



TECHNICAL MEMORANDUM

To: Gordon Dickson, MCIP, RPP, Senior Planner, Community Planning Department, City of Burlington

From: Christienne Uchiyama, MA, CAHP, Principal | Manager, Heritage Consulting Services, LHC

Date: 3 December 2021

Re: Nelson Quarry Application(s) to change the Official Plan designation to “Mineral Resource Extraction Area” to permit the extraction of aggregate materials on the subject lands

Subsequent to review comments provided in August and October 2020, LHC has conducted a review of the following responses and documents submitted as part of the above noted application:

- Cultural Heritage Impact Assessment Report, prepared by MacNaughton Hermsen Britton Clarkson Planning Limited (MHBC) dated June 2021;
- Cultural Heritage Impact Assessment Report, prepared by MacNaughton Hermsen Britton Clarkson Planning Limited (MHBC) dated June 2021 with tracked changes;
- Response matrix for the Cultural Heritage Impact Assessment Report dated 30 June 2021; and
- Response matrix for the Archaeological Assessments dated June 2021.

On 24 November 2021, a site visit and documentation exercise was carried out on the subject lands by JART members. Christienne Uchiyama, of LHC, was in attendance.

1.0 FINDINGS – CULTURAL HERITAGE IMPACT ASSESSMENT

LHC has reviewed the comment responses and revised CHIA and is of the opinion that the revised report dated June 2021 generally satisfies the submitted Terms of Reference, with the exception of outstanding concerns related to the evaluation of the property 5235 Cedar Springs Road - specifically the stone Ontario Gothic Revival Cottage. LHC maintains that, given the potential for a direct adverse impact related to removal, a screening-level evaluation is insufficient and the property warrants further research and evaluation to determine if O.Reg.9/06 criteria are satisfied. Further to the 24 November 2021 site visit additional concerns have been identified related to the smaller outbuilding at 2280 No. 2 Side Road and a large barn immediately northwest of the south extension lands. [Please see comments 23, 24, 25, and 33 of the Cultural Heritage Impact Assessment Comment Response Table.]

LHC has the following general comments:

- It is evident that the report and revisions have been undertaken by experienced and qualified professionals in the field of cultural heritage.
- Clarification was provided for a number of comments related to assessment of impacts and mitigation measures recommended in other technical studies. This clarification was sufficient to address comments; however, LHC is of the opinion that relevant details regarding potential impacts and mitigation measures referenced in other technical studies can be cross-referenced within a CHIA for clarity.
- During the 24 November 2021 site visit, it was noted that the smaller outbuilding at 2280 Sideroad No. 2 may, despite its conditions, meet O.Reg.9/06 criteria as a component of a grouping of buildings (including the stone house and larger barn) and it is unclear why the outbuilding has not been identified as a potential heritage attribute of this property.
- A large barn in the southwest half of Lot 17, Concession 2 NDS was noted during the JART site visit. This property, the barn and any potentially associated components are not addressed in the CHIA.
- It remains unclear why the stone Ontario Gothic Revival Cottage building at 5235 Cedar Springs Road has been identified in the CHIA as not having cultural heritage value or interest. Its cultural heritage value or interest warrants further evaluation.
- It should be noted that the Ministry of Heritage, Sport, Tourism, and Culture Industries is not an approval authority.

2.0 FINDINGS – ARCHAEOLOGICAL ASSESSMENTS

LHC has reviewed the comment responses related to the archaeological assessments.

LHC has the following general comments:

- The Stage 1-2 Archaeological Assessment dated 15 September 2020 has been entered into the Ontario Public Register of Archaeological Reports. A letter from the MHSTCI, dated 14 May 2021, was included in the comment response package. The review letter from the Archaeological Review Officer (ARO) was not included in the comment response package. **This letter should be requested from the proponent.**
- LHC is of the opinion that the Study Area's location on the Mount Nemo Plateau, has not been taken into account in the understanding of the property's physiography and that consideration of other sites on the plateau (such as those identified within the South Extension Lands) is warranted in this case. Notwithstanding this, the identification of areas of archaeological potential appears to have captured all undisturbed lands within the study area and the extent of Stage 2 activities appears to be in conformance with the S&Gs - a more robust understanding of the context of the Study Area or AiGx-462 would be very unlikely to affect the results and recommendations. LHC concurs with the proponent responses that the standards outlined in the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* (S&Gs) have been met.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on review of the June 2021 CHIA, and the 24 November 2021 site visit, it is the opinion of the author that the cultural heritage value or interest and potential heritage attributes of 2280 No. 2 Side Road and 5235 Cedar Springs Road warrant further consideration. The large barn and any associated components may also warrant further consideration. Comment responses are outlined in the attached table.

