that with the implementation of the recommended mitigation and monitoring requirements, the proposed MQEE and accessory uses will comply with provincial guidelines, standards and procedures at surrounding sensitive land uses.

Based on the large setback to adjacent land uses, Staff concur that there will be minimal impacts, and that Part 2.9.3 (g) is satisfied.

- h) *complete progressive and final rehabilitation of the licensed site to provide equal or greater ecological values, including utilizing native species, in order to accommodate subsequent land use designations compatible with the surrounding land uses;*

Large portions of the existing Dufferin Milton Quarry have already been rehabilitated and the rehabilitation plan for the proposed MQEE builds on the existing and ongoing rehabilitation plan. The rehabilitation plan for the 15.9 ha extraction area of the proposed MQEE, which is currently in abandoned

agricultural fields, includes deep lake (7.7 ha), shallow and deep wetlands (1.5 ha and 1.2 ha respectively), islands (0.4 ha), reforestation (5.1 ha) and cliffs (673 m). Species planted will be native to the area and appropriate in the local context. Overall, Dufferin identifies that the rehabilitation plan, combined with the ecological enhancement plan will replace the abandoned agricultural fields and result in a net-increase in biodiversity, ecological function, wildlife habitat, significant woodland and wetlands. Based on review of the ecological enhancement and rehabilitation plan, Staff agree that the net result following rehabilitation will be equal or greater ecological value, satisfying Part 2.9.3 (h).

- i) *within the licensed area but outside of the area of extraction, protect the Escarpment environment during periods of extraction and rehabilitation;*

The lands within the proposed licensed area, outside the area of extraction, are composed of abandoned agricultural fields. Water lines to support the water management system will be run through parts of these lands, but the majority of the lands will be subject to the ecological enhancement plan which will see tree planting and other activities resulting in an overall increase in biodiversity and natural cover (see Part 2.7). This work is to start shortly after approval. Processing, storage of extracted aggregate, etc. will be done in the existing quarry, and so there would be no need for work to occur outside the extraction area in the additional lands under the new license. Staff are satisfied that there will be no impacts outside of the extraction area, and that instead there will be a net increase in biodiversity and natural cover in the short term, satisfying Part 2.9.3 (i).

- j) *minimize negative impacts of mineral aggregate operations and their accessory uses on parks, open space and the existing and optimum routes of the Bruce Trail.*

The proposed MQEE is adjacent to two NEPOSS properties, the Halton Regional Forest owned by the Region of Halton, and the Tirion Tract owned by Conservation Halton. The latter will be buffered from the extraction area by the additional lands under license, which are subject to the ecological enhancement plan. The former lands are buffered from the extraction area by the road allowance and an additional 20 m setback from the property line. In both cases, the Bruce Trail is set back more than a km from the proposed extraction area. Staff are satisfied that there will be no impact on the NEPOSS or the Bruce Trail and that Part 2.9.3 (j) is satisfied.

Subject to the proposed site-specific policy amendments to enable elements of the water management system within significant woodlands and wetlands, the proposal complies with Part 2.9.

6.3.1 Analysis of Part 2.10 Cultural Heritage

The Objective of NEP Part 2.10 Cultural Heritage policies is to conserve the Escarpment's cultural heritage resources, including significant built heritage resources, cultural heritage landscapes, and archaeological resources. The applicant submitted a Stage 1 and 2 archaeological assessment and a stage 3 archaeological assessment, both completed by Golder and Associates and a cultural heritage impact assessment completed by MHBC.

The stage 1 and 2 assessment documented three sites within the property where artefacts were found. At two of these sites (sites 1 and 3) a single non-diagnostic, pre-contact Indigenous artefact was found. A more intensive search in the vicinity of each was undertaken with no further artefacts noted. In both instances, it was concluded that the artefacts represented transient use of the area by Indigenous peoples, that the sites did not meet the criteria for determining the need for a Stage 3 site specific assessment, and that no further investigations were necessary.

At the third location (site 2), 152 Euro-Canadian artifacts were found in an area measuring 70X75 m. The artefacts represent or would be associated with domestic occupation from approximately the mid-19th to early 20th century. The findings met the criteria in the Standards and Guidelines for Consultant Archaeologists for having cultural heritage value or interest, requiring a Stage 3 archaeological assessment of site 2.

Golder and Associates also conducted the Stage 3 archaeological assessment which included 51-1m² test pits within the 70X75 m area. A total of 1119 artifacts were found which resulted in the determination that the site represented the historical domestic occupation of the site dating from the late 19th century into the early 20th century by the Chisholm family, who purchased the surrounding parcel in 1875. Because the artefacts predominately represented occupation after 1870, the Standards and Guidelines for Consultant Archaeologists indicate that there is no further cultural heritage value or interest in the site, and the study concluded that the site has been sufficiently assessed and documented and that no further archaeological assessment is required.

