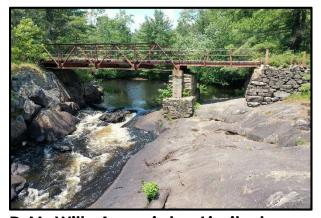


Class EA – Project File

Black River Road, 12.2 km East of County Road 6 (Victoria Falls / Black River)

Victoria Falls (Black River Road) Bridge (Structure #400019) Replacement

D.M. Wills Project Number 9245



**D.M. Wills Associates Limited**Partners in Engineering, Planning and Environmental Services
Peterborough

March 2021

Prepared for: City of Kawartha Lakes



## **Submissions Summary**

Submission No.	Submission Title	Date of Release	Submissions Summary
1	Draft Class EA – Project File	01/11/2021	Issued for Review
2	Class EA Project File	03/02/2021	Issued for Public Review

This report / proposal has been formatted considering the requirements of the Accessibility for Ontarians with Disabilities Act.



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## 1.0 Introduction

D.M. Wills Associates Limited (Wills) has been retained by the City of Kawartha Lakes (City) to complete an Environmental Assessment (EA) and the detailed design for the replacement of the Victoria Falls (Black River Road) Bridge (Structure No. 400019).

This Class EA – Project File covers the consultation work completed to the date of this report and the proposed work for the replacement of Victoria Falls Bridge, which is being planned for the 2021 construction season.

### 1.1 Location

The Victoria Falls Bridge (Structure No. 400019) is located on Black River Road, approximately 12.2 km east of Kawartha County Road 6 in the Township of Dalton, bordering the Township of Digby, and surrounded by the boundaries of Queen Elizabeth II Wildlands Provincial Park. The bridge carries a single-lane east-west traffic over the Black River and is a connecting link between the Townships of Dalton and Digby, which are owned by Longford Reserve Limited. The bridge provides an unofficial secondary access to trails in the Queen Elizabeth II Wildlands Provincial Park. **Figure 1** depicts the location of the Victoria Falls Bridge.



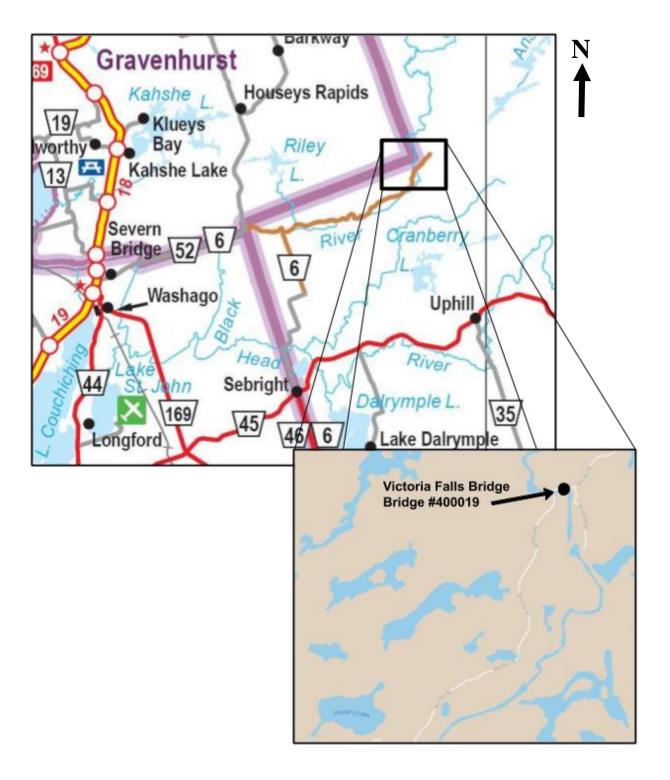


Figure 1: Location Map



### 1.2 Reference Documents

The following documents were available and reviewed during the preparation of this report:

- Ontario Environmental Assessment Act, R.S.O. 1990, c. E. 18.
- Municipal Class Environmental Assessment document, as amended in 2015.
- 2018 OSIM Inspection Report, AUE Structural Inc., dated May 10, 2018.
- Cultural Heritage Evaluation Report Black River Road/Victoria Falls Bridge (Structure ID 400019), Archaeological Services Inc., July 2020.
- Heritage Impact Assessment Black River Road/Victoria Falls Bridge (Structure ID 400019), Archaeological Services Inc., July 2020.
- In-Water Work Timing Window Guidelines, Ontario Ministry of Nature Resources, March 11, 2013.