Based on review of the June 2021 comment responses, it is the opinion of the author that archaeological resources have been adequately addressed. Comment responses are outlined in the attached table.

We trust that this information satisfies your needs at this time. Please contact the undersigned should you have any questions or require any clarification.

Sincerely,



Christienne Uchiyama, MA, CAHP
Principal, Manager – Heritage Consulting Services
LHC

CULTURAL HERITAGE IMPACT ASSESSMENT COMMENT RESPONSE TABLE

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
1	When reviewed against the submitted Terms of Reference, the Cultural Heritage Report is lacking “statements of significance of cultural heritage value and heritage attributes for any identified cultural heritage resources”.	General	2280 No. 2 Side Road has been confirmed to have heritage value, with information related to the significance and attributes found in 5.2 and 5.4 of the MHBC report. See revised Cultural Heritage Impact Assessment dated June, 2021.	This comment, as it relates to 2280 No. 2 Side Road has been addressed through the revisions.
2.	The CHIA does not provide sufficient historical research of the general area of the subject site against which to evaluate Cultural Heritage Value or Interest (CHVI) under <i>Ontario Regulation 9/06: Criteria for Determining Cultural Heritage Value or Interest</i> .	General	This research of the general area is meant to be high-level and describe the development of the surrounding area. The level of detail is sufficient to understand the area. In addition, correspondence has been received from the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) indicating they have no concerns with the content or recommendations. See Attachment 1.	This comment has been addressed.
3.	Insufficient analysis or rationale has been provided to support the evaluations of built heritage resources and cultural heritage landscapes.	General	Disagree. The level of detail in the report is sufficient to understand and evaluate the area. In addition, MHSTCI has indicated they are satisfied with the report content and recommendations.	This comment has been addressed
4.	Although two late 20th century built heritage resources are evaluated within the report, the CHIA does not	General	The golf course was considered as part of the evaluation of cultural heritage landscapes. It is	This comment has been addressed.

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	include any evaluation of the golf course lands as a significant cultural heritage landscape.		referenced when describing the development of the subject lands and surrounding area, and was also reviewed as part of the historical air photo / mapping review. Through the initial screening exercise, the golf course was determined not to have cultural heritage value or potential as a significant cultural heritage landscape. As such, it was not carried through in the report for further evaluation specifically as a cultural heritage landscape. The golf course is not associated with a significant golf course architect or persons, does not contain significant built heritage features, is not valued by the community, and is not identified as a cultural heritage resource by the City (including through the 2015 Mount Nemo HCD Study). The evaluation carried through in the report for the overall subject lands concluded the property did not have cultural heritage value or qualify as a significant cultural heritage landscape.	
5.	The summary of heritage character presented in section 5.4 does not include all of the content required of a Statement of Cultural Heritage Value or Interest.	General	Section 5.4 has been updated. See revised Cultural Heritage Impact Assessment dated June, 2021.	This comment has been addressed through revisions.

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
6.	Although the proposed extraction is within approximately 15 m of the house at 2280 No. 2 Side Road, the impact assessment does not address the potential for indirect impacts due to vibrations and it is unclear how blasting will be designed to ensure the integrity of the building is being retained.	General	Direct and indirect impacts are addressed in Section 7 of the report, and blasting is mentioned. No revisions are required. Blast design is further addressed in the blasting report, with a recommendation that vibration not exceed 50 mm/s at these structures. See blasting recommendations on the Aggregate Resources Act Site Plans.	This comment has been addressed.
7.	It is unclear when the site visit(s) were undertaken and if all of the properties discussed in this report were accessed during those site visits. In the event that site visits were undertaken from the public ROW, this should be stated as a limitation, as it would affect the evaluation.	General	During the site visit, all properties were accessed by the project team. Field areas were walked and buildings were reviewed in a non-intrusive manner. Due to site conditions (e.g. vegetation), clear photos of some buildings were not possible.	This comment has been addressed.
8.	It is unclear why the golf course has not been evaluated as a cultural heritage landscape when 2292 No. 2 Side Road and 2300 No. 2 Side Road have been evaluated as built heritage resources. Given that the proposed development results in the removal of the golf course lands, its potential CHVI should be addressed.	General	See response to #4.	This comment has been addressed.
11.	Photographs of the known/potential built heritage resources and cultural heritagelandscape discussed in this report do not adequately	General (Photograph)	In our opinion the photos appropriately document the site and existing conditions, and are in line with other similar projects.	With the understanding that the properties were also accessed by the project team, this