The cultural heritage impact assessment found that the property has no built heritage value and does not represent a significant cultural heritage landscape. As such, it was concluded that the proposed quarry development will have no negative impact on cultural heritage resources.

Following peer review, JART had minor comments related to mapping in the stage 3 archaeological assessment, asking that the report include detailed mapping of the area where the assessment was completed, and delineating the area encompassing site 2. There was also a typographical error noted. Golder and Associates provided confirmation of the typographical error and provided updated mapping to JART but noted that since the report had been submitted to the ministry, that it could not be amended.

The final JART report concluded that with the completion of the Stage 3 archaeological assessment, all archaeological concerns with respect to the proposed MQEE have been addressed, and that all issues related to cultural heritage were adequately addressed by Dufferin, and the Ministry of Citizenship and Multiculturalism has agreed with all findings. Staff concur with these conclusions.

The proposal complies with Part 2.10.

6.3.1 Analysis of Part 2.13 Scenic Resources and Landform Conservation

The Objective of Part 2.13 Scenic Resources and Landform Conservation is to ensure that development preserves the natural scenery and maintains Escarpment related landforms and the open landscape character of the Escarpment. A visual impact assessment was submitted by Dufferin which was reviewed by NEC's Landscape Architect. A number of requests were made for edits and additional information, and following submission of the revised report, the Landscape Architect was satisfied. No unique landforms are proposed to be impacted by the proposed extraction. Members of JART and NEC staff are satisfied and conclude that the proposal complies with Part 2.13.

6.4 NEP Part 3 NEPOSS

The subject lands are adjacent to the Tirion Tract Resource Management Area and Halton Regional Forest Natural Environment Park, which are both within the Niagara Escarpment Parks and Open Space System (NEPOSS). The park agencies (Conservation Halton and the Region) as members of JART, will provide input with respect to any potential impacts of the proposed development on the adjacent NEPOSS lands.

The applicant has submitted a Rehabilitation Plan for the subject lands that considers both the existing operation and the proposed expansion lands. The proposed MQEE is contiguous with the lands that are currently slated to be conveyed to Conservation Halton (following extraction and restoration), and Dufferin is proposing to include the MQEE lands as part of this future conveyance. The applicant provides that following

extraction and the completion of rehabilitation, the conveyed lands are intended to be added to NEPOSS and be managed in a manner complementary to the Objectives for Part 3 of the NEP. Once the lands are conveyed to Conservation Halton, NEC staff will work with the conservation authority on the development of a master or management plan that will satisfy the requirements of Part 3 of the NEP, and the NEPOSS Planning Manual.

6.5 NEP Policy Summary

Staff has undertaken a fulsome review of the application to amend the land use designation of the subject lands from Escarpment Rural Area to Mineral Resource Extraction Area, and to include site specific policy amendments required for the continued use of the existing quarry for processing and other supporting operations, and the inclusion of the water management system within significant woodlands and wetlands which are also within the Escarpment Natural Area. This review included all relevant studies, peer reviews and the final JART report, and considered how the proposal addresses and satisfies the relevant NEP policies. The following is a summary of NEP policy requirements related to amendments, and an analysis of how the requirements have been met.

Part 1.2.1

Part 1.2.1 of the NEP outlines provisions that apply to applications to amend the NEP and require that the amendment demonstrates that:

- Changes to planning policies and land use designations continue to meet the Purpose and Objectives of the NEPDA and the NEP,
- The amendments are justified and include the rationale for the amendment, as well as reasons, arguments or evidence in support of the change to the plan,
- The proposed amendments and the expected impacts resulting from the proposed amendment do not adversely affect and be consistent with the purpose and objectives of the NEPDA and be consistent with other relevant Provincial policies; and
- The proposed amendments satisfy the Development Criteria set out in Part 2 of the NEP.

As noted in section 6.2, Dufferin has demonstrated why the amendments are justified, and have provided appropriate reasonings and evidence in support of their application. They have also provided reasonable responses to questions and comments from JART and the NEC, satisfying the second requirement of Part 1.2.1.

With respect to the first and third bullets in 1.2.1 relating to the Purpose and Objectives of the NEPDA and NEP, and other relevant policies. As outlined in the full NEP policy analysis, the proposal complies with relevant policies of the NEP, and staff find that the proposal also upholds the Purpose and Objectives. The policy analysis also included a full review of the relevant Part 2 Development Criteria. Subject to the site-specific policies which will permit ongoing use of the existing quarry for processing and other accessory uses, and for installation of the water management system within significant woodlands and wetlands, staff find that the proposal complies with Part 2.

