



Archaeology and Cultural Heritage
Assessment Report for the Brooks Road
Landfill Site Vertical Capacity Expansion
Environmental Assessment

Brooks Road Landfill Site 160 Brooks Road Haldimand County, Ontario

JULY 2016 REF. No. 018235 (59)

Table of Contents

Section 1.0	Introduction				
Section 2.0	Alteri	native Methods for Vertical Expansion	1		
Section 3.0		eology and Cultural Heritage Environment Potentially Affected			
	3.1	Study Areas			
	3.2	Methodology			
	3.3	Archaeology and Cultural Heritage Existing Conditions	4		
Section 4.0	_	ation Measures to be Incorporated into the Alternative	_		
	Meth	od Designs	4		
Section 5.0	Net E	ffects Assessment	4		
	5.1	Net Effects Assessment Methodology	5		
	5.2	Criteria/Indicators	5		
	5.4	Potential Environmental Effects	5		
	5.4.1	Alternative Method 1	5		
	5.4.2	Alternative Method 2	6		
	5.4.3	Alternative Method 3	6		
	5.5	Mitigation Measures Beyond Those Incorporated into the Design	6		
	5.5.1	Alternative Method 1	6		
	5.5.2	Alternative Method 2	6		
	5.5.3	Alternative Method 3	6		
	5.6	Net Environmental Effects	6		
	5.6.1	Alternative Method 1	6		
	5.6.2	Alternative Method 2	7		
	5.6.3	Alternative Method 3	7		
Section 6.0	Comp	parative Evaluation	10		
	6.1	Comparative Evaluation Methodology	10		
	6.2	Comparative Evaluation Results			
Section 7.0	Concl	usion	11		
Section 8.0	Refer	ences	13		

List of Figures

Figure 3.1	Archaeology and Cultura	l Heritage Study Area
0		

List of Drawings (Following Text)

	(Following Text)				
Drawing C-01	Existing Conditions Interim Closure				
Drawing C-02	Vertical Expansion Alternative 1				
Drawing C-03	Vertical Expansion Alternative 1 Details				
Drawing C-04	Vertical Expansion Alternative 2				
Drawing C-05	Vertical Expansion Alternative 2 Details				
Drawing C-06	Vertical Expansion Alternative 3				
Drawing C-07	Vertical Expansion Alternative 3 Details				
	List of Tables				
Table 2.1	Comparison of Vertical Expansion Options				
Table 5.1	Alternative Method 1 Archaeology and Cultural Heritage Potential Environmental Effects, Mitigation Measures & Net Effects				
Table 5.2	Alternative Method 2 Archaeology and Cultural Heritage Potential Environmental Effects, Mitigation Measures & Net Effects				
Table 5.3	Alternative Method 3 Archaeology and Cultural Heritage Potential Environmental Effects, Mitigation Measures & Net Effects				
Table 6.1	Archaeology and Cultural Heritage Comparative Evaluation				
	List of Appendices				
Appendix A	Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist				
Appendix B	Criteria for Evaluating Archaeological Potential: A Checklist for the Non-Specialist				



Section 1.0 Introduction

In July 2015 the Minister of the Environment and Climate Change approved the Terms of Reference (ToR) for the Brooks Road Landfill Site Vertical Capacity Expansion Environmental Assessment (EA). This report provides an overview of the alternative conceptual vertical capacity expansion designs (i.e., 'Alternative Methods') for the Brooks Road Landfill Site Vertical Capacity Expansion EA (Section 2.0) and documents the following with respect to Archaeology and Cultural Heritage:

- Describes the Archaeology and Cultural Heritage Existing Conditions associated with the EA Study Areas (Section 3.0);
- Details the mitigation measures to be incorporated into the Alternative Method designs in order to prevent or minimize effects on Archaeology and Cultural Heritage (Section 4.0);
- Documents the net effects analysis for each Alternative Method with respect to Archaeology and Cultural Heritage (Section 5.0); and
- Identifies the Preferred Alternative Method from an Archaeology and Cultural Heritage perspective through a comparative evaluation process (**Section 6.0**).

Section 2.0 Alternative Methods for Vertical Expansion

Three vertical expansion alternatives have been developed for comparative analysis. The alternatives were identified in consideration of the criteria and assumptions outlined in the Conceptual Design Report (CDR) and based on public input received during the ToR.

The following aspects will be identical across all three vertical expansion alternatives, including:

- An expansion capacity of 421,000 m³, including waste, daily cover, and interim cover
- The limit of waste (i.e., landfill footprint)
- Traffic associated with importing waste, daily cover, and interim cover
- The location of the site entrance, scalehouse, and other ancillary supporting features
- The size and location of all buffer areas
- The final cover design (0.6 m of compacted fine-grained soil overlain by a 0.15 m thick vegetative layer)
- The leachate treatment (i.e., batch leachate treatment system)

The three vertical expansion alternatives are illustrated on **Drawings C-02** through **C-07** (following text) and their unique attributes are outlined in **Table 2.1**, below. Further information on the vertical expansion alternatives is found in the CDR.



Table 2.1 Comparison of Ver	tical Expansion Options	3	
Attribute	Alternative 1	Alternative 2	Alternative 3
General Description	Expansion capacity with 3H to 1V (33%) side slopes to a crest height of 218.075 m	Expansion capacity with 4H to 1V (25%) side slopes to a crest height of 221.0 m	Expansion capacity with 3H to 1V (33%) side slopes to a crest height of 221.25 m and bench at approx. 210.0 m
Approximate Elevation of Top of Landfill (including final cover)	219.65 m	221.50 m	222.13 m
Approximate Height of Landfill Above Existing Grade of 198.96	20.69 m	22.54 m	23.17 m
Post-Closure Leachate Generation Rate	36 m³/day	36 m³/day	36 m³/day
Number of Vehicles Per Day Associated with Waste and Construction Materials	16	16	16

Section 3.0 Archaeology and Cultural Heritage Environment Potentially Affected

The July 2015 Minister-approved ToR includes a preliminary description of the existing environmental conditions within the Study Areas and commits to providing an expanded description of the existing environmental conditions within the Study Areas in the EA. The following section provides a more detailed description and understanding of the Archaeology and Cultural Heritage Existing Conditions within the Study Areas for use in the assessment and evaluation of Alternative Methods.

3.1 Study Areas

The following two generic study areas were established for preparation of the EA:

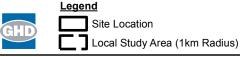
- **Site Study Area**, including all lands (i.e., 14.3 hectares (ha)) within the existing, approved boundaries of the Brooks Road Landfill Site (Site), as defined by Environmental Compliance Approval (ECA) No. A110302, dated July 21, 2014, as amended; and
- Local Study Area, including all lands and waters within a 1 kilometre (km) radius of the Site Study Area boundaries.

As provided for in the approved ToR, each technical discipline may modify the Local Study Area, as required, during the EA. For Archaeology and Cultural Heritage only the Local Study Area is applicable (see **Figure 3.1**).



Source: MNRF NRVIS, 2014. Produced by GHD under licence from Ontario Ministry of Natural Resources and Forestry, © Queen's Printer 2016; Aerial: 2006 Grand River Conservation Authority Coordinate System: NAD 1983 UTM Zone 17N

figure 3.1



LOCAL STUDY AREA ARCHAEOLOGY AND CULTURAL HERITAGE ASSESSMENT REPORT BROOKS ROAD LANDFILL 160 Brooks Road, Cayuga, Ontario



3.2 Methodology

Available secondary sources of information were collected and reviewed to determine Archaeological and Cultural Heritage existing conditions within the Local Study Area. The following sources of secondary information were collected and reviewed:

Heritage Haldimand Designated Properties Inventory

3.3 Archaeology and Cultural Heritage Existing Conditions

Following a review of the Heritage Haldimand Designated Properties Inventory (2015) it was concluded that there are no heritage properties located within the Local Study Area. The completed "Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist" contained in **Appendix A** identifies the Site as having no potential for cultural heritage resources, with the exception of the response to Part B, 4.c (i.e., is [the Site] in a Canadian Heritage River watershed?). The Brooks Road Landfill Site is within the Grand River watershed, which is considered to be a Canadian Heritage River watershed and, therefore, the checklist indicates that there is potential for cultural heritage resources on the property. However, given that the entire Site has been disturbed, it can be confirmed that there is no potential for cultural heritage resources On-Site.