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	document/depict existing conditions. Photographs are limited to one or two elevations, are sometimes obstructed by trees, and all appear to have been taken from a distance.		As noted above, site conditions (e.g. vegetation) made photos of some features challenging. Of note, the MHSTCI has indicated they are satisfied with the report content and recommendations.	comment has been addressed.
13.	The statement that “An onsite building” is listed on the City’s Heritage Register and is therefore considered to be a built heritage resource is not entirely accurate. Although the 1830 one-storey rubblestone Regency structure at 2280 No. 2 Side Road is described in the Register, Section 27, Part IV of the OHA applies to the property, as a whole.	Section 2.2 (Page 4) Last Sentence	Agreed that the whole property is ‘listed’. However, the register listing specifically mentions the house as being part of the listing, hence the focus on the building.	This comment has been addressed.
15.	This background is very high-level and is not sufficient to adequately address O.Reg.9/06 criteria related to historical or associative value. The history of Mount Nemo, for example, is not addressed.	Section 3.1	This section is meant to be high-level and describe the surrounding area. Of note, the MHSTCI has indicated they are satisfied with the report content and recommendations.	This comment has been addressed.
16.	The lack of buildings depicted within the study area is not likely the result of there being no structures at the time. Often, only subscribers’ residences were depicted and the extensive land ownership in the area, subdivision of farm lots, and lack of structures depicted in the majority of surrounding lots (coupled with the knowledge that at least one stone structure is understood to have been extant in the 1830s at present-day 2280 No.2 Side Road) indicates that this is the case here.	Section 3.2 (Page 11) Last Sentence	Noted. We agreed that the historical atlas project did not capture all buildings. A notation has been added to Section 3.2 of the revised report.	This comment has been addressed through revisions.

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17.	Given the likelihood that the 1858 atlas did not depict all of the extant resources, comparison with the 1877 does not necessarily reflect changes through the middle of the 19th century. This is particularly the case where individual owners did not change, or where the property remained in the family.	Section 3.2 (Page 12)	This is true, however the comparison is still useful to make.	This comment has been addressed.
18.	No sources other than the two atlases and the 1954 & 1988 air photos appear to have been reviewed as part of the background research for the site history. Census records and/or LRO documents should be reviewed – particularly for the Pitcher/Freeman and John Buckley properties. This site history does not provide sufficient information to adequately address O.Reg.9/06 criteria.	Section 3.2	The level of research is sufficient to show the development of the area and document the history of the properties. Of note, the MHSTC has indicated they are satisfied with the report content and recommendations.	This comment has been addressed.
19.	The discussion of the historical atlases and air photos does not explicitly address any of the extant structures. There is no discussion about when extant structures may have been constructed or by whom.	Section 3.2	The discussion addresses the area as a whole, to show how it evolved and was built out. The level of detail is sufficient for the purposes of this report and evaluation.	This comment has been addressed.
21.	It is unclear what the c.1860s date of construction is based upon.	Section 4.3.1 (Page 20) Line 1	This is based on the architectural features of the building, as well as the historical atlas information which shows no building in 1858 and a building by 1877.	This comment has been addressed.
22.	The photographs presented do not provide any detail of the features of the structure. Only two elevations are	Section 4.3.1 (Page 20)	The photos are sufficient to conclude regarding the building characteristics and potential value. MHSTC staff have also	This comment has been addressed.

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
	presented and those photographs are very small.		indicated they are satisfied with the report content.	
23.	The smaller outbuilding is described as being generally in poor condition; however, the view of the structure shown in Photo 15 (presumed to be correct structure) is obstructed by trees. It is unclear if the evaluation of the poor condition is based on closer evaluation of the structure.	Section 4.3.1 (Page 20) Last Paragraph	Yes, the building was more closely inspected by the project team. As noted above, vegetation made clearly photographing the building difficult.	The November 24, 2021 site inspection and documentation by JART representatives indicates that the smaller outbuilding at 2280 No. 2 Side Road, despite its condition, may meet O.Reg.9/06 criteria as a component of a grouping of buildings – including the house and larger barn.
24.	The discussion of criterion 1.i. is incomplete. The analysis only addresses whether the style, described as Ontario Gothic Revival Cottage architectural style, is rare or unique, but does not address whether it is representative or early example, nor does it address whether it is a rare example of the style in stone. Despite additions to the structure, it appears to retain a number of characteristic features. It is unclear if the property was accessed and if the structure was reviewed up close. Evaluation of the degree of craftsmanship would be affected by lack of property access. The discussion of criterion 2 is incomplete. The background	Section 5.2 (5235 Cedar Springs Road)	The level of detail within the report is sufficient, as agreed by MHSTCI staff in their recent letter.	This comment has not been addressed. Given the potential direct impact of demolition, the analysis does not address the potential for the property to meet criterion 1(i) as a representative example of the style, nor has any evidence been provided to inform the analysis of the rarity of this example of this type for its stone construction. Insufficient property-specific research was