Part 1.2.2

In addition to the considerations for all amendments to the NEP (Part 1.2.1), Part 1.2.2.3 requires that amendments to redesignate lands as MREA must also specifically consider how the following matters are considered:

- a) Protection of the Escarpment environment
- b) Opportunities for achieving the objectives of the NEPDA through the final rehabilitation of the site;
- c) The protection of prime agricultural areas, the capability of the land for agricultural uses, and its potential for rehabilitation for agricultural uses; and
- d) Opportunities to include rehabilitated lands in the NEPOSS.

Item c is not relevant in this application as the lands are not within a Prime Agricultural Area. As with Part 1.2.1 above, many of the remaining items in this section also overlap other policies of the NEP including the Development Criteria in Part 2. Policies within Part 2 of the plan related to key hydrologic and natural heritage features, cultural heritage and scenic resources and landform features have been satisfied, demonstrating that the Escarpment environment will be protected. Dufferin has also outlined a rehabilitation plan including future stewardship of the property by Conservation Halton which will enhance ecological features and functions of the site, provide outdoor recreation opportunities for the public and allow for future uses of the property within the NEPOSS system, demonstrating that the proposal satisfies the Purpose and Objectives of the NEP. Part 1.2.2.3 is satisfied.

Land Use Designations and Permitted Uses

Objective 1.5.1.7 of the Escarpment Rural Area provides for the consideration of the re-designation of lands designated ERA to MREA. As the portion of the property proposed to be re-designated is currently ERA, the proposal is considered a Permitted Use.

Part 1.9.1 outlines the objectives for Mineral Resource Extraction Areas, which are:

1. To designate Mineral Resource Extraction Areas where licensed *mineral aggregate operations* are permitted.
2. To minimize the impact of *mineral aggregate operations* on the *Escarpment environment*.
3. To encourage *progressive rehabilitation* of *mineral aggregate operations*.
4. To encourage rehabilitated *mineral aggregate operations* to be restored to a state that is of equal or greater ecological or agricultural value than the original characteristics of the site.
5. To ensure that, after a licence is surrendered, the land is re-designated to a land use designation that is compatible with the rehabilitation of the site, the designation criteria of adjacent lands, the surrounding *Escarpment environment* and existing land uses in the area.
6. To encourage, where possible, the integration of rehabilitated lands into the Niagara Escarpment Parks and Open Space System.

Review of the application, technical reports and NEP policies demonstrates that the objectives for MREA are being met. The lands are currently designated ERA, which allows for an application to redesignate to MREA. The technical reports have shown that impacts to the Escarpment environment will be minimized, and that restoration will be undertaken resulting in an increase in natural heritage features and ecological function. Finally, the lands will be transferred to Conservation Halton and added to the NEPOSS system.

Consideration of the appropriate land use designation will follow surrender of the license and restoration of the site and will be informed by future plans for the site within NEPOSS by Conservation Halton.

Lastly, the permitted uses for MREA noted within 1.9.3 will be met through site specific amendments to allow for ongoing use of the existing licensed east extension for processing and other accessory uses. These site-specific permitted uses will be appended to this section of the NEP.

In conclusion, the proposed redesignation of the subject lands to MREA, and the site-specific policy amendments meet the applicable policies of the Niagara Escarpment Plan

6.5 Official Plan Amendment:

The proposed MQEE will require changes to the Halton Hills Official Plan, and potentially the Region of Halton Official Plan. These changes would be limited to a mapping change to illustrate the change from Escarpment Rural Area to Mineral

Resource Extraction. NEC staff will review the final proposed amendment(s) to ensure that mapping is consistent with the NEP amendment.

Although the NEP amendments will include site specific policy changes related to the exiting approved aggregate operation located within both Halton Hills and Milton, to enable the use of existing facilities to process aggregate from the MQEE, no changes are required to the Official Plans for Halton Hills or Milton to reflect this use.

6.6 Provincial Policy Statement

On October 20, 2024, the Provincial Policy Statement (2020) was replaced by the Provincial Planning Statement (2024) (PPS). The below assessment is therefore based on PPS 2024 policies.

The PPS provides overall policy directions on matters of provincial interest related to land use planning and development in Ontario, and applies province-wide, except where the PPS or another provincial plan provides otherwise.

Provincial plans, including the Niagara Escarpment Plan, are to be read in conjunction with the PPS and take precedence over the policies of the PPS to the extent of any conflict. Where the policies of the NEP address the same, similar, related, or overlapping matters as the policies of the PPS, applying the more specific policies of the NEP satisfies the more general requirements of the PPS. In contrast, where matters addressed in the PPS do not overlap with policies in provincial plans, the policies in the PPS must be independently satisfied.