The entire Brooks Road Landfill Site has been subjected to recent, extensive and intensive disturbance and it is therefore considered that the Site does not have any archaeological potential. While there may be areas within the Local Study Area that have archaeological potential, as these areas will not be disturbed by the proposed vertical expansion, it was concluded that an assessment of the archaeological potential within the Local Study Area was not necessary. The completed "Criteria for Evaluating Archaeological Potential: A Checklist for the Non-Specialist" provided in **Appendix B** confirms that the Site does not possess archaeological potential.

Section 4.0 Mitigation Measures to be Incorporated into the Alternative Method Designs

Based on the description of the Alternative Methods provided in **Section 2.0** and the characterization of Archaeology and Cultural Heritage Existing Conditions within the Study Areas described in **Section 3.0**, there are no mitigation measures recommended to be incorporated into the Alternative Methods designs in order to avoid or minimize impacts on Archaeology and Cultural Heritage.

Section 5.0 Net Effects Assessment

This section documents the net effects assessment for the Alternative Methods for the Brooks Road Landfill Site Vertical Capacity Expansion EA from an Archaeology and Cultural Heritage perspective.

4



5.1 Net Effects Assessment Methodology

The assessment of the Alternative Methods was conducted in two steps:

• Step 1: Confirm Evaluation Criteria and Indicators/Measures

Prior to undertaking the net effects assessment, the Archaeology and Cultural Heritage evaluation criteria, indicators and measures developed in the Minister approved ToR were reviewed and confirmed for application to each of the Alternative Methods.

Step 2: Undertake the Net Effects Analysis

With the evaluation criteria, indicators and measures confirmed through the preceding step, a net effects analysis of the Alternative Methods was carried out consisting of the following activities:

- Identify potential effects (based on measures) on the Archaeology and Cultural Heritage;
- Develop and apply avoidance/mitigation/compensation/enhancement measures; and
- Determine net effects on the environment.

5.2 Criteria/Indicators

The evaluation criteria, indicators, rationale and data sources for the Archaeology and Cultural Heritage environmental component are shown below.

	Environmental Component	Evaluation Criteria	Study Area	Indicators	Rationale	Data Sources
AL	Archaeology	Cultural and heritage resources	Local Study Area	Cultural and heritage resources (built and landscapes) in the Local Study Area and predicted impacts on them Archaeological	The use and enjoyment of cultural resources may also be disturbed by the ongoing operation. Archaeological	 Published data sources Cultural/heritage assessments Commemorative statements Criteria for Evaluating Archaeological Potential: A Checklist for the Non-Specialist Published data sources
CULTURAL	and Cultural Heritage	resources	Study Area	resources in the Local Study Area and predicted impacts on them	resources are nonrenewable cultural resources that can be destroyed by the construction and operation of a waste disposal facility.	 Stage 1 and Stage 2 (possibly Stage 3 and 4) archaeological assessments Commemorative statements Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist

5.4 Potential Environmental Effects

5.4.1 Alternative Method 1

Alternative Method 1 is a vertical expansion of the existing Brooks Road Landfill and would not require the development of any additional land beyond the existing landfill footprint. As such, there will be no



loss of or disturbance to cultural and heritage resources or archaeological resources within the Local Study Area.

5.4.2 Alternative Method 2

Alternative Method 2 is a vertical expansion of the existing Brooks Road Landfill and would not require the development of any additional land beyond the existing landfill footprint. As such, there will be no loss of or disturbance to cultural and heritage resources or archaeological resources within the Local Study Area.

5.4.3 Alternative Method 3

Alternative Method 3 is a vertical expansion of the existing Brooks Road Landfill and would not require the development of any additional land beyond the existing landfill footprint. As such, there will be no loss of or disturbance to cultural and heritage resources or archaeological resources within the Local Study Area.

5.5 Mitigation Measures Beyond Those Incorporated into the Design

5.5.1 Alternative Method 1

As there are no potential effects on cultural and heritage resources or archaeological resources within the Local Study Area, no specific mitigation measures are required with respect to Archaeology and Cultural Heritage.

5.5.2 Alternative Method 2

As there are no potential effects on cultural and heritage resources or archaeological resources within the Local Study Area, no specific mitigation measures are required with respect to Archaeology and Cultural Heritage.

5.5.3 Alternative Method 3

As there are no potential effects on cultural and heritage resources or archaeological resources within the Local Study Area, no specific mitigation measures are required with respect to Archaeology and Cultural Heritage.

5.6 Net Environmental Effects

5.6.1 Alternative Method 1

There are no net effects on cultural and heritage resources or archaeological resources associated with Alternative Method 1.

6



5.6.2 Alternative Method 2

There are no net effects on cultural and heritage resources or archaeological resources associated with Alternative Method 2.

5.6.3 Alternative Method 3

There are no net effects on cultural and heritage resources or archaeological resources associated with Alternative Method 3.

7

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	Environmental Component	Evaluation Criteria	Indicator	Potential Effects	Mitigation Measures	Net Effects
COLIORAL	Archaeology & Cultural Heritage	Cultural & Heritage Resources	Cultural and heritage resources (built and landscapes) in the Local Study Area and predicted impacts on them	No potential loss of or disturbance to cultural and heritage resources within the Local Study Area.	No mitigation measures required.	No loss of or disturbance to cultural and heritage resources within the Local Study Area.
		Archaeological Resources	Archaeological resources in the Local Study Area and predicted impacts on them	No potential loss of or disturbance to archaeological resources within the Local Study Area.	No mitigation measures required.	No loss of or disturbance to archaeological resources within the Local Study Area.

Tal	Table 5.2 Alternative Method 2 Archaeology & Cultural Heritage Potential Environmental Effects, Mitigation Measures & Net Effects						
	Environmental Component	Evaluation Criteria	Indicator	Potential Effects	Mitigation Measures	Net Effects	
CULTURAL	Archaeology & Cultural Heritage	Cultural & Heritage Resources	Cultural and heritage resources (built and landscapes) in the Local Study Area and predicted impacts on them	No potential loss of or disturbance to cultural and heritage resources within the Local Study Area.	No mitigation measures required.	No loss of or disturbance to cultural and heritage resources within the Local Study Area.	
ບ		Archaeological Resources	Archaeological resources in the Local Study Area and predicted impacts on them	No potential loss of or disturbance to archaeological resources within the Local Study Area.	No mitigation measures required.	No loss of or disturbance to archaeological resources within the Local Study Area.	

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Tal	Table 5.3 Alternative Method 3 Archaeology & Cultural Heritage Potential Environmental Effects, Mitigation Measures & Net Effects							
	Environmental Component	Evaluation Criteria	Indicator	Potential Effects	Mitigation Measures	Net Effects		
CULTURAL	Archaeology & Cultural Heritage	Cultural & Heritage Resources	Cultural and heritage resources (built and landscapes) in the Local Study Area and predicted impacts on them	No potential loss of or disturbance to cultural and heritage resources within the Local Study Area.	No mitigation measures required.	No loss of or disturbance to cultural and heritage resources within the Local Study Area.		
		Archaeological Resources	Archaeological resources in the Local Study Area and predicted impacts on them	No potential loss of or disturbance to archaeological resources within the Local Study Area.	No mitigation measures required.	No loss of or disturbance to archaeological resources within the Local Study Area.		



Section 6.0 Comparative Evaluation

This section documents the comparative evaluation of the Alternative Methods from an Archaeology and Cultural Heritage perspective based on the net environmental effects identified in **Section 5.0**.

6.1 Comparative Evaluation Methodology

The Minister approved ToR states that the comparative evaluation of the Alternative Methods will be carried out using a Reasoned Argument (or Trade-off) method, with evaluation criteria as the basis for comparison. Under the Reasoned Argument approach, the differences in the net effects associated with each Alternative Method are highlighted. Based on these differences, the advantages and disadvantages of each alternative can be identified according to the evaluation of trade-offs between the various evaluation criteria and indicators. The relative significance of potential impacts is then examined to provide a clear rationale for the selection of a preferred alternative from an Archaeology and Cultural Heritage perspective. The term *trade-offs* is defined as "things of value given up in order to gain different things of value." Each Alternative Method will be compared against the others to distinguish relative differences in impacts to the environment, taking into account possible mitigation measures.

