Archaeological Screening Process

for the Municipal Class EA (MCEA) Start Time 10:30



October 24, 2023



Paul Knowles, P.Eng., is the MEA's MCEA Advisor. He graduated from Queen's University as a Civil Engineer and worked in the private sector for 9 years before joining the Town of Carleton Place as Town Engineer in 1989. His involvement with the Municipal Engineers Association (MEA) and the Municipal Class Environment Assessment (MCEA) began shortly thereafter. In 1993, Paul was promoted to CAO for Carleton Place but continued his engineering work and remained very active with the MEA as a Board member (2008 – 2018) and as its President in 2017,

Throughout the years, Paul has been involved in all aspects of the MCEA document, including all re-writes and amendments. Paul officially retired from Carleton Place at the end of 2018 but is continuing to work with MEA as its MCEA Advisor, delivering training programs and pursuing improvements to the MCEA process

Topics for Today

What/Why/When ASP? ASP – Three Questions Sample Projects ASP Advantages

What/Why/When ASP?

Ensure Indigenous Communities engaged for projects shifted to Exempt

 9a Initial stockpiling of de-icing material within an engineered permanent storage structure where the storage structure has an impervious ground surface and de-icing material will be protected from precipitation and surface runoff and the storage structure is not located in or adjacent to an environmentally sensitive natural area, residential, or other sensitive land use. Refer to "environmentally sensitive natural area" in the Glossary See A1-2 	ASP	x	
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Archaeological Screening Process (ASP)

The projects that are identified as eligible for screening, subject to the archaeological screening process (identified as "ASP") may be exempt from the requirements of the EAA as determined by the archaeological screening process set out below. In order to proceed with a project that is identified as eligible for screening, a proponent must either;

(i)carry out the process for a Schedule B/C project; or (ii)complete the archaeological screening process and

follow the directions set out in the screening process. If the outcome of the screening process is that the project is exempt from the requirements of the EAA, the proponent may proceed with the undertaking/project without further application of the EAA to the project

Roads

9a Initial stockpiling of de-icing material within an engineered permanent storage structure where the storage structure has an impervious ground surface and de-icing material will be protected from precipitation and surface runoff and the storage structure is not located in or adjacent to an environmentally sensitive natural area, residential, or other sensitive land use.

 Refer to "environmentally sensitive natural area" in the Glossary

Roads

12b Construction of new parking lots >\$12m not associated with a building and are not located in or adjacent to an environmentally sensitive natural area, residential or other sensitive land use, or on lands with cultural heritage or archaeological potential.

 To determine whether there is "archaeological potential" refer to MCM's Criteria for Evaluating Archaeological Potential checklist posted on the MEA website

 Refer to "environmentally sensitive natural area" in the Glossary

Roads

14b Construction of a new collector road, or reconstruction or widening of an existing collector road that will not be for the same purpose, use, capacity or at the same location, and is required as a condition of approval on a plan of subdivision and/or the subdivision agreement which will come into effect under the Planning Act

NOTE – also must follow Collector Roads Screening Process (CR)

Roads

28b Installation, construction, or reconstruction of traffic control devices >\$12m (e.g. signing, signalization)

29b Installation of safety projects (e.g. lighting including "high mast", grooving, glare screens, safety barriers, energy attenuators) >\$3m

Roads

31b Reconstruction of, or alteration to a structure or the grading adjacent to it when the structure is over 40 years old, the structure is found to have cultural heritage value or interest, and the heritage attributes will be conserved in accordance with the recommendations of a Heritage Impact Assessment

• To determine whether a bridge has "cultural heritage value", refer to the MEA's municipal heritage bridge checklist developed with the Ministry of Citizenship and Multiculturalism and posted on the MEA website