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	<p>presented in sections 3.1 and 3.2 did not provide a basis to determine whether or not this property has any historical or associative value.</p> <p>Given that the development proposal results in the removal of this structure, its potential CHVI must be adequately addressed.</p>			<p>provided to assess criterion 2.</p> <p>In addition, the November 24, 2021, site inspection and documentation by JART representatives indicates that the structure may meet additional O.Reg 9/06 criteria and warrants further evaluation.</p>
25.	<p>The report states that the property type is somewhat rare within the broader area. It is unclear if this refers to the Regency style, or stone construction. It is unclear if the property was accessed and if the structure was reviewed up close. Evaluation of the degree of craftsmanship would be affected by lack of property access.</p> <p>The discussion of criterion 2 is not supported by the background research presented in Sections 3.1 and 3.2.</p> <p>The discussion of criteria 1 and 2 does not address the barns. The small barn, in particular, is proposed to be removed. Its CHVI, as an individual built heritage resources and as it</p>	Section 5.2 (2280 No. 2 Sideroad)	<p>The reference to the property being somewhat unique was mentioned in the HCD Study completed on behalf of the City, which we took to mean both the style and type of construction. The barn was reviewed up close, although access to the interior of the building was not undertaken.</p> <p>The evaluation in the report is sufficient, as agreed to by MHSTCI staff.</p>	<p>The November 24, 2021 site inspection and documentation by JART representatives indicates that the smaller outbuilding at 2280 No. 2 Side Road, despite its condition, may meet O.Reg.9/06 criteria as a component of a grouping of buildings – including the house and larger barn.</p> <p>Note, for clarification, MHSTCI is not the approval authority.</p>

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	relates to the house and large barn, should be evaluated.			
26.	<p>The summary of heritage character presented in section 5.4 does not include all of the content required of a Statement of Significance/Statement of Cultural Heritage Value or Interest and list of heritage attributes as outlined in the <i>Ontario Heritage Toolkit</i>.</p> <p>It is unclear if the barn complex refers to the large barn, or to both barns described in Section 4.3.2.</p>	Section 5.4	2280 No. 2 Side Road has been confirmed to have heritage value, with information related to the significance found in 5.2 and 5.4 of the Cultural Heritage Impact Assessment. The revised report dated June, 2021 has expanded the description.	This comment has been addressed through revisions.
27.	The site plan and figures depicting the proposed development suggest that a portion of house extends into the Licence Boundary. This should be confirmed. This is the c.1830s Regency portion of the structure.	Section 6	A portion of the house is within the Licence boundary; however, it is outside the extraction area. The space is required for berming.	This comment has been addressed.
31.	<p>The proposed extraction area is approximately 15 metres from the house (and small barn) indirect impacts resulting from vibrations have not been addressed in the impact assessment.</p> <p>It is unclear how blasting will be designed to ensure the integrity of the building is retained (blasting is not addressed in the Noise Impact Assessment). What measures are being implemented?</p>	Section 7.1 (Page 33) Paragraph 4, Last Line	<p>Blast design is further addressed in the blasting report, with a recommendation that vibration not exceed 50 mm/s at these structures. The key is to maintain the structural integrity of the buildings, and the expertise of Explotech has been relied upon in this regard.</p> <p>The proposed development was addressed broadly in this report. However the specifics of the berm are more appropriately</p>	This comment has been addressed.

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	Figure 8 suggests that an acoustic and visual berm may be erected between the licence boundary and the line of extraction. The berm and its construction have not been addressed in the impact assessment.		addressed in the visual impact report.	
33.	During the November 24, 2021 site inspection and documentation by JART representatives, a large barn was noted in the southwest half of Lot 17, Concession 2 NDS (2416 No.2 Side Road). This barn – although located within the cultural heritage study area, was not evaluated in Section 4.3.2 of the report. This barn may be associated with Andrew Cairns/Robert Spence's farmstead, as depicted in Figures 3 & 4 of the June 2021 report. It is unclear why this barn – and any associated components – were not evaluated in the Cultural Heritage Report.	Section 4.3.2		

ARCHAEOLOGICAL ASSESSMENT COMMENT RESPONSE TABLE

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
1.	The 2020 Stage 1-2 Archaeological Assessment of the West Extension lands is an interim report. Stage 2 fieldwork and reporting has not been completed for the entirety of the study area and is required. The Golder Report identifies approximately 11.1 ha of lands	General	Stage 2 archaeological assessment was completed for the outstanding 11.1 ha of land. See Stage 1-2 archaeological assessment report dated 15 September 2020. See attached clearance letter from	This comment has been addressed.