6.2 Comparative Evaluation Results

There are no net effects associated with any of the proposed Alternative Methods in relation to cultural and heritage resources and archaeological resources. As such, there is no distinction between the alternatives in relation to their effects on Archaeology and Cultural Heritage within the Local Study Area and, therefore, all alternatives rank the same.



Tal	Table 6.1 Archaeology & Cultural Heritage Comparative Evaluation						
	Environmental Component	Evaluation Criteria	Indicator	Alternative Method 1 Net Effects	Alternative Method 2 Net Effects	Alternative Method 3 Net Effects	
	Archaeology &	Cultural &	Cultural and	No loss of or	No loss of or	No loss of or	
	Cultural	Heritage	heritage	disturbance to	disturbance to	disturbance to	
	Heritage	Resources	resources (built	cultural and	cultural and	cultural and	
			and landscapes)	heritage	heritage	heritage	
			in the Local	resources	resources	resources	
			Study Area and	within the Local	within the Local	within the Local	
			predicted	Study Area.	Study Area.	Study Area.	
			impacts on them				
				NO NET	NO NET	NO NET	
				EFFECTS	EFFECTS	EFFECTS	
			Criteria Ranking:	Tied for 1 st	Tied for 1 st	Tied for 1 st	
			Criteria	All three alternatives are preferred as they would all			
			Rationale:	result in no loss or disturbance to cultural and			
F				heritage resources within the Local Study Area.			
CULTURAL		Archaeological	Archaeological	No loss of or	No loss of or	No loss of or	
		Resources	resources in the	disturbance to	disturbance to	disturbance to	
ರ			Local Study Area	archaeological	archaeological	archaeological	
			and predicted	resources	resources	resources	
			impacts on them	within the Local	within the Local	within the Local	
				Study Area.	Study Area.	Study Area.	
				NO NET	NO NET	NO NET	
				EFFECTS	EFFECTS	EFFECTS	
			Criteria Ranking:	Tied for 1 st	Tied for 1 st	Tied for 1 st	
			Criteria		tives are preferred		
			Rationale:		s or disturbance to		
				within the Local St			
		Environmental (Component	Tied for 1 st	Tied for 1 st	Tied for 1 st	
		Ranking:					
					nction between th		
		RATIONALE			ir effects on cultur		
				resources and a	rchaeological pote	ential within the	
					Local Study Area.		

Section 7.0 Conclusion

There are no heritage properties located within the Local Study Area and no potential for cultural heritage resource nor archaeological potential on-Site as the entire Brooks Road Landfill Site has been subjected to recent, extensive and intensive disturbance. While there may be areas within the Local Study Area that have archaeological potential, as these areas will not be disturbed by the proposed vertical expansion, it was concluded that an assessment of the archaeological potential within the Local Study Area was not necessary.



From an Archaeology and Cultural Heritage perspective, all three of the Alternative Methods are preferred as there will be no effects on cultural and heritage resources and archaeological resources associated with any of the vertical expansion alternatives.