Roads

- 32b Construction of underpasses or overpasses for pedestrian, cycling, recreational or agricultural use, and where the underpass or overpass >\$3m would not be located in or adjacent to an environmentally sensitive natural area, potential built heritage resource or cultural heritage landscape or other sensitive land use, or on lands with archaeological potential
- To determine whether there is "archaeological potential" refer to MCM's Criteria for Evaluating Archaeological Potential checklist
- Refer to new definition of "environmentally sensitive natural area" in the Glossary

5b Increasing pumping station capacity where new equipment is located in a new building or structure and the new building or structure is located on the existing pumping station site, or located on municipally owned lands adjacent to the existing pumping station site where the lands are not in an environmentally sensitive natural area

• Refer to "environmentally sensitive natural area" in the Glossary

Water/Wastewater

5d Construct a new pumping station where the facility is not located in or adjacent to an environmentally sensitive natural area, residential or other sensitive land use, or on land with cultural heritage or archaeological potential

6c Establish new water storage facilities where the facility is not located in or adjacent to an environmentally sensitive natural area, residential or other sensitive land use, or on lands with cultural heritage or archaeological potential

Water/Wastewater

9b Install a new well on an existing municipal well site

• This does not include the construction of a new water system

17 Install sewer connections for disposal of process wastewater

18 Establish facilities for disposal of proposal wastewater (e.g. construct holding pond, dewatering and hauling operations to disposal sites) where the facility does not require new property or property is not disturbed, is not a significant drinking water threat in a source water protection area or requires a new outfall or does not discharge to a sensitive receiver, and is not located on lands with cultural heritage or archaeological potential

23b Increase pumping station capacity where new equipment is located in a new building or structure and the new building or structure is located on the existing pumping station site, or located on municipally owned lands adjacent to the existing pumping station site where the lands are not in an environmentally sensitive natural area

 Refer to "environmentally sensitive natural area" in the Glossary

24d Construct new pumping station where the facility is not located in or adjacent to an environmentally sensitive natural area, residential or other sensitive land use, or on land with cultural heritage or archaeological potential

30a Establish sewage flow equalization tankage for influent and/or effluent control within existing sewer system or at existing sewage treatment plants, or at existing pumping stations where no property acquisition is required

38a Establish new or modify, retrofit or improve LID features within an existing road allowance or an existing utility corridor

45 Water crossing for a new or replacement water or sewage facility where the facility will be supported by an existing bridge or structure and the project does not involve in water works or significant modifications to the bridge or structures piers or abutments; the bridge or structure does not have cultural heritage value; and additional property is not required

Archaeological Screening Process (ASP)

ASP involves considering the following three questions;

- 1. Does the project area include known or potential archaeological resources?
- 2. Based on the archaeological assessment(s), will the proposed project/undertaking have negative impacts (effects) to archaeological resources?
- 3. Based on the archaeological assessment(s), will any negative impacts (effects) be appropriately mitigated?

Archaeological Screening Process (ASP)

- Use regular meetings with Indigenous Communities respond to Question #1
- Maintain record of all Consultation
- Proponent must fully/properly complete ASP and complete checklists before project can be shifted to Exempt
- Subsequent approvals/permits may be required



Proponents must complete the <u>Criteria for Evaluating</u>
 <u>Archaeological Potential Checklist</u> (form 021-0478E) and/or
 the <u>Criteria for Evaluating Marine Archaeological Potential</u>
 <u>Checklist</u> (form 021-0503E) if your project is located in or by
 the water. The marine licensing program is different from the
 land-based system. The checklists can be accessed at:
 <u>https://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/?</u>
 <u>OpenDatabase& ENV=WWE</u>

Instructions:

- Fill out the Criteria for Evaluating Archaeological Potential Checklist beginning at question 2.
- If your project is located in or by the water, fill out the Criteria for Evaluating Marine Archaeological Potential Checklist beginning at question 2.
- To answer this question and complete the associated checklists, proponents need to contact:
 - The Ministry of Citizenship and Multiculturalism at archaeology@ontario.ca
 - Appropriate Indigenous Communities *
 - Local municipal staff
 - Research known burial sites or cemeteries

* You can contact the Ministry of the Environment, Conservation and Parks for guidance on which Indigenous Communities should be contacted.