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	associated with the golf course lands that require a Stage 2 Archaeological Assessment. What is the status of the Stage 2 Archaeological Assessment?		Ministry of Heritage, Sport, Tourism and Cultural Industries dated May 14, 2021 confirming the Province has reviewed the archaeological assessment and have no further archaeological concern.	
2.	The Interim Stage 1-2 AA fails to take into account the study area's location on the Mount Nemo Plateau and incorrectly states the study area's location in relation to the Escarpment.	General	Data related to the West Extension Lands' proximity to physiographic features was based and consistent with geoscience data provided through the Ministry of Energy, Northern Development and Mines (https://www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearth).	This comment has been addressed.
3.	It is unclear why the earlier archaeological assessments undertaken for the South Extension Lands were not reviewed as part of the assessment and why, although more than 300 m from the current West Extension Lands study area, the previously identified sites were not considered to be indicators of archaeological potential, given the setting and their likely relevance to the archaeological potential of the West Extension Lands.	General	<p>Per Section 1.1 of the Ministry of Heritage, Sport, Tourism, and Culture Industries' (MHSTCI) 2011 Standards and Guidelines for Consultant Archaeologists, previous archaeological assessments within a radius of 50 m around the project limits are required to be reviewed. The South Extension Lands are greater than 50 m from the West Extension Lands limits.</p> <p>Section 1.3.1 and 1.4 of the MTSTCI (2011), state that previously registered archaeological sites within 300 m are considered features of archaeological potential. The sites within the South Extension Lands are greater than 300 m, and, therefore, do not contribute to the archaeological potential of the West Extension Lands.</p>	This comment has been addressed.

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
4.	<p>The descriptions of AiGx-238 and AiGx-239 (Table 2) do not correspond with their descriptions in the Stage 4 AA prepared by Archaeologix in 2004.</p> <p>Notwithstanding these omissions, the identification of areas of archaeological potential have captured all undisturbed lands within the study area and the report appears to conform with the Standards and Guidelines for Consultant Archaeologists (S&Gs).</p> <p>It should be stressed that the Interim Stage 1-2 AA was required prior to Stage 2 AA fieldwork being undertaken on 11.1 hectares of the Licence Boundary area along the western boundary of the West Extension Lands (see attached Map 5). Stage 2 fieldwork is still outstanding for this portion of the West Extension Lands and the entire study area has not been cleared of further archaeological concern (this is noted in the report).</p>	General	<p>The description provided of AiGx-238 and AiGx-239 are consistent with the data provided within the MHSTCI archaeological sites database. Per Section 1.1 of the MHSTCI (2011), the background study must include research information from the following source:</p> <ul style="list-style-type: none"> The most up-to-date listing of sites from the MHSTCI's archaeological sites database for a radius of 1 km around the property. <p>Stage 2 archaeological assessment was completed for the outstanding 11.1 ha of land. See Stage 1-2 archaeological assessment report dated 15 September 2020.</p>	This comment has been addressed.
5.	The 2003 Stage 1, 2 & 3 AA predates the S&Gs.	General	The South Quarry Extension archaeological assessments were reviewed by the Ministry of Culture and in a letter dated November 19, 2004 the Ministry of Culture, as per Section 48 (1) of the Ontario Heritage Act and Ontario Regulation 170/4, confirmed that they had	This comment has been addressed.

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			no further concerns for the archeological site documented within the subject property. In February 2009, JART accepted the sign off by the Ministry of Culture with respect to the archaeological investigation. See attached excerpt from the February 2009 JART Report.	
6.	Similar to the 2020 Interim Stage 1-2 AA, the 2003 Stages 1, 2 & 3 AA does not adequately address the setting of the study area nor does it provide a robust pre-contact or historical context.	General	The South Quarry Extension archaeological assessments were reviewed by the Ministry of Culture and in a letter dated November 19, 2004 the Ministry of Culture, as per Section 48 (1) of the Ontario Heritage Act and Ontario Regulation 170/4, confirmed that they had no further concerns for the archeological site documented within the subject property. In February 2009, JART accepted the sign off by the Ministry of Culture with respect to the archaeological investigation. See attached excerpt from the February 2009 JART Report.	This comment has been addressed.
7.	Notwithstanding this, the Stage 1 findings are consistent with the current requirements and resulted in Stage 2 survey (test pits at 5-meter intervals) and pedestrian survey of the entirety of the study area. Stage 2 fieldwork methodologies and recommendations, similarly, appear to be generally consistent with the S&Gs.	General	The South Quarry Extension archaeological assessments were reviewed by the Ministry of Culture and in a letter dated November 19, 2004 the Ministry of Culture, as per Section 48 (1) of the Ontario Heritage Act and Ontario Regulation 170/4, confirmed that they had no further concerns for the archeological site documented within the subject property. In February 2009, JART accepted the sign off by the Ministry of Culture with respect to the archaeological	This comment has been addressed.