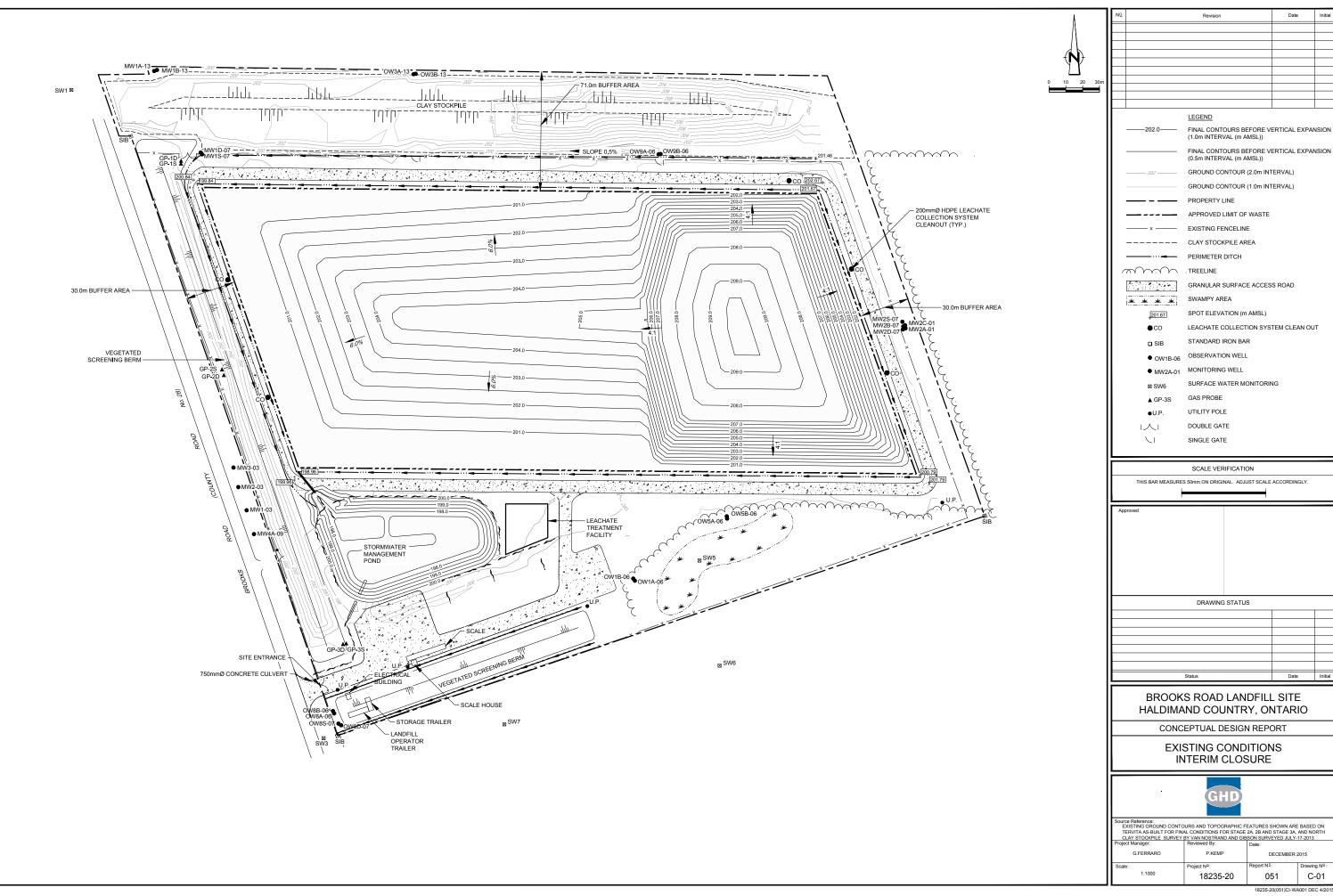


Section 8.0 References

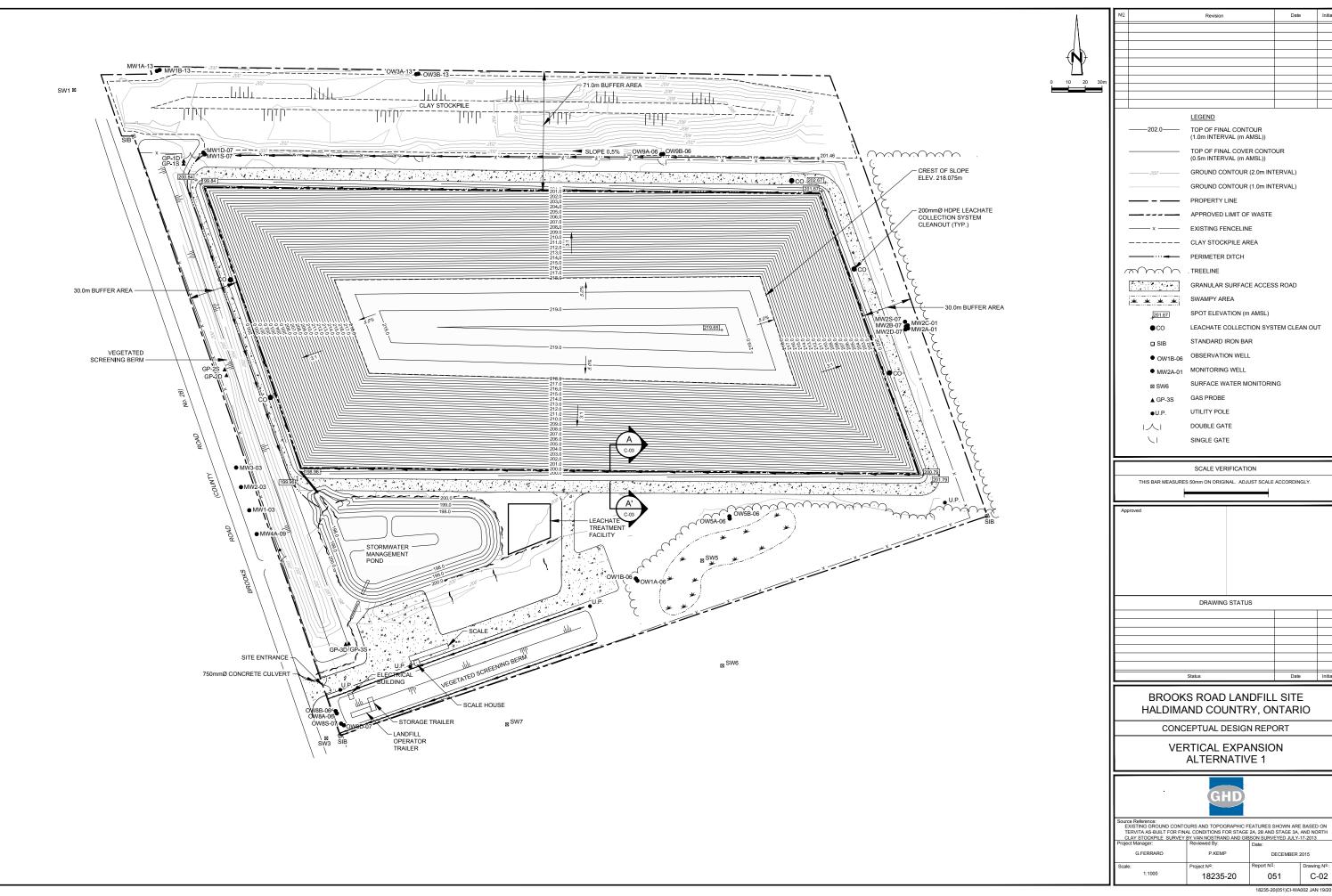
Heritage Haldimand, 2015. Heritage Haldimand Designated Properties. Available at: http://www.haldimandcounty.on.ca/residents.aspx?id=68