## 1.3 The Municipal Class Environmental Assessment

Environmental Assessments within the Province of Ontario are governed by R.S.O. 1990, c. E. 18, namely the Environmental Assessment Act (the Act).

The MCEA was developed by the Municipal Engineers Association (MEA) in order to provide municipalities with a streamlined method for determining the minimum requirements they need to meet in order for their projects to meet the governing requirements of the Act

Appendix 1 of the MCEA document outlines sample project descriptions against which a given project can be compared to determine the appropriate EA schedule. **Table 1** outlines the sample project descriptions that Victoria Falls Bridge satisfies:

Table 1 - MCEA Sample Project Descriptions Applicable to Victoria Falls Bridge

Project Description No.	Description	Applicability
24	Reconstruction of a water crossing where the reconstructed facility will be for the same purpose, use, capacity and at the same location. (Capacity refers to either hydraulic or road capacity but does not include alterations to include or remove facilities for cycling, pedestrians or to support utilities.) This includes ferry docks.	Victoria Falls Bridge project includes the potential for rehabilitation/reconstruction of the existing structure with no change to its current purpose, use, or capacity.



Project Description No.	Description	Applicability
30	Reconstruction or alteration of a structure or the grading adjacent to it when the structure is over 40 years old, which after appropriate evaluation is found to have cultural heritage value and cost of the project is less than \$2.4M.	Victoria Falls Bridge is over 40 years old and may have cultural heritage value. Project cost for replacement not anticipated to cost more than \$2.4M.
31	Reconstruction or alteration of a structure or the grading adjacent to it when the structure is over 40 years old which after appropriate evaluation is found not to have cultural heritage value.	Victoria Falls Bridge is over 40 years old and may have no cultural heritage value.

In addition to the MCEA, a Cultural Heritage and Archaeological Resources Assessment Checklist was developed by the MEA in 2013 (rev. 2014) to assist proponents in further identifying their obligations under the Act with respect to bridges that are more than 40 years old. Having been constructed in 1924, Victoria Falls Bridge meets this criteria, and the Checklist was therefore used to confirm Schedule selection as well as identify requirements for Cultural Heritage and Archaeological Assessment. It was determined through the Checklist that a Cultural Heritage Evaluation Report (with provisional Heritage Impact Assessment) and a Stage 1 Archaeological Assessment are required for the project. The completed Cultural, Heritage, and Archaeological Resources Assessment Checklist can be found in **Appendix B**.

A Cultural Heritage Evaluation Report (CHER) for the Victoria Falls Bridge was completed by Archaeological Services Incorporated (ASI) in July 2020 and a draft report was submitted to the City. No comments have been received from the City to date; the draft version is enclosed in **Appendix B**. The CHER concluded that the Victoria Falls Bridge has potential cultural heritage value / interest.

As the Victoria Falls Bridge has cultural heritage value, the replacement of the bridge has been assessed as a Schedule 'B'.

Under the MCEA, Schedule 'B' projects are approved subject to screening and require a Project File to be published at the completion of the study. This document shall be considered to be the Class EA Project File for the Victoria Falls Bridge project at the completion of the EA.

After completing the Schedule 'B' EA, a Notice of Completion must be published to review agencies and the public. A 30 day comment period commences upon



publishing of the Notice of Completion. Within the comment period, review agencies and members of the public who do not believe the MCEA process has been followed adequately may submit a Part II Order to the Minister of the Environment, Conservation and Parks requesting a review of the MCEA process completed by the proponent. The appropriate mailing addresses for the submission of Part II Oder requests will be included in the Notice of Study Completion.

### 1.4 Consultation Plan

Consultation in the Class EA process is conducted in several forms in an effort to gain feedback on preliminary proposed solution alternatives. The Public, Agency, and First Nations form the parent classifications for stakeholders. Solicitation of feedback can be conducted through different approaches depending on the requirements of the project.

For schedule 'B' undertakings, the MCEA defines two points of mandatory contact as milestones throughout a Class EA process. The first is two (2) published Notices of Study Commencement, notifying stakeholders that the Class EA has been initiated. The second is two (2) published Notices of Study Completion, notifying stakeholders that the Class EA has been completed and is entering a minimum 30-day comment period, during which time final questions and concerns related to the Class EA can be raised and addressed.

Additional points of contact for schedule 'B' projects include one or more Public Information Centres (PICs), where the public and stakeholders are invited to review the Class EA status and provide feedback on preliminary/preferred alternatives, as applicable.