Ministry of Tourism, Culture and Sport

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

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

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.

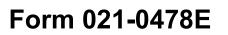
The assessment will help you:

 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)

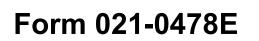
Project or Property Name Project or Property Location (upper and lower or single tier municipality) Proponent Name Proponent Contact Information

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

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

2. Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS?
If Yes, do not complete the rest of the checklist. You are expected to follow the recommendations in the archaeological assessment report(s).
If No, continue to Question 3.



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

Yes No

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 (or project area)?

Yes No

Check with:

- Aboriginal communities in your area
- local municipal staff

5. 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

Check with:

- Aboriginal communities in your area
- local municipal staff

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

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.

Recent: after-1960 Extensive: over all or most of the area Intensive: thorough or complete disturbance



9. Are there present or past water sources within 300 metres of the property (or project area)? If Yes, an archaeological assessment is required. If 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

If Yes, an archaeological assessment is required.

If No, there is low potential for archaeological resources at the property (or project area). 1

Clearly No evidence of Heritage Value (No to 3 - 7), and; Clearly prior disturbance (Yes to 8) or No evidence of risk features (No to 9 & 10)

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

Checklist must be available upon request Consider posting checklist on website Proceed with Project classified as Schedule A+ (Exempt)

Example Project

New Salt Storage No Nearby known archeological sites, burial sites or water course Previously excavated Industrial site

Schedule A+ (Exempt)



Example Project

New Lighting No Nearby known archeological sites, burial sites or water course Previously excavated Hwy property

Schedule A+ (Exempt)



Ministry of Tourism, Culture and Sport

Programs & Services Branch 401 Bay Street, Suite 1700 Toronto ON M7A 0A7 Criteria for Evaluating Marine Archaeological Potential A Checklist for Non-Marine Archaeologists

The **purpose of this checklist** is to help proponents determine:

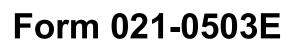
• if a property or project area may contain marine archaeological resources or have marine archaeological potential

A marine archaeological site is fully or partially submerged, or lies below or partially below the high-water mark of any body of water.

The property or project area includes all submerged areas that may be impacted by project activities, including, but not limited to:

- the main project area
- temporary storage and stockpiling locations
- staging and work areas, such as docking platforms and dredging locations
- temporary features such as access routes, anchors, moorings and cofferdams

Project or Property Name Project or Property Location (upper and lower or single tier municipality) Proponent Name Proponent Contact Information



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

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Has a marine archaeological assessment been prepared for the property or project area and been entered by MTCS into the Ontario Public Register of Archaeological Reports?
 If **Yes**, do **not** complete the rest of the checklist. You are expected to follow the recommendations in the marine archaeological assessment report(s).

If No, continue to Question 3..

3. Are there known marine or land-based archaeological sites on or within 500 metres of the property or project area? Yes No

4. Is there Aboriginal or local knowledge of marine or landbased archaeological sites on or within 500 metres of the property or project area? Yes No

5. Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 500 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

7. Has the property or project area been recognized for its cultural heritage value? Yes No

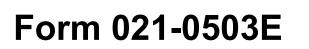
If **Yes** to any of questions 3 to 7, do **not** complete the checklist. Your property or project area could contain marine archaeological resources: please hire a licensed marine archaeologist to conduct a marine archaeological assessment.

If **No**, continue to Question 8.

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

If **Yes**, do **not** complete the checklist. Instead, please keep and maintain a summary of documentation that provides evidence of the recent disturbance. A marine archaeological assessment is not required.

If **No**, continue to Question 9.



9. Are there two or more reported or registered ship wreck sites or reports of lost ships within a five kilometre radius of the

property or project area?