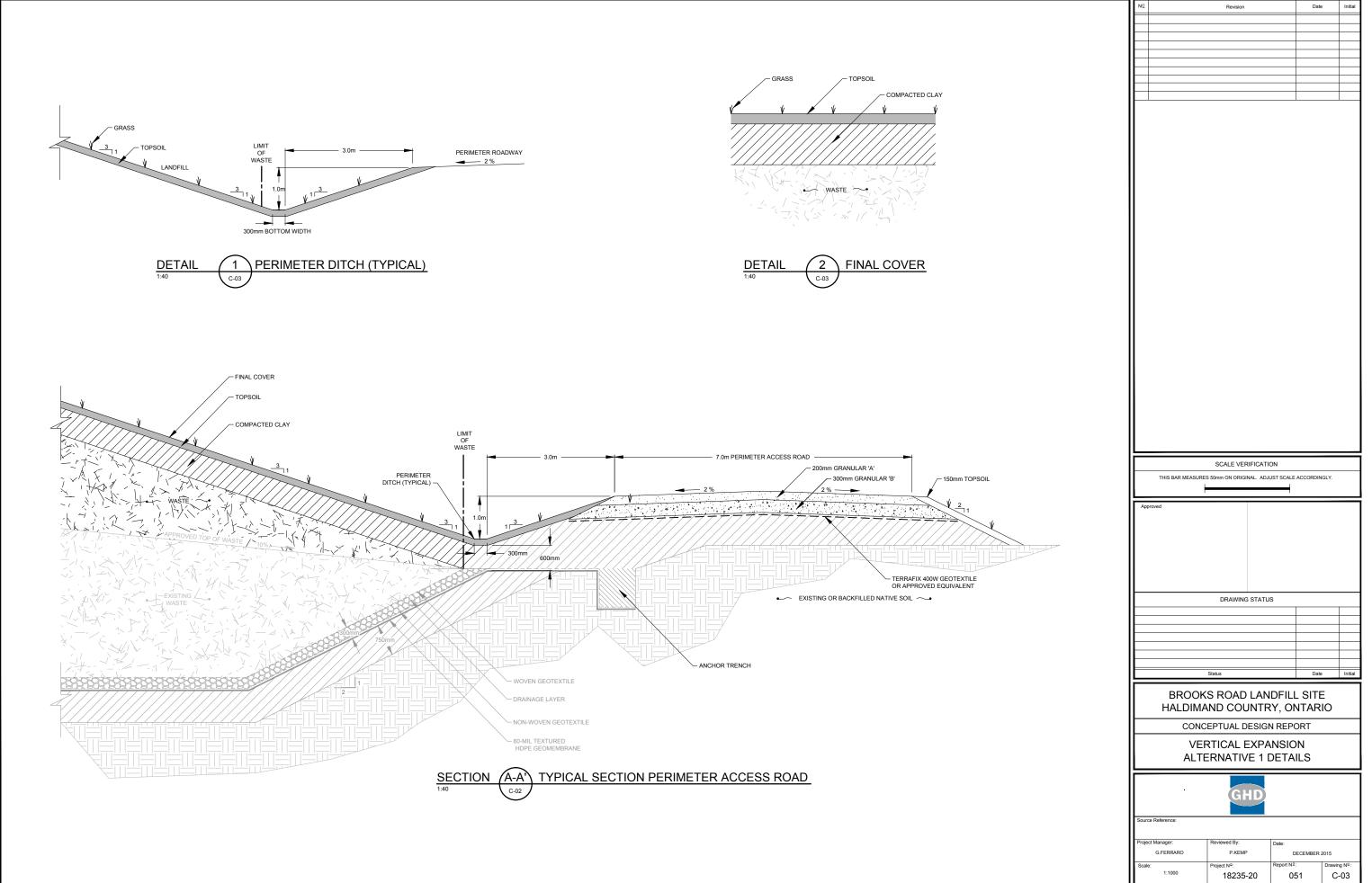


Drawings

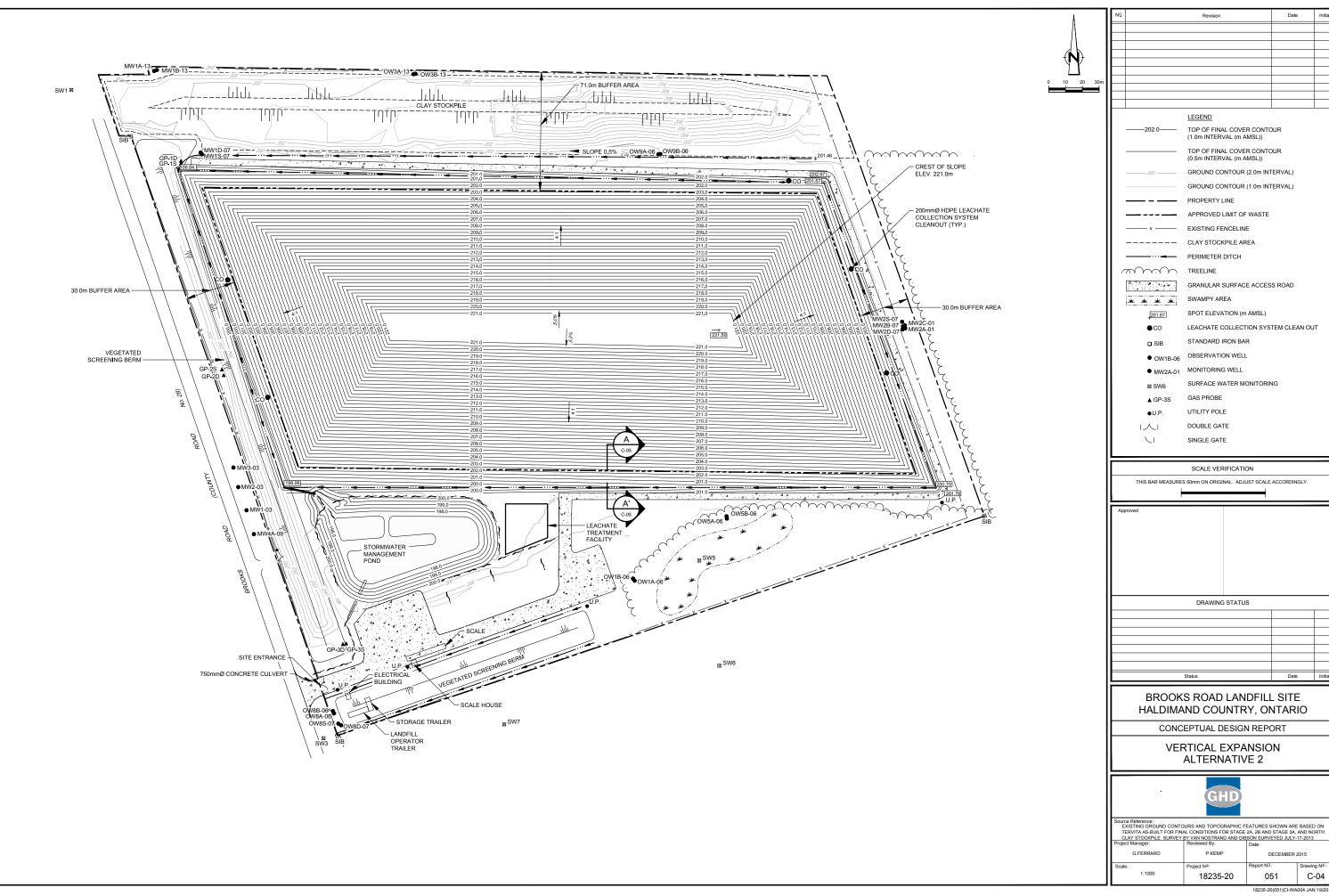


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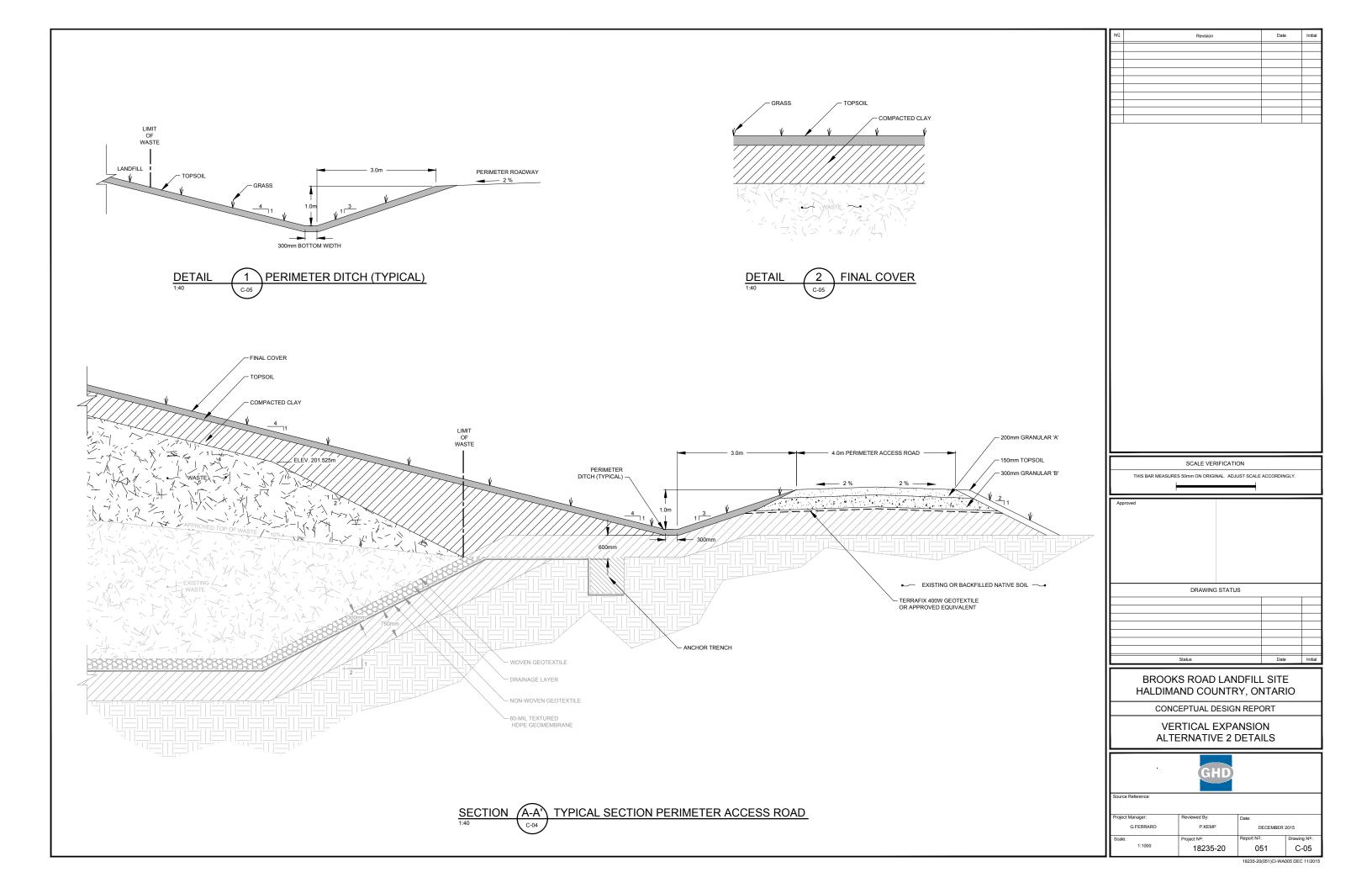