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			investigation. See attached excerpt from the February 2009 JART Report.	
8.	<p>The Stage 3 AA fieldwork methodology, although consistent with standard practices at the time, does not conform to Section 3.2.3, Standard 1 (Table 3.1) the S&Gs; however, because all three of the registered sites underwent Stage 4 AA, this would not have resulted in a different outcome under the current S&Gs. The boundaries of the Stage 3 excavation of all three sites are consistent with the current S&Gs.</p>	General	<p>The South Quarry Extension archaeological assessments were reviewed by the Ministry of Culture and in a letter dated November 19, 2004 the Ministry of Culture, as per Section 48 (1) of the Ontario Heritage Act and Ontario Regulation 170/4, confirmed that they had no further concerns for the archeological site documented within the subject property. In February 2009, JART accepted the sign off by the Ministry of Culture with respect to the archaeological investigation. See attached excerpt from the February 2009 JART Report.</p>	This comment has been addressed.
9.	<p>The Stage 4 AA documents the full excavation and documentation of registered sites AiGx-238, AiGx-239, and AiGx-240.</p> <p>The Stage 4 AA report does not appear to be the most up to date version of the report and cites an incorrect "CIF" number on the title page. A search through the MHSTCI PastPortal database identified a 2005 report - A.A. (Stage 4), Nelson Aggregate Quarry Expansion, Lot 17 & 18, Con. 2 NDS, Geo. Twp. of Nelson, City of Burlington, R.M of Halton, Ontario under the Project Information Number (PIF) P001- 160.</p>	General	See response above.	This comment has been addressed.

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
	<p>It is likely that the report includes revisions or additional information requested by the MHSTCI, at the time of their review. As such, the 2005 Stage 4 AA should be submitted as part of the application. As a general note, no Indigenous engagement appears to have been undertaken as part of the Stage 3 or 4 assessment of the cultural heritage value or interest of AiGx-238, AiGx-239, and AiGx-240.</p>			
11.	<p>The following provides a summary of the key findings related to deficiencies with the Stage 1-2 Archaeological Assessment, prepared by Golder Associates Ltd. (Golder) dated September 2020 (herein the Stage 1-2 AA).</p> <p>a) The Interim Stage 1-2 AA fails to take into account the study area's location on the Mount Nemo Plateau and incorrectly states the study area's location in relation to the Escarpment (see Section 1.4.2).</p> <p>It unclear why the earlier archaeological assessments undertaken for the South Extension Lands were not reviewed as part of the assessment and why, although more than 300 m from the current West Extension Lands study area, the previously identified sites were</p>	General	<p>a.) See response to Item 2.</p> <p>b.) See response to Item 3.</p> <p>c.) See response to Item 4.</p>	These comments have been addressed.

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	<p>not considered to be indicators of archaeological potential, given the setting and their likely relevance to the archaeological potential of the West Extension Lands.</p> <p>c) The descriptions of AiGx-238 and AiGx-239 (Table 3) do not correspond with their descriptions in the Stage 4 AA prepared by Archaeologix in 2004.</p> <p>The identification of areas of archaeological potential appears to have captured all undisturbed lands within the study area in conformance with the Standards and Guidelines for Consultant Archaeologists (S&Gs).</p> <p>The Stage 1-2 AA resulted in the identification of one (1) Euro-Canadian historical archaeological site dating from circa 1850s to the early 20th century. This site has been registered as Inglehart-Harbottle and assigned the Borden number AiGx-462. A total of 1,074 artifacts were recovered from 18 positive test pits (seven of these being intensified pits at 2.5 m intervals around one of the positive test pits) and one test unit. The positive test pits were distributed over an area measuring approximately 40 m (north-south) by 20 m (east-west). Analysis of the</p>			