Based on this policy framework, only those relevant PPS policies that do not overlap with NEP policies are addressed here. All overlapping policies have been addressed and satisfied through the NEP policy analysis above.

Policy 2.6 Rural Lands in Municipalities

Policy 2.6.1 permits the management or use of resources on rural lands within municipalities. Policy 2.6.3 requires that development be appropriate to the infrastructure which is planned or available and avoids the need for uneconomical expansion of this infrastructure.

Traffic corridors are the only infrastructure relevant to the proposed MQEE. Dufferin has indicated that the volume of truck traffic would not change based on the expansion as the current licensed quarry is generally depleted, and operations would shift to the expansion area. The traffic impact study and haul route assessment prepared by the Municipal Infrastructure Group Ltd. for the MQEE, concluded that operations could

continue into the future without requiring road expansions as a result of the operation of the quarry. The proposal complies with PPS Policy 2.6.3.

Policy 3.5 Land Use Compatibility

Policy 3.5.1 stipulates that *Major facilities* and *sensitive land uses* shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential *adverse effects* from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of *major facilities* in accordance with provincial guidelines, standards and procedures.

The Dufferin Milton Quarry, including the MQEE lands, are quite isolated from residential development and other sensitive uses with the closest residence being located 1.1 km away. The proposed expansion is also located immediately adjacent to the current operating quarry. Dufferin provided technical studies related to air quality and noise assessments. In both instances, peer reviews through JART resulted in changes to the reports and mitigation but concluded that both will be able to meet provincial guidelines. The proposal complies with Policy 3.5.1.

Policy 4.5.2.1

Policy 4.5.2.1 stipulates that as much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible. As part of its justification, Dufferin has stated that the Milton quarry represents one of the closest to market sources of high-quality crushed stone within the province's highest demand area for aggregate resources, and thus approving the extension continues to satisfy Policy 4.5.2.1.

Policy 6.2.2

Policy 6.2.2 stipulates that planning authorities undertake early engagement with Indigenous communities and coordinate on land use planning matters to facilitate knowledge-sharing, support consideration of Indigenous interests in land use decision-making and support the identification of potential impacts of decisions on the exercise of Aboriginal or treaty rights. NEC staff worked with MNR Regional Operations Division (ROD) staff to coordinate consultation efforts related to the proposals under NEPDA and the *Aggregate Resources Act*. When interest from Six Nations of the Grand River Elected Counsel was expressed with respect to the proposal, NEC and ROD staff worked together with the applicant and SNGR to respond to concerns from the community. In July 2024 and again in September 2024, MNR and the NEC determined that the Crown's duty to consult Indigenous communities with respect to the MQEE had been fulfilled. Policy 6.2.2 is satisfied.

The proposal complies with the PPS.

6.7 Greenbelt Plan (2017)

The Greenbelt Plan Area includes the NEP Area. The NEP takes precedence over the policies of the Greenbelt Plan except for Section 1.2.1 (Vision); and Section 3.3 (the Open Space and Trails Policies). The following discussion outlines how the proposed MQEE meets these policies.

Policy 1.2.1 Vision

Section 1.2.1 of the Greenbelt Plan outlines the plans Vision, which states that the Greenbelt is a broad band of permanently protected land which:

- Protects against the loss and fragmentation of the agricultural land base and supports agriculture as the predominant land use;
- Gives permanent protection to the natural heritage and water resource systems that sustain ecological and human health and that form the environmental framework around which major urbanization in southcentral Ontario will be organized;
- Provides for a diverse range of economic and social activities associated with rural communities, agriculture, tourism, recreation and resource uses; and
- Builds resilience to and mitigates climate change.

The proposed MQEE meets the Vision of the Greenbelt Plan in that it does not further fragment the agricultural land base, has demonstrated that the proposal will protect natural heritage and water resource systems, and provides for economic activities without impacting other uses.

Policy 3.3 Open Space and Trails

The Parkland, Open Space the Trails policies of the Greenbelt Plan are intended to ensure that there are opportunities for recreation, tourism and appreciation of cultural and natural heritage. Policy 3.3.2 encourages the development of a system of publicly accessible parkland, open space and trails. These policies largely mirror those of the NEPOSS system, which is addressed in Part 3 of the NEP.

Dufferin has committed, as part of its proposal, that the property will be turned over to Conservation Halton, post extraction, for inclusion in the NEPOSS. Once ownership has transferred, NEC staff will work Conservation Halton on the development of a master or management plan.

The proposal meets Policy 3.3, and the proposal complies with the Greenbelt Plan.

7.0 Issues and Summary

NEC staff have reviewed the proposed amendment for the expansion of the Dufferin Milton Quarry and find that the proposal meets the policies of the Niagara Escarpment Plan and the PPS. Site-specific policy amendments will be required to allow for the installation of the water management system within significant woodland and wetlands and the ENA, however, the approach will result in an enhancement to ecological function within two wetlands, and the impacts of installation are minor.