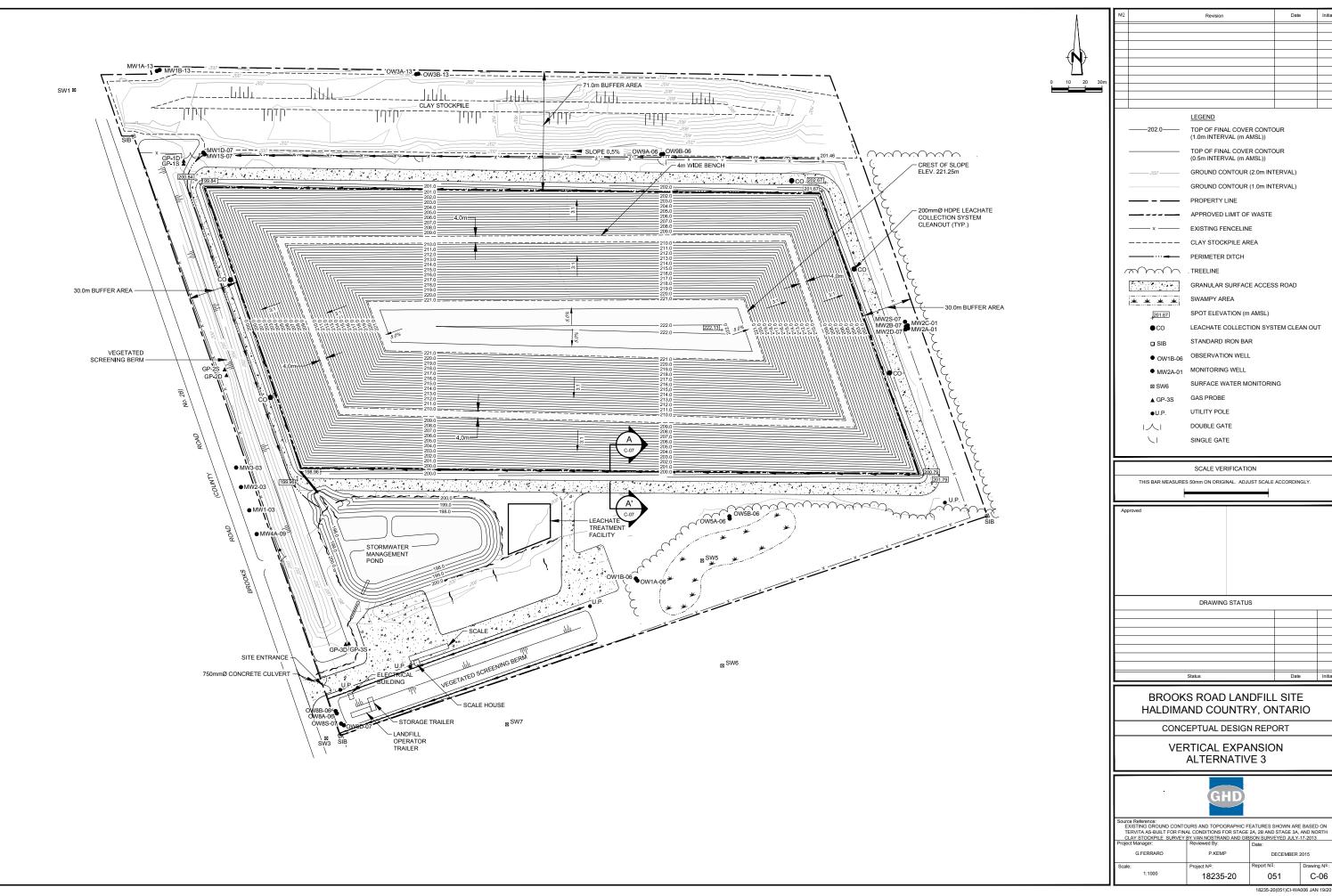


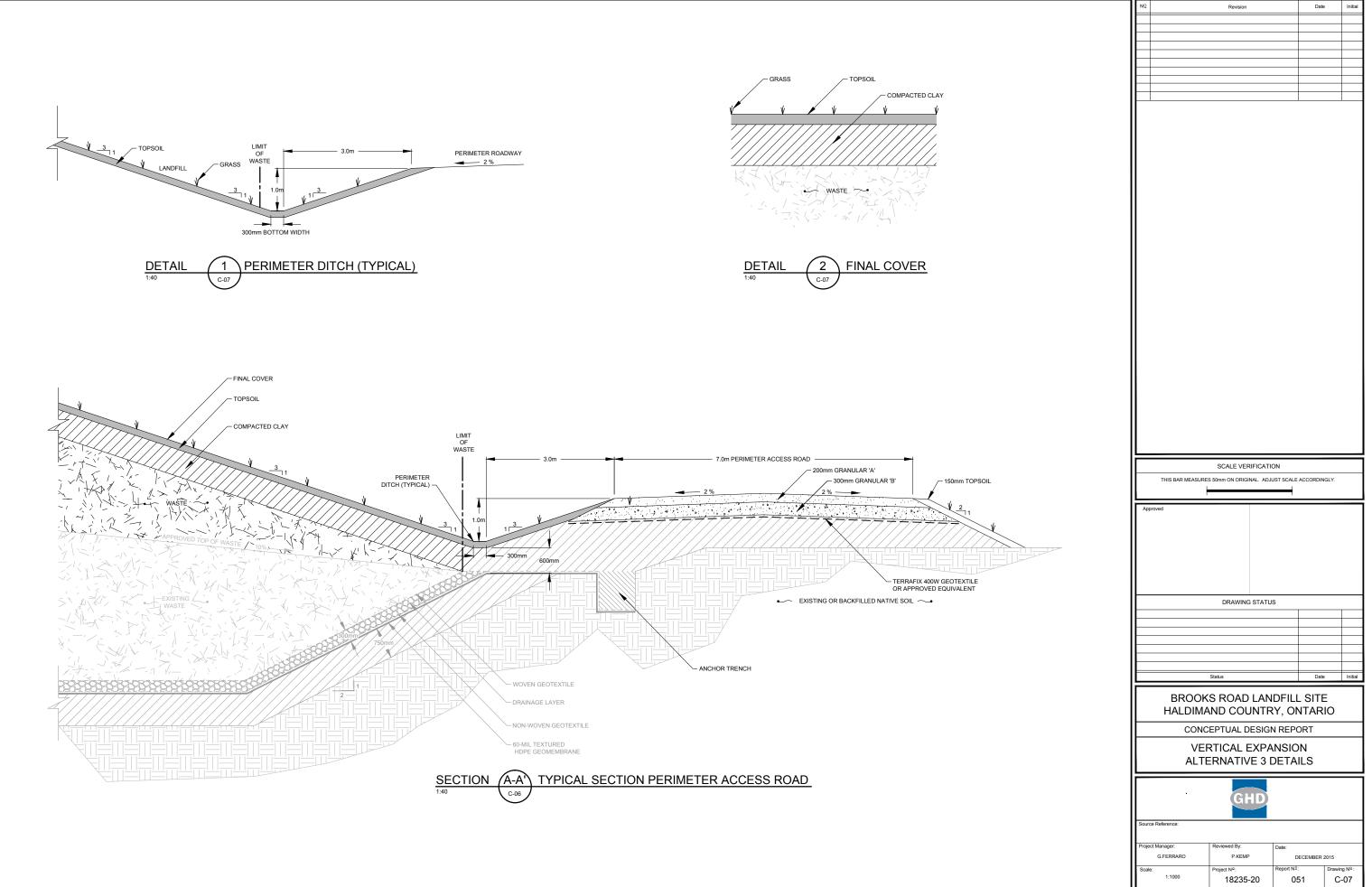
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Appendix A

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist



Ministry of Tourism, Culture and Sport

Programs & Services Branch 401 Bay Street, Suite 1700 Toronto ON M7A 0A7 Clear Form

Print Form

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes A Checklist for the Non-Specialist

The purpose of the checklist is to determine:

- if a property(ies) or project area:
 - is a recognized heritage property
 - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- Planning Act
- Environmental Assessment Act
- Aggregates Resources Act
- Ontario Heritage Act Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 separate checklist
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

-	Property Name Road Landfill Site		
	Property Location (upper and lower or single tier municipality)		
-	oks Road, Haldimand County, ON		
Proponent	Name		
Brooks F	Road Environmental		
•	Contact Information		
Richard '	Weldon, 416-928-4810		
Screening	g Questions		
•		Yes	No
1. Is the	re a pre-approved screening checklist, methodology or process in place?		~
	ease follow the pre-approved screening checklist, methodology or process.		
	tinue to Question 2.		
Part A: So	creening for known (or recognized) Cultural Heritage Value		
		Yes	No
2. Has th	he property (or project area) been evaluated before and found not to be of cultural heritage value?		~
	not complete the rest of the checklist.		
The propo	onent, property owner and/or approval authority will:		
•	summarize the previous evaluation and		
•	add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken		
The sumn	nary and appropriate documentation may be:		
•	submitted as part of a report requirement		
•	maintained by the property owner, proponent or approval authority		
If No. con	tinue to Question 3.		
11 140 , COII	uniue to Question 3.		
		Yes	No
3. Is the	property (or project area):		
a.	identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?		~
b.	a National Historic Site (or part of)?		~
C.	designated under the Heritage Railway Stations Protection Act?	$\overline{\Box}$	~
d.	designated under the Heritage Lighthouse Protection Act?	$\overline{\Box}$	~
e.	identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?		~
f.	located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?		~
If Yes to a	any of the above questions, you need to hire a qualified person(s) to undertake:		
•	a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated		
	ment of Cultural Heritage Value has been prepared previously and if alterations or development are , you need to hire a qualified person(s) to undertake:		

0500E (2015/03) Page 2 of 8

a Heritage Impact Assessment (HIA) - the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Pa	rt B: So	creening for Potential Cultural Heritage Value		
			Yes	No
1.	Does t	the property (or project area) contain a parcel of land that:		
	a.	is the subject of a municipal, provincial or federal commemorative or interpretive plaque?		~
	b.	has or is adjacent to a known burial site and/or cemetery?		~
	C.	is in a Canadian Heritage River watershed?	~	
	d.	contains buildings or structures that are 40 or more years old?		~
Pa	rt C: Ot	ther Considerations		
			Yes	No
5.	Is ther	e local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area)):	
	a.	is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?		~
	b.	has a special association with a community, person or historical event?		~
	C.	contains or is part of a cultural heritage landscape?		~
		ne or more of the above questions (Part B and C), there is potential for cultural heritage resources on the r within the project area.		
Υo	u need	to hire a qualified person(s) to undertake:		
	•	a Cultural Heritage Evaluation Report (CHER)		
		erty is determined to be of cultural heritage value and alterations or development is proposed, you need to lified person(s) to undertake:)	
	•	a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts		
	lo to all perty.	of the above questions, there is low potential for built heritage or cultural heritage landscape on the		
Γh	e propo	nent, property owner and/or approval authority will:		
	•	summarize the conclusion		
	•	add this checklist with the appropriate documentation to the project file		
Γh	e summ	nary and appropriate documentation may be:		
	•	submitted as part of a report requirement e.g. under the Environmental Assessment Act, Planning Act		

- processes
- maintained by the property owner, proponent or approval authority

Page 3 of 8 0500E (2015/03)

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's <u>Ontario Heritage Toolkit</u> or <u>Standards and Guidelines for Conservation of Provincial Heritage Properties</u>.