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	<p>assemblage dated four of the artifacts to the 20th century and a total of 27 artifacts were faunal material.</p> <p>The Stage 1-2 AA applies the MHSTCI's 2014 Rural Historical Farmsteads bulletin (the bulletin) to its determination of the Cultural Heritage Value or Interest (CHVI) of the site, recommending no Stage 3 AA because: approximately 33% of the site dates to before 1870; the site have been continuously occupied since c.1850 (the historical background information presented in Section 4.4.1 of the Stage 1- 2 AA dates the earliest occupation to 1844); additional historical research was presented in the Stage 1- 2 AA; and, the survey was intensified through the excavation of a test unit and eight additional test pits at 2.5 m intervals around one of the positive test pits. Based on our review, LHC identified the following concerns with the report and its findings:</p>			
12.	<p>1. Approximately 33% of the site dates before 1870 (Executive Summary and Section 4.5 Conclusions).</p> <p>The Stage 1-2 AA determines that no Stage 3 AA is required because less than 80% of the assemblage dates to before 1870 and states that 33% of</p>	General	The report states, "less than 80% of the site's occupation dates to before 1870 (approximately 33% of the site dates before 1870). This data was determined based on archival data and the Stage 2 artifact collection. The artifact collection alone was not considered, and occupational dates can often be well	This comment has been addressed.

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	<p>the site dates to pre-1870. Although several diagnostic artifacts and artifact types and their dates of manufacture or popularity are discussed in Section 3.2 of the Stage 1-2 AA, very few examples are securely dateable and the analysis that resulted in the determination that approximately 33% of the assemblage is pre-1870 is not presented.</p> <p>Per Section 6.1 of the bulletin some examples of characteristics of an assemblage that might support the argument that the site is of no further CHVI include:</p> <ul style="list-style-type: none"> • Many of the artifacts in the assemblage could be dated to either the 19th or 20th century, but there are only a few artifacts which can be clearly attributed to only the early to mid-19th century • The artifacts are all or mostly from one item (e.g., 20 fragments from one vessel) • The artifacts dateable to the early to mid-19th century are widely spatially dispersed within a larger distribution of later-dated artifacts without evidence of a cluster of the earlier-dated 19th century artifacts within the overall 		<p>determined based on the archival data.</p> <p>The artifact collection dates from the mid-19th century to the early 20th century; therefore, the site can be attributed to the Inglehart, Thomas, Fraser, Eaton, and Harbottle families. The Inglehart family occupied the property from 1844-1876, Thomas family from 1876-1884, Fraser family from 1884-1888, Eaton family from 1888-1910, and the Harbottle family from 1910-1961.</p> <p>Based on the artifact collection (mid-19th century to early 20th century) and settlement of the property by the aforementioned families associated with these artifacts (1844 to 1961), it was determined that less than 80% of the site's occupation dates to before 1870. The approximate 33% of the site's occupational date dating to before 1870 was determined based on an 1844 (Inglehart settlement date) to c. 1920s (approximate terminal date of artifacts) timeframe.</p> <p>No early concentrations (pre-1870s) of artifacts were encountered.</p>	

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
	<p>distribution</p> <p>The earlier-dated 19th century artifacts form a very small proportion of the total assemblage</p>			
13.	<p>...the site has no further cultural heritage value or interest... Per the bulletin,</p> <p>The ministry expects the available evidence to be incorporated into the report to make a recommendation of no further CHVI. This includes:</p> <ul style="list-style-type: none"> • an analysis of the complete artifact assemblage (see comment 1, above) • all available historical documentation • any information from extant built heritage • the local and regional context • any information regarding site integrity <p>Additional information is missing from the analysis presented in the Stage 1-2 AA which would support the finding that AiGx-462 The conclusions further state that “the Inglehart family is not affiliated with the early settlement of</p>	General	<p>Section 1.3.4.1 of the report provides local context to the settlement of Nelson Township. The initial Euro-Canadian settlement of the Township was in 1800 by the Bates family, and the next influx of settlers arrived in 1807. By 1817, 476 inhabitants and 68 houses, two grist mills, and three sawmills were located in the Township.</p> <p>The site can be attributed to the Inglehart, Thomas, Fraser, Eaton, and Harbottle families. The Inglehart family occupied the property from 1844-1876, Thomas family from 1876-1884, Fraser family from 1884-1888, Eaton family from 1888-1910, and the Harbottle family from 1910-1961.</p> <p>Initial and early settlement of Nelson Township happened in 1800. The Inglehart family, the earliest occupants of the AiGx-462 site, settled the property approximately 44 years after the early settlement of the Township. Therefore, the site is not affiliated with the early settlement of the Township.</p> <p>Based on the Stage 2 assessment data, the site’s integrity (i.e., its cultural layer) appears to remain intact. Artifacts were</p>	This comment has been addressed.