Staff recommend that the Commission endorse and recommend to the Minister of Natural Resources that the proposed amendments be approved.

8.0 Recommendation

Staff recommend that the Niagara Escarpment Commission recommends to the Minister of Natural Resources that the Niagara Escarpment Plan be modified as follows:

1) Map 3 of the Niagara Escarpment Plan be amended as shown on Schedule A (See Appendix 1).

2) That NEP Part 1.9.3.25 be added as follows:

Notwithstanding the policies of Part 2.9.1 of this Plan, water lines, recharge wells, diffuse discharges and associated minor equipment related to the water management system associated with the quarry located in the Mineral Resource Extraction Area approved under Amendment PH 224 21 to the Niagara Escarpment Plan may be installed, operated and serviced within significant woodland and wetlands on the properties located at Part of Lots 11 & 12, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton;

3) That the following permitted use is added to Part 1.3.3, Escarpment Natural Area, Permitted Uses:

The Niagara Escarpment Area lands located at Part of Lots 11 & 12, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton may be used for the installation of, access to, and servicing of the water management system associated with the quarry located in the Mineral Resource Extraction Area approved under Amendment PH 224 21 to the Niagara Escarpment Plan. Extraction shall not be permitted on these lands;

4) That the following permitted use is added to Part 1.5.3, Escarpment Rural Area, Permitted Uses:

The Niagara Escarpment Area lands located at Part of Lots 11 & 12, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton may be used for the installation of, access to, and servicing of the water management system associated with the quarry located in the Mineral Resource Extraction Area approved under Amendment PH 224 21 to the Niagara Escarpment Plan. Extraction shall not be permitted on these lands; and

5) That NEP Part 1.9.3.26 be added as follows:

Notwithstanding the policies of Part 1.9.3, and the definition of *Accessory Use* in Appendix 2 of this Plan, for the quarry operating on the subject property described as Part Lots 8-10, 13 & 14, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton, and Lots 8-14, Concession 7 (former geographic Township of Nassagaweya), Town of Milton, Region of Halton, that the aggregate processing facility composed of an office, maintenance buildings, facilities for washing, processing and stockpiling of aggregate, truck washing facility, recycling facilities and the entrance may be used for the purpose of supporting the extraction of aggregate from the area approved under Amendment PH 224 21 to this Plan located at Part of Lots 11 & 12, Concession 1 (former geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton, provided and only while the two sites are actively operated by a single Aggregate Resources Act licensee, as an integrated operation, and after which rehabilitation will be effected and the aggregate processing facility removed.

Prepared by:

Original signed by

Sandy Dobbyn
Senior Strategic Advisor

Approved by:

Original signed by

Shawn Carey
Director

Attachments:

Appendix 1 – Schedule A – Niagara Escarpment Plan Amendment Area

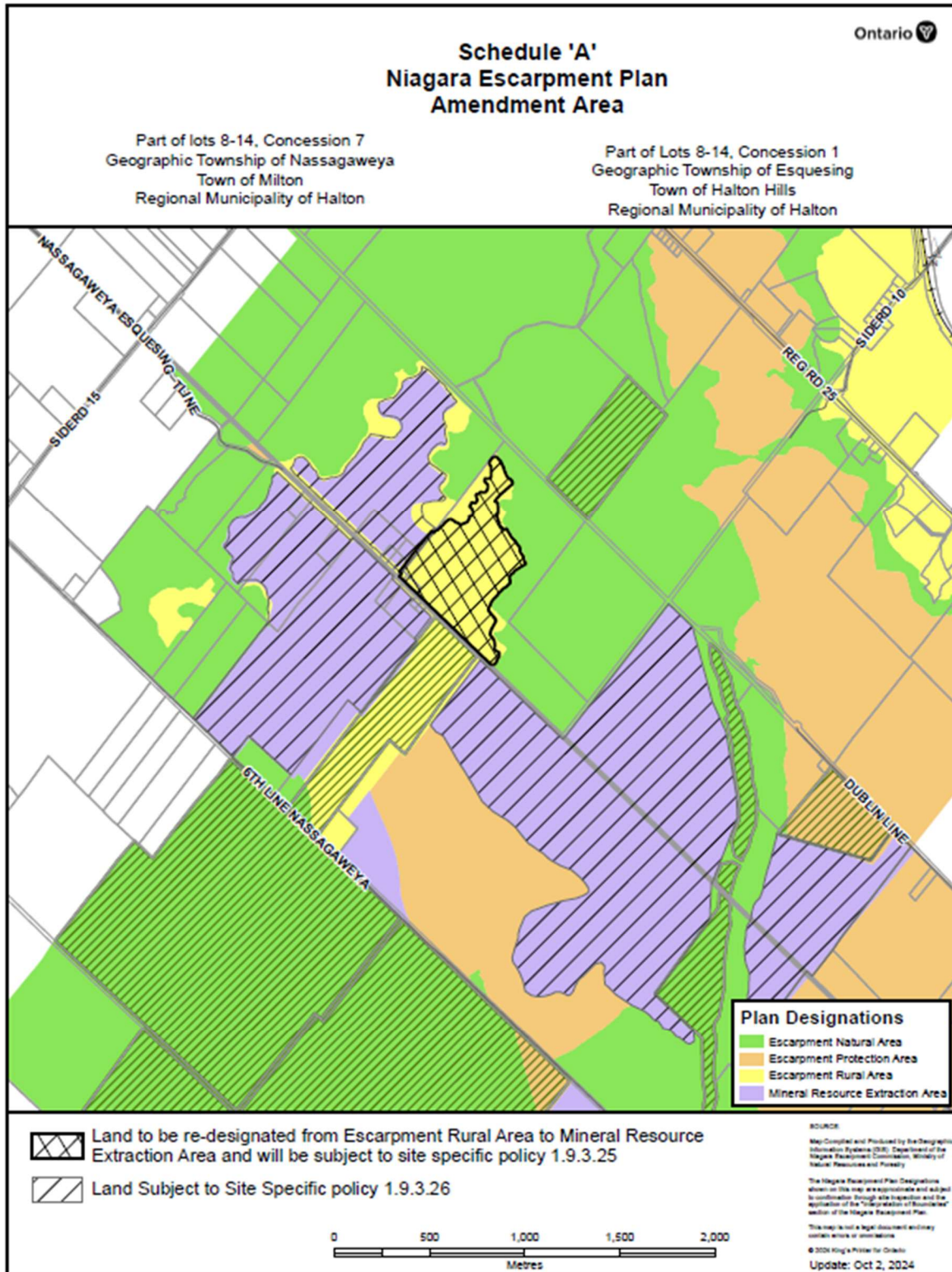
Appendix 2 – Map 1 Current Dufferin MREA Lands