In this context, the following definitions apply:

- qualified person(s) means individuals professional engineers, architects, archaeologists, etc. having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's Standards & Guidelines for Conservation of Provincial Heritage Properties [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) or equivalent has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the Ontario Heritage Act
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)

0500E (2015/03) Page 4 of 8

Individual Designation - Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the Ontario Heritage Act]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note**: To date, no properties have been designated by the Minister.

Heritage Conservation District - Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
- Ontario Heritage Trust
- · local land registry office (for a title search)
- ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the Ontario Heritage Act

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- Ontario Heritage Trust for an agreement, covenant or easement [clause 10 (1) (c) of the Ontario Heritage Act]
- municipal clerk for a property that is the subject of an easement or a covenant [s.37 of the Ontario Heritage Act]
- local land registry office (for a title search)
- iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the Ontario Heritage Act (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
- municipal heritage planning staff
- · municipal heritage committee

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the Ontario Heritage Act)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the Ontario Heritage Act
- section 34.6 of the *Ontario Heritage Act.* **Note**: To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk for a property that is the subject of notice of intention [s. 29 and s. 40.1]
- Ontario Heritage Trust

0500E (2015/03) Page 5 of 8

v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@mtc.gov.on.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the National Historic Sites website.

3c. Is the property (or project area) designated under the Heritage Railway Stations Protection Act?

The Heritage Railway Stations Protection Act protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the <u>Directory of Designated Heritage Railway Stations</u>.

3d. Is the property (or project area) designated under the Heritage Lighthouse Protection Act?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the <u>Heritage Lighthouses of Canada</u> website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the Federal Heritage Buildings Review Office.

See a directory of all federal heritage designations.

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – World Heritage Site website.

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

0500E (2015/03) Page 6 of 8

For more information, contact:

- <u>municipal heritage committees</u> or local heritage organizations for information on the location of plaques in their community
- Ontario Historical Society's <u>Heritage directory</u> for a list of historical societies and heritage organizations
- Ontario Heritage Trust for a list of plaques commemorating Ontario's history
- Historic Sites and Monuments Board of Canada for a <u>list of plaques</u> commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services for a <u>database of registered cemeteries</u>
- Ontario Genealogical Society (OGS) to <u>locate records of Ontario cemeteries</u>, both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project to <u>locate early cemeteries</u>

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the Canadian Heritage River System.

If you have questions regarding the boundaries of a watershed, please contact:

- · your conservation authority
- · municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- · building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- · residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide <u>Heritage Property Evaluation</u>.

0500E (2015/03) Page 7 of 8

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- · Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- municipal heritage committees or local heritage organizations
- Ontario Historical Society's "<u>Heritage Directory</u>" for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through Ontario Trails.

0500E (2015/03) Page 8 of 8



Appendix B

Criteria for Evaluating Archaeological Potential: A Checklist for the Non-Specialist



Ministry of Tourism, Culture and Sport

Programs & Services Branch 401 Bay Street, Suite 1700 Toronto ON M7A 0A7 Print Form

Clear Form

Criteria for Evaluating Archaeological Potential A Checklist for the Non-Specialist

The purpose of the checklist is to determine:

- · if a property(ies) or project area may contain archaeological resources i.e., have archaeological potential
- it includes all areas that may be impacted by project activities, including but not limited to:
 - the main project area
 - temporary storage
 - · staging and working areas
 - · temporary roads and detours

Processes covered under this checklist, such as:

- Planning Act
- Environmental Assessment Act
- Aggregates Resources Act
- Ontario Heritage Act Standards and Guidelines for Conservation of Provincial Heritage Properties

Archaeological assessment

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a licensed consultant archaeologist (see page 4 for definitions) to undertake an archaeological assessment.

The assessment will help you:

- identify, evaluate and protect archaeological resources on your property or project area
- reduce potential delays and risks to your project

Note: By law, archaeological assessments **must** be done by a licensed consultant archaeologist. Only a licensed archaeologist can assess – or alter – an archaeological site.

What to do if you:

find an archaeological resource

If you find something you think may be of archaeological value during project work, you must – by law – stop all activities immediately and contact a licensed consultant archaeologist

The archaeologist will carry out the fieldwork in compliance with the Ontario Heritage Act [s.48(1)].

· unearth a burial site

If you find a burial site containing human remains, you must immediately notify the appropriate authorities (i.e., police, coroner's office, and/or Registrar of Cemeteries) and comply with the *Funeral, Burial and Cremation Services Act*.

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 separate checklist
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages when completing this form.

Project or Property Name Brooks Road Landfill Site		
Project or Property Location (upper and lower or single tier municipality) 160 Brooks Road, Haldimand, ON		
Proponent Name		
Brooks Road Environmental Proponent Contact Information		
Richard Weldon, 416-928-4810		
Screening Questions		
	Yes	No
Is there a pre-approved screening checklist, methodology or process in place?	les	No ✓
If Yes, please follow the pre-approved screening checklist, methodology or process.		
If No, continue to Question 2.		
 Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS? 	Yes	No ✓
If Yes, do not complete the rest of the checklist. You are expected to follow the recommendations in the archaeological assessment report(s).		
The proponent, property owner and/or approval authority will:		
summarize the previous assessment		
 add this checklist to the project file, with the appropriate documents that demonstrate an archaeological assessment was undertaken e.g., MTCS letter stating acceptance of archaeological assessment report 		
The summary and appropriate documentation may be:		
 submitted as part of a report requirement e.g., environmental assessment document 		
 maintained by the property owner, proponent or approval authority 		
If No, continue to Question 3.		
	Yes	No
3. Are there known archaeological sites on or within 300 metres of the property (or the project area)?		~
4. Is there Aboriginal or local knowledge of archaeological sites on or within 300 metres of the property (or project area)?	Yes	No ✓
 Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 300 metres of the property (or project area)? 	Yes	No ✓
6. Is there a known burial site or cemetery on the property or adjacent to the property (or project area)?	Yes	No
	Yes	No
7. Has the property (or project area) been recognized for its cultural heritage value?		~
If Yes to any of the above questions (3 to 7), do not complete the checklist. Instead, you need to hire a licensed		
consultant archaeologist to undertake an archaeological assessment of your property or project area.		
If No, continue to question 8.		
	Yes	No
8. Has the entire property (or project area) been subjected to recent, extensive and intensive disturbance?	~	
If Yes to the preceding question, do not complete the checklist. Instead, please keep and maintain a summary of documentation that provides evidence of the recent disturbance.		
An archaeological assessment is not required.		
If No, continue to question 9.		0.10

0478E (2015/11) Page 2 of 8

9.	Are there present or past water sources within 300 metres of the property (or project area)?	Yes	No
lf `	Yes, an archaeological assessment is required.		
lf I	No , continue to question 10.		
10	 Is there evidence of two or more of the following on the property (or project area)? elevated topography pockets of well-drained sandy soil distinctive land formations resource extraction areas early historic settlement early historic transportation routes 	Yes	No
lf `	Yes, an archaeological assessment is required.		
lf I	No , there is low potential for archaeological resources at the property (or project area).		
Th	 proponent, property owner and/or approval authority will: summarize the conclusion add this checklist with the appropriate documentation to the project file 		
Th	ne summary and appropriate documentation may be:		
	 submitted as part of a report requirement e.g., under the Environmental Assessment Act, Planning Act processes 		

maintained by the property owner, proponent or approval authority

0478E (2015/11) Page 3 of 8

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

In this context, the following definitions apply:

- consultant archaeologist means, as defined in Ontario regulation as an archaeologist who enters into an
 agreement with a client to carry out or supervise archaeological fieldwork on behalf of the client, produce reports for
 or on behalf of the client and provide technical advice to the client. In Ontario, these people also are required to hold
 a valid professional archaeological licence issued by the Ministry of Tourism, Culture and Sport.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may be already in place for identifying archaeological potential, including:

- one prepared and adopted by the municipality e.g., archaeological management plan
- an environmental assessment process e.g., screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport under the Ontario government's <u>Standards & Guidelines for Conservation of Provincial Heritage Properties</u> [s. B.2.]

2. Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS?