If **Yes**, a marine archaeological assessment is required. If **No**, continue to Question 10.

10. Is the property or project area within one kilometre of an active or historic harbour, seaplane or floatplane base, tunnel, ferry route, marine terminal, or winter road? If **Yes**, a marine archaeological assessment is required. If **No**, continue to Question 11.



11. Where the project impacts fourth order or higher watercourses, are there existing narrows, rapids, waterfalls or does the watercourse enter or leave a body of water within 300 metres of the property or project area?
If **Yes**, a marine archaeological assessment is required.
If **No**, continue to Question 12.

12. Are there potential built heritage or cultural heritage landscape resources that may be of cultural heritage value or interest adjacent to the watercourse or water body? If **Yes**, a marine archaeological assessment is required. If **No**, continue to Question 13

13. Are there inundated beaches, bluffs, lakeshores, streams or river banks within 300 metres of the property or project area?

If **Yes**, a marine archaeological assessment is required.

If **No**, continue to Question 14.

14. Are there inundated beaches, lakeshores or river/creek banks beyond 300 metres and at greater depth than the

project area with evidence of two or more of the following in the project area?

- elevated bathymetric features such as drumlins, eskers, kames, ridges, etc.
- pockets of sandy lakebed
- distinctive bathymetric formations such as escarpments, shoals, promontories, reefs, etc.
- inundated resource extraction areas (quarry, fishery)
- inundated historical settlement including built heritage resources or cultural heritage landscapes
- inundated historical transportation routes
- If **Yes**, a marine archaeological assessment is required.

If **No**, there is low potential for marine archaeological resources at the property (or project area).



Clearly No evidence of Heritage Value (No to 3 - 7), and; Clearly prior disturbance (Yes to 8) or Clearly No evidence of risk features (No to 9 - 14)

The proponent, property owner and/or approval authority will:

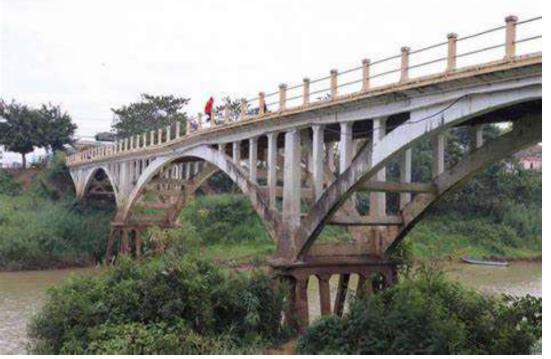
summarize the conclusion

add this checklist with the appropriate documentation to the project file

Checklist must be available upon request Consider posting checklist on website Proceed with Project classified as Schedule A+ (Exempt)

Example Project

Reconstruct deck and railing of Heritage Bridge with no work on substructure or outside disturbed road allowance.



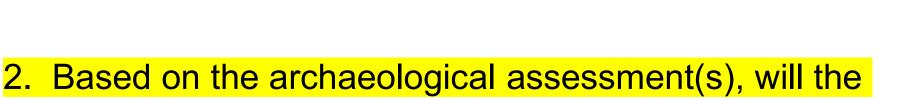
No Nearby known archeological sites, burial sites

Schedule A+ (Exempt)

Archaeological Screening Process (ASP)

ASP involves considering the following three questions;

- 1. Does the project area include known or potential archaeological resources?
- Based on the archaeological assessment(s), will the proposed project/undertaking have negative impacts (effects) to archaeological resources?
- 3. Based on the archaeological assessment(s), will any negative impacts (effects) be appropriately mitigated?



- 2. Based on the archaeological assessment(s), will the proposed project/undertaking have negative impacts (effects) to archaeological resources?
- Hire Licensed Archaeologist to complete assessments
- Engage Indigenous Communities throughout assessment process
- Submit to Ontario Public Register of Archaeological Reports
- No work until letter from MCM

 Based on the archaeological assessment(s), will the proposed project/undertaking have negative impacts (effects) to archaeological resources?