Appendix 3 – Map 2 Local Context

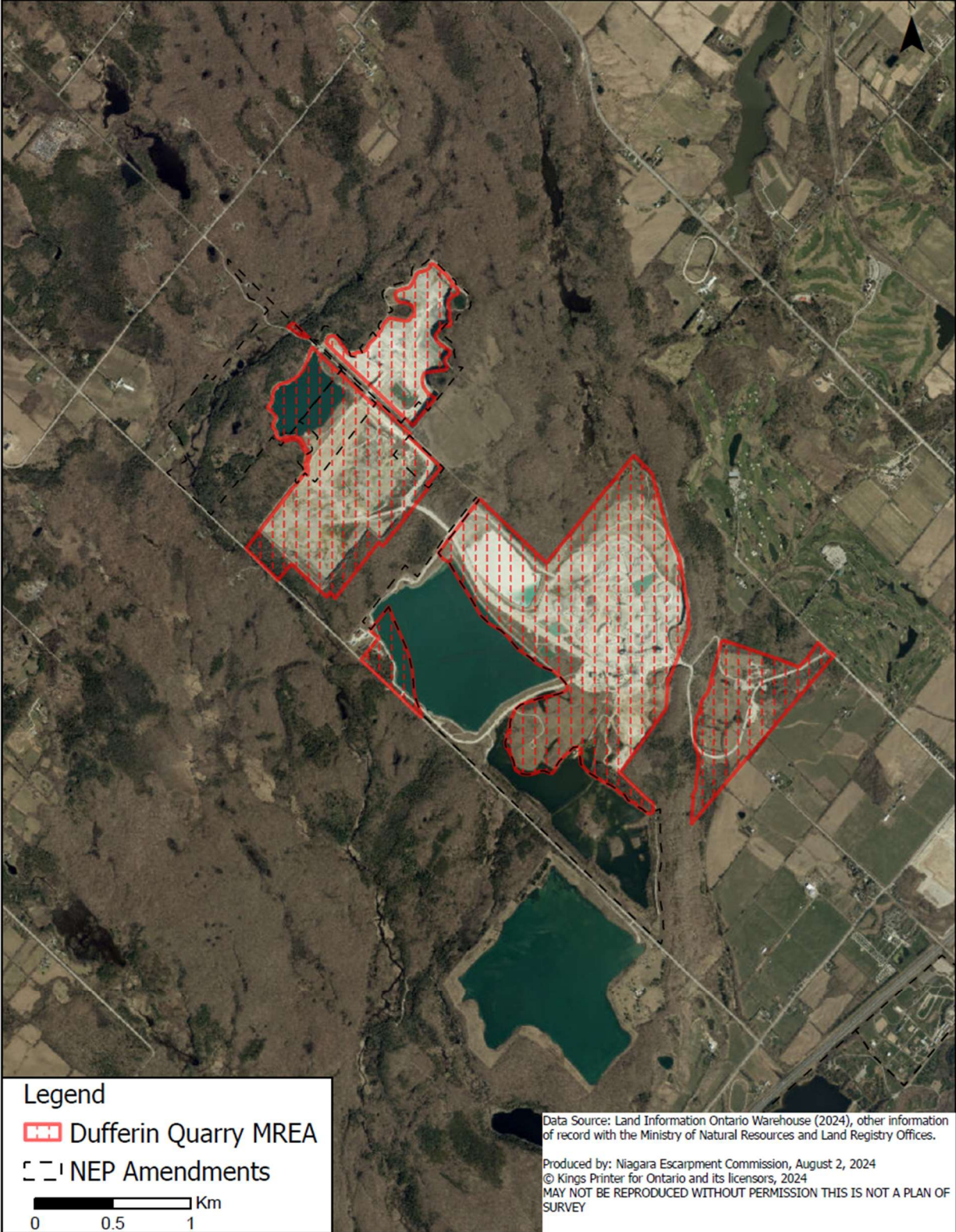
Appendix 4 – Map 3 Previous Amendments

Appendix 5 – Map 4 Current Proposal

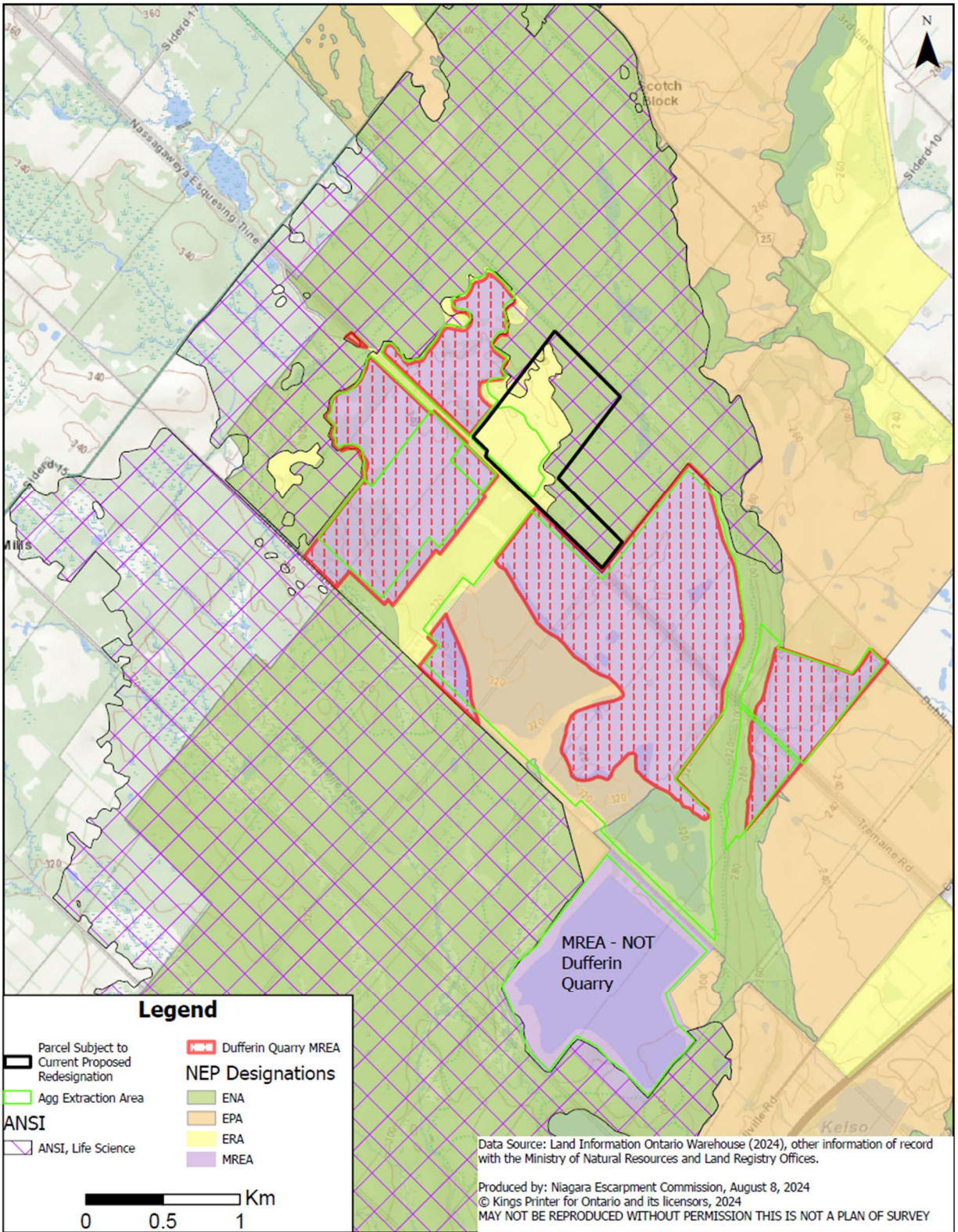