Respond 'yes' to this question, if all of the following are true:

- an archaeological assessment report has been prepared and is in compliance with MTCS requirements
 - a letter has been sent by MTCS to the licensed archaeologist confirming that MTCS has added the report to the Ontario Public Register of Archaeological Reports (Register)
- · the report states that there are no concerns regarding impacts to archaeological sites

Otherwise, if an assessment has been completed and deemed compliant by the MTCS, and the ministry recommends further archaeological assessment work, this work will need to be completed.

For more information about archaeological assessments, contact:

- approval authority
- proponent
- · consultant archaeologist
- Ministry of Tourism, Culture and Sport at <u>archaeology@ontario.ca</u>

3. Are there known archaeological sites on or within 300 metres of the property (or project area)?

MTCS maintains a database of archaeological sites reported to the ministry.

For more information, contact MTCS Archaeological Data Coordinator at archaeology@ontario.ca.

4. Is there Aboriginal or local knowledge of archaeological sites on or within 300 metres of the property?

Check with:

- Aboriginal communities in your area
- local municipal staff

They may have information about archaeological sites that are not included in MTCS' database.

Other sources of local knowledge may include:

- property owner
- local heritage organizations and historical societies
- local museums
- municipal heritage committee
- · published local histories

0478E (2015/11) Page 4 of 8

5. Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 300 metres of the property (or property area)?

Check with:

- Aboriginal communities in your area
- local municipal staff

Other sources of local knowledge may include:

- · property owner
- · local heritage organizations and historical societies
- local museums
- · municipal heritage committee
- · published local histories

6. Is there a known burial site or cemetery on the property or adjacent to the property (or project area)?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulation Unit, Ontario Ministry of Consumer Services for database of registered cemeteries
- Ontario Genealogical Society (OGS) to <u>locate records of Ontario cemeteries</u>, both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project to <u>locate early cemeteries</u>

In this context, 'adjacent' means 'contiguous', or as otherwise defined in a municipal official plan.

7. Has the property (or project area) been recognized for its cultural heritage value?

There is a strong chance there may be archaeological resources on your property (or immediate area) if it has been listed, designated or otherwise identified as being of cultural heritage value by:

- your municipality
- Ontario government
- · Canadian government

This includes a property that is:

- designated under Ontario Heritage Act (the OHA), including:
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)
 - an archaeological site (Part VI)
- subject to:
 - an agreement, covenant or easement entered into under the OHA (Parts II or IV)
 - a notice of intention to designate (Part IV)
 - a heritage conservation district study area by-law (Part V) of the OHA
- listed on:
 - a municipal register or inventory of heritage properties
 - Ontario government's list of provincial heritage properties
 - Federal government's list of federal heritage buildings
- part of a:
 - National Historic Site
 - UNESCO World Heritage Site
- designated under:
 - Heritage Railway Station Protection Act
 - Heritage Lighthouse Protection Act
- subject of a municipal, provincial or federal commemorative or interpretive plaque.

To determine if your property or project area is covered by any of the above, see:

Part A of the MTCS Criteria for Evaluating Potential for Built Heritage and Cultural Heritage Landscapes

0478E (2015/11) Page 5 of 8

Part VI - Archaeological Sites

Includes five sites designated by the Minister under Regulation 875 of the Revised Regulation of Ontario, 1990 (Archaeological Sites) and 3 marine archaeological sites prescribed under Ontario Regulation 11/06.

For more information, check Regulation 875 and Ontario Regulation 11/06.

8. Has the entire property (or project area) been subjected to recent extensive and intensive ground disturbance?

Recent: after-1960

Extensive: over all or most of the area

Intensive: thorough or complete disturbance

Examples of ground disturbance include:

- quarrying
- major landscaping involving grading below topsoil
- building footprints and associated construction area
 - where the building has deep foundations or a basement
- infrastructure development such as:
 - sewer lines
 - gas lines
 - · underground hydro lines
 - roads
 - any associated trenches, ditches, interchanges. **Note**: this applies only to the excavated part of the right-of-way; the remainder of the right-of-way or corridor may not have been impacted.

A ground disturbance does not include:

- · agricultural cultivation
- gardening
- · landscaping

Site visits

You can typically get this information from a site visit. In that case, please document your visit in the process (e.g., report) with:

- photographs
- maps
- detailed descriptions

If a disturbance isn't clear from a site visit or other research, you need to hire a licensed consultant archaeologist to undertake an archaeological assessment.

9. Are there present or past water bodies within 300 metres of the property (or project area)?

Water bodies are associated with past human occupations and use of the land. About 80-90% of archaeological sites are found within 300 metres of water bodies.

Present

- Water bodies:
 - · primary lakes, rivers, streams, creeks
 - secondary springs, marshes, swamps and intermittent streams and creeks
- accessible or inaccessible shoreline, for example:
 - high bluffs
 - swamps
 - marsh fields by the edge of a lake
 - · sandbars stretching into marsh

0478E (2015/11) Page 6 of 8

Water bodies not included:

- man-made water bodies, for example:
 - · temporary channels for surface drainage
 - rock chutes and spillways
 - temporarily ponded areas that are normally farmed
 - · dugout ponds
- artificial bodies of water intended for storage, treatment or recirculation of:
 - runoff from farm animal yards
 - · manure storage facilities
 - sites and outdoor confinement areas

Past

Features indicating past water bodies:

- raised sand or gravel beach ridges can indicate glacial lake shorelines
- clear dip in the land can indicate an old river or stream
- shorelines of drained lakes or marshes
- · cobble beaches

You can get information about water bodies through:

- · a site visit
- aerial photographs
- 1:10,000 scale Ontario Base Maps or equally detailed and scaled maps.

10. Is there evidence of two or more of the following on the property (or project area)?

- elevated topography
- pockets of well-drained sandy soil
- · distinctive land formations
- · resource extraction areas
- early historic settlement
- early historic transportation routes

Elevated topography

Higher ground and elevated positions - surrounded by low or level topography - often indicate past settlement and land use.

Features such as eskers, drumlins, sizeable knolls, plateaus next to lowlands, or other such features are a strong indication of archaeological potential.

Find out if your property or project area has elevated topography, through:

- site inspection
- aerial photographs
- topographical maps

· Pockets of well-drained sandy soil, especially within areas of heavy soil or rocky ground

Sandy, well-drained soil - in areas characterized by heavy soil or rocky ground - may indicate archaeological potential Find out if your property or project area has sandy soil through:

- site inspection
- soil survey reports

0478E (2015/11) Page 7 of 8

Distinctive land formations

Distinctive land formations include – but are not limited to:

- waterfalls
- rock outcrops
- · rock faces
- caverns
- mounds, etc.

They were often important to past inhabitants as special or sacred places. The following sites may be present – or close to – these formations:

- burials
- structures
- offerings
- · rock paintings or carvings

Find out if your property or project areas has a distinctive land formation through:

- · a site visit
- aerial photographs
- 1:10,000 scale Ontario Base Maps or equally detailed and scaled maps.

Resource extraction areas

The following resources were collected in these extraction areas:

- food or medicinal plants e.g., migratory routes, spawning areas, prairie
- scarce raw materials e.g., quartz, copper, ochre or outcrops of chert
- · resources associated with early historic industry e.g., fur trade, logging, prospecting, mining

Aboriginal communities may hold traditional knowledge about their past use or resources in the area.

Early historic settlement

Early Euro-Canadian settlement include – but are not limited to:

- · early military or pioneer settlement e.g., pioneer homesteads, isolated cabins, farmstead complexes
- early wharf or dock complexes
- pioneers churches and early cemeteries

For more information, see below – under the early historic transportation routes.

Early historic transportation routes - such as trails, passes, roads, railways, portage routes, canals.

For more information, see:

- historical maps and/or historical atlases
 - for information on early settlement patterns such as trails (including Aboriginal trails), monuments, structures, fences, mills, historic roads, rail corridors, canals, etc.
 - Archives of Ontario holds a large collection of historical maps and historical atlases
 - digital versions of historic atlases are available on the <u>Canadian County Atlas Digital Project</u>
- commemorative markers or plaques such as local, provincial or federal agencies
- <u>municipal heritage committee</u> or other <u>local heritage organizations</u>
 - for information on early historic settlements or landscape features (e.g., fences, mill races, etc.)
 - for information on commemorative markers or plaques

0478E (2015/11) Page 8 of 8