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
	<p data-bbox="285 228 789 488">Nelson Township”; however, this assertion has been made without taking into account the historical context of the site with respect to its location on the Mount Nemo Plateau. The local context has thus not been taken into consideration in the determination of the site’s CHVI.</p> <p data-bbox="285 529 789 789">Furthermore, the site’s integrity and its dense distribution of the artifacts have not been addressed in the analysis or recommendations, nor does the Stage 1-2 AA make any reference to how the location of the test unit was selected or how the boundaries of the site were determined.</p> <p data-bbox="285 829 789 1398">With respect to the distribution of artifacts, supplemental documentation was not submitted with the Stage 1-2 AA, so test pit locations cannot be cross-referenced with counts from the catalogue. It is, therefore, unclear why this specific positive test pit was selected for intensification and test unit excavation and not one or more of the other ten positive test pits, as this is not addressed in Section 2.0 Field Methods. Although it is not necessary to excavate more than one test unit where multiple positive test pits are encountered, the decision to excavate only one test unit over one positive test pit should be justified in</p>		<p data-bbox="999 228 1545 318">disturbed over an area measuring 40 m by 20 m, and no early concentrations were identified.</p> <p data-bbox="999 358 1545 756">The location of the test unit was selected per MHSTCI (2011), Section 2.1.3, Standard 2, Option A. There are no standards within the MHSTCI (2011) that requires providing a rationale for how the location of the test unit was selected. Nevertheless, the test unit location was selected based on a combination of criteria including, artifact concentration, artifact dates, activities areas, positive test pit distribution, artifact type, and stratigraphy.</p> <p data-bbox="999 797 1545 1024">The site’s Stage 2 boundary was determined per Section 2.1.3 of the MHSTCI (2011). The positive test pits were disturbed over an area measuring 40 m by 20 m. See Section 2.2 and Section 3.2 of the report.</p> <p data-bbox="999 1065 1545 1227">A supplementary documentation is not required for sites that do not have further cultural heritage value or interest (CHVI). Site AjGx-462 does not have further CHVI.</p> <p data-bbox="999 1268 1545 1398">Per MHSTCI (2011), justification to excavate only one test unit over one positive test pit does not require justification, nor is it a standard.</p>	

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	<p>the Stage 1-2 AA. Per the bulletin, Test unit placement should be determined by:</p> <ul style="list-style-type: none"> • the distribution of artifacts including concentrations of earlier dating artifacts or activity areas; • test pits that provide information about site integrity; and, <p>the most productive test pits.</p>			
14.	<p>Finally, the Stage 1-2 AA provides no commentary on the presence of occupation-specific features, strata or middens. This is particularly of interest given the productivity of the site, proximity to the c. 1844-1851 residence, and the length of continuous occupation.</p>	General	<p>The Stage 2 archaeological assessment did not identify any occupation-specific features or middens. Also, no early concentration of artifacts was encountered.</p>	<p>This comment has been addressed.</p>
15.	<p>With respect to the Interim Stage 1-2 AA, the reporting has failed to accurately take into account the West Extension Lands study area's location on the Mount Nemo Plateau and has not captured the results of the previous archaeological assessment of the South Extension Lands.</p> <p>The Stage 1-2 AA does not provide analysis to support the finding that only 33 % of the artifact assemblage of the Inglehart-Harbottle site (AiGx-462) dates to before 1870 and the subsequent recommendation that the site has no further CHVI and no</p>	General	<p>See response to Item 2.</p> <p>The determination that less than 80% of the artifact assemblage of AiGx-462 dates to before 1870 is provided within Section 3.2</p>	<p>This comment has been addressed.</p>

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
	<p>Stage 3 AA is warranted. It is recommended the report be revised to include the additional analysis used to determine the percentage of the assemblage dating to pre-1870 occupation and to include supplemental information regarding the integrity of the site, distribution of artifacts, the determination of the approximate site dimensions/boundaries, and analysis of the site's CHVI as it relates to its local context.</p> <p>It should be noted that the MHSTCI the authority responsible for licencing archaeologists in the province, and are not an approval authority. The City may – as an approval authority - choose to require Stage 3 AA notwithstanding the baseline requirements outlined in the S&Gs.</p> <p>With respect to the Cultural Heritage Impact Assessment (CHIA), additional information provided in the Stage 1-2 AA as a result of accessing the property, indicates that the property at 2015 No. 2 Side Road has potential CHVI as a built heritage resource. Photographs from the rear of the structure clearly indicate that portions</p>			

#	LHC Comments (January 2021)	Reference	Response (June 2021)	Discussion
	<p>of the c.1844-1851 one-and-a-half-storey Inglehart farmhouse are extant. As such, 2015 No. 2 Side Road should be included in the CHIA.</p>			