If assessments determine no negative impacts;

- Assessments to MCM (Register)
- Notice of Project Screening to Regional EA Coordinator (MECP)
 Letter to REAC document that the ASP process has been followed.
- Assessments and related documentation in project file
- Assessments must be available upon request
- Consider posting Assessments on website
- Proceed with Project classified as Schedule A+ (Exempt)

 Based on the archaeological assessment(s), will the proposed project/undertaking have negative impacts (effects) to archaeological resources?

If assessments determine no negative impacts;

- Assessments to MCM (Register)
- Notice of Project Screening to Regional EA Coordinator (MECP)
 Letter to REAC document that the ASP process has been followed.
- Assessments Compose letter that includes required info. Combine with Transition Notice when
- Assessments appropriate.
- Consider posting Assessments on website
- Proceed with Project classified as Schedule A+ (Exempt)

Notice of Project Screening to Regional EA Coordinator (MECP)

 Letter to REAC to document that the ASP process has been followed.

Letter needs to include;

- Proponent name and contact information,
- Project description,
- Schedule/type
- Location of the project (including a map),
- Project commencement date
- A brief statement that the requirements of the ASP have been met and the documentation is available to the ministry to view on request.

In addition to Notice of Project Screening Letter A.1.5.1 - Streamlined Project Initiation Form

- All Schedule B or C projects must be reported
- Projects that follow ASP to become exempt Are designated Schedule B/C – Report Shift to Exempt – Report as Schedule A+
- Other Schedule A+ projects
 Are designated exempt **Do Not Report**

Example Project

Bridge Replacement

Stage 1 and 2 Archaeological Assessment completed.

"The Stage 2 archaeological assessment resulted in no indication of archaeological remains with cultural heritage value or interest within the proposed development area.

Based on the results of this investigation it is recommended that:

1. No further archaeological study is required for the subject property as delineated"

Schedule A+ (Exempt)



Example Project

Bridge Replacement

- Hire Licensed Archaeologist to complete assessments
- Engage Indigenous Communities throughout assessment process
- Submit to Ontario Public Register of Archaeological Reports
- No work until letter from MCM
- Notice of Project Screening to Regional EA Coordinator (MECP)
 - Letter to REAC document that the ASP process has been followed.
- Assessments and related documentation in project file
- Assessments must be available upon request
- Consider posting Assessments on website
- Proceed with Project classified as Schedule A+ (Exempt)

Archaeological Screening Process (ASP)

ASP involves considering the following three questions;

- 1. Does the project area include known or potential archaeological resources?
- Based on the archaeological assessment(s), will the proposed project/undertaking have negative impacts (effects) to archaeological resources?
- 3. Based on the archaeological assessment(s), will any negative impacts (effects) be appropriately mitigated?

- 3. Based on the archaeological assessment(s), will any negative impacts (effects) be appropriately mitigated?
- Hire Licensed Archaeologist to complete assessments
- Engage Indigenous Communities throughout assessment process
- Submit to Ontario Public Register of Archaeological Reports
- No work until letter from MCM

3. Based on the archaeological assessment(s), will any negative impacts (effects) be appropriately mitigated?

If assessments determine impacts can be appropriately mitigated;

- Assessments to MCM (Register)
- Notice of Project Screening to Regional EA Coordinator (MECP)
- Assessments and related documentation in project file
- Assessments must be available upon request
- Consider posting Assessments on website
- Proceed with Project classified as Schedule A+ (Exempt)

If assessments determine **impacts cannot be appropriately mitigated the project is not Exempt** and must follow the MCEA Schedule B/C process.

Example Project

Construct Large Parking Lot >\$12m



MUNICIPA

SSACIA

Example Project

Construct Large Parking Lot >\$12m

Stage 1 Archaeological Assessment of Study Area;

- Identifies portions of Study Area which have been previously disturbed or previously assessed.
- Remainder of Study Area requires Stage 2
 Archaeological Assessment

ESR Commitments

a. Should future work require an expansion of the study area, complete Stage 1 Archaeological Assessment (AA) to confirm presence / absence of archaeological potential.