Appendix 1 – Schedule A



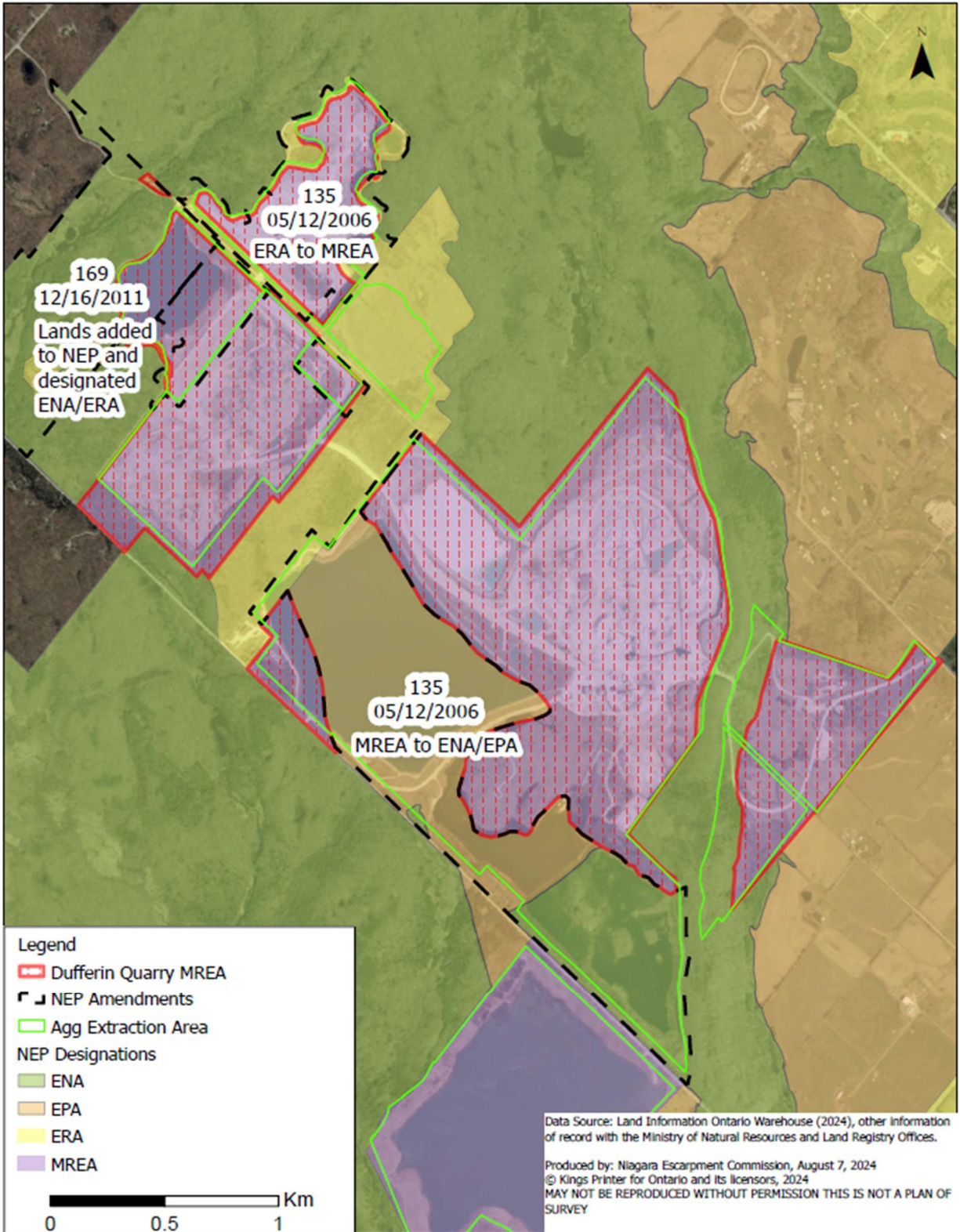
Appendix 2 – Map 1 Current Dufferin MREA Lands



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