As Black River Road and Victoria Falls Bridge is surrounded by the boundaries of Queen Elizabeth II Wildlands Provincial, and the bridge provides an unofficial secondary access to some trails within the park, Ontario Parks was included in the Project Start-Up meeting to confirm their interest. During the start-up meeting Ontario Parks advised that they no interest in the bridge and does not approve of the secondary entrance.

Consultation with other applicable stakeholders has not been initiated, and the MECP streamlined notification form has not been submitted to the MECP at the time of preparing this report. A draft project contact list, draft combined notice of study commencement and notice of PIC, and a draft notice of request to consult for the Williams Treaties First Nations has been prepared. These draft documents have not been submitted to the City for review at the time of preparing this report. The draft documents can be found in **Appendix C**.

As the bridge is a connecting link between two (2) townships owned by Longford Reserve Limited, namely the Townships of Dalton and Digby, we are planning for Longford Reserve to be actively involved in the design and implementation of the replacement of Victoria Falls Bridge. Preliminary consultation with Longford Reserve has been initiated. Longford Reserve has advised that they have plans to have Hydro One



provide services to the east of the bridge, in the Township of Digby. However, the current bridge load posting is restricting Hydro One from servicing this area as the equipment required to install and maintain the services exceeds the bridge load posting and therefore, the equipment is not able to cross the bridge.

The City is planning to submit the MECP streamlined notification form and the notices to applicable stakeholders, as well as holding one (1) virtual PIC in early 2021.

## 2.0 Existing Conditions

## 2.1 Existing Structure

The Victoria Falls (Black River Road) Bridge, constructed in 1924, is a two-span ( $\pm 15.38$  m,  $\pm 6.42$  m) half-through steel truss with a timber deck and steel plate wearing surface. The structure is supported directly by bedrock at the west end, a stacked stone wall abutment with a concrete top at the east end, and a reinforced concrete offset pier. The bridge cross-section provides single lane passage over the Black River with an overall structure width of  $\pm 4.0$ m, and a roadway width of  $\pm 3.0$ m. It is currently load posted at three (3) tonnes. There has been no known rehabilitation work completed on the structure.

The most recent OSIM structure inspection report for the bridge (2017) indicated that the superstructure is generally in good to fair condition, and the substructure is generally in good condition. The OSIM structure inspection report noted that the girders, floor beams, and truss members are experiencing extensive loss of coating and light corrosion, and the south abutment wall concrete is deteriorated and exhibits spalling at the bearing seat. The barriers over the structure were also noted to be substandard, requiring replacement. Repairs were recommended due to deterioration of the steel coating and abutment walls.

Site photographs are enclosed in **Appendix A**.

The Victoria Falls Bridge has been in service for close to 100 years which is well past its intended design life, and is currently load posted to a maximum load of three (3) tonnes. It is expected that the bridge will be unable to fulfill its functional requirements in the near future. Since the bridge is a connecting link between the Townships of Dalton and Digby and is currently restricting the ability for Hydro One to provide services east of the bridge, intervention in the form of replacement is needed.

### 2.2 Natural Environment

A desktop-level investigation using Fish-ON-Line was completed for Black River to determine fish species present in the river. Several cold water fish species have been documented within the watercourse and includes brook trout, muskellunge, pumpkinseed, rock bass, smallmouth bass, and yellow perch. Correspondence with the MNRF has confirmed the permitted in-water work timing window is from July 16 to September 30.



A desktop-level investigation using INaturalist was completed for the area surrounding the Victoria Falls Bridge to determine if there were species at risk (SAR) noted in the area. SAR has been noted in the area and include bald eagle, monarch, bobolink, yellow banded bumble bee, eastern whip-poor-will, northern bush katydid, eastern milksnake, eastern ribbon snake and snapping turtle. The MECP has been contacted to confirm the list of SAR and to determine the appropriate mitigation measures for the SAR noted, however no response has been received at the time of preparing this report.

A desktop-level investigation using the MNRF Natural Heritage Areas Map was completed to determine natural heritage information such as locations of wetlands, areas of natural and scientific interest (ANSI) and locations of significant wildlife habitat (SWH) etc. An unevaluated wetland is located just north of the bridge location. There are no SWH and ANSI identified in the area. The Victoria Falls Bridge is located within a Natural Heritage System.

Correspondence with the MNRF and MECP is included in **Appendix C**.