ESR Commitments

b. Complete Stage 2 AA for impacted lands as per recommendations of the Stage 1 AA.

c. Engage with Indigenous Communities that expressed interested during Stage 1 engagement in the Stage 2 Archaeological Assessments.



ESR Commitments

d. Consult with Indigenous Communities to identify opportunities for participation in field investigations where additional archaeological assessment is required.

e. Findings from subsequent archaeological assessments are to be filed with the MCM to obtain clearance for archaeology.

ESR Commitments

f. Should any archaeological resources be unexpectedly encountered during construction, all activities impacting archaeological resources will cease immediately. MCM will be notified, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the Ontario Heritage Act and the Standards and Guidelines for Consultant Archaeologists.

Example Project

ESR Commitments

g. If human remains are encountered, all activities will cease immediately and the local police or corner as well as the Registrar of Cemeteries at the Ministry of Consumer Services will be contacted. In situations where human remains are associated with archaeological resources, MHSTCI will also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.

Schedule A+ (Exempt)

ASP vs Schedule BC

Proponent may choose to;

Schedule B/C	ASP - Exempt
Circulate Archaeological Assessments to Indigenous	Notice of Project Screening to Indigenous (include Archaeological Assessments) 30 - 60 days
Potential for Section 16 Order	Cannot continue if Indigenous concerns
Prepare project file/ESR	Organize project file
Notice of Completion 30 + 30 days	Acceptance from MCM
Community Input for design details part of EA process	Community Input for design details outside EA process
Other approvals and permits	Other approvals and permits



Other Applications for ASP

Provincial Law

If human remains are encountered, all activities will cease immediately

Should any archaeological resources be unexpectedly encountered during construction, all activities impacting archaeological resources will cease immediately

Mindful of ASP for any project with excavation

Questions?

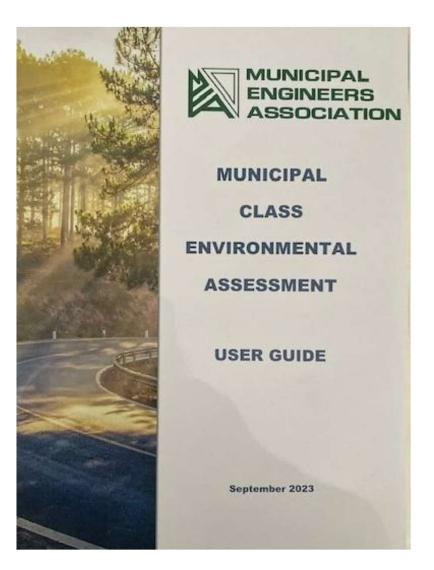
MUNICIPAL ENGINEERS ASSOCIATION



The MEA is pleased to announce it has published a new Municipal Class Environmental Assessment (MCEA) User Guide (September 2023). It provides practitioners with useful information, advice, and interpretation of the MCEA.

You can purchase the new user guide via the QR code below:





https://municipalclassea.ca/access/login.html? redirect=%2Fmanual-purchase.html



MCEA 2023 Appendix 1 – Roads MCEA 2023 Appendix 1 – W/WW MCEA 2023 Appendix 1 – Transit Heritage Bridge Checklist Archeology Screening Process (ASP) MCEA 2023 Part A Intro to MCEA Workshop Collector Road Screening Process MCEA Annual Fall Update May 12 2023 May 15 2023 Oct 25, 2023 May 16 2023 Oct 24, 2023 Oct 25, 2023 Oct 25, 2023 Oct 17-19, 2023 Oct 24, 2023



Questions

www.MunicipalEngineers.on.ca/Resources/Ask-An-Expert

www.municipalclassea.ca