## 2.3 Archeological Assessment

A Stage 1 Archeological Assessment (AA) has not been completed at the time of preparing this report. The Stage 1 AA is scheduled to occur in the Spring of 2021 to determine whether there is evidence of archaeological potential and if a Stage 2 AA is required.

## 2.4 Heritage Impact Assessment

A Heritage Impact Assessment (HIA) was completed by Archaeology Services Incorporated (ASI) in July 2020 and a draft report has been submitted to the City for review. No comments have been received to date; the draft version is enclosed in **Appendix B**. The HIA report outlines the following mitigation measures for replacing the structure:

- Professional documentation of the bridge and surrounding setting prior to any disturbance;
- Completion of a heritage documentation report by a qualified heritage professional once COVID-19 related library and archive closures are lifted and the additional research is conducted in the CHER;
- Design of the replacement structure in a manner that is sympathetic to the cultural heritage attributed to the bridge, such as giving consideration to retaining the substructure or using natural and local materials into the reconstruction, and a truss and barrier system that minimizes visual intrusion; and
- A commemoration strategy, such as a plaque, if the substructure requires replacement.



To address the mitigation measures outlined in the HIA, it is anticipated that professional documentation of the bridge and surrounding area as well as a commemorative plaque will be required as part of the replacement of Victoria Falls Bridge.

### 2.5 Traffic

Black River Road extends from Kawartha Lakes County Road 6, west of the bridge to 2km east of the bridge, providing a connecting link between the Townships of Dalton and Digby, owned by Longford Reserve. Existing traffic volumes on Black River Road are very low.

### 2.6 Utilities

A utility locate request was completed and concluded that no utilities are located on or around the structure.

## 3.0 Proposed Design and Approvals

## 3.1 Proposed Design

The proposed structure replacement work is detailed below:

- Remove existing two-span, single-lane bridge superstructure;
- Remove stacked stone wall abutment with a concrete top at the east end;
- Remove the top portion of the offset pier and install a concrete cap;
- Install a new 24.4 m long single-span, single-lane Bailey Style Modular Bridge, including code compliant barriers;
- Install new concrete abutments and wingwalls at each end of the structure;
- Regrade approaches; and
- Install new steel beam guide rail on approaches with appropriate end treatments.

General arrangement and removals drawings showing the proposed work are included in **Appendix E**.

### 3.1.1.1 Construction Staging

A full road closure is recommended to facilitate the replacement of the Victoria Falls Bridge because existing traffic volumes are very low. As the bridge is a connecting link between the Township of Digby and Dalton, coordination with Longford Reserve will be critical for implementing the full road closure as this connection will be impacted. Impacts to the Queen Elizabeth II Wildlands Provincial Park is considered minimal as Black River Road is an unofficial secondary entrance to the Park so the Park will remain accessible from the official main entrance at the north. However, it is recommended

Victoria Falls (Black River Road) Bridge Replacement Class EA – Project File City of Kawartha Lakes



that the closure take place during the Park's off-season to minimize any impacts to any members of the public who would typically use this secondary entrance to access the Park.

#### 3.1.1.2 Cost Estimate

The estimated cost to replace the Victoria Falls Bridge is approximately \$654,366.00 including a 20% contingency allowance.

A detailed breakdown of the preliminary cost estimate can be found in **Appendix D**.

### 3.2 Environmental Considerations

No in-water work is anticipated as part of this project, however as the detailed design progresses, if it is determined that in-water work is required, the work will be limited to the immediate area in the vicinity of the existing structure footprint and take place within the permitted in-water work timing window.

Construction works should to take place within the allowable work timing windows established for SAR or appropriate mitigation measures shall be installed (i.e. wildlife exclusionary fencing), which are still to be confirmed by the MECP.

## 3.3 Approvals

Correspondence with the MNRF has confirmed that no permit is required under the Public Lands Act.

As Victoria Falls Bridge and Black River Road are excluded from the boundaries of Queen Elizabeth II Wildlands Provincial Park, no work permit is required from the MECP under the Provincial Parks and Conservation Reserves Act.

An application is to be submitted to Navigation Protection Program (Transport Canada) to confirm requirements for compliance with the Canadian Navigable Waters Act.

Based on the proposed replacement design, no other approvals or permits are anticipated for the replacement of Victoria Falls Bridge.

Prepared By:	Approved By:
Kyle Riddell, P.Eng.	David Bonsall, P.Eng.
Structural Engineer	Manager, Structural Engineering

# Appendix A

Site Photographs







Photo 1 – Site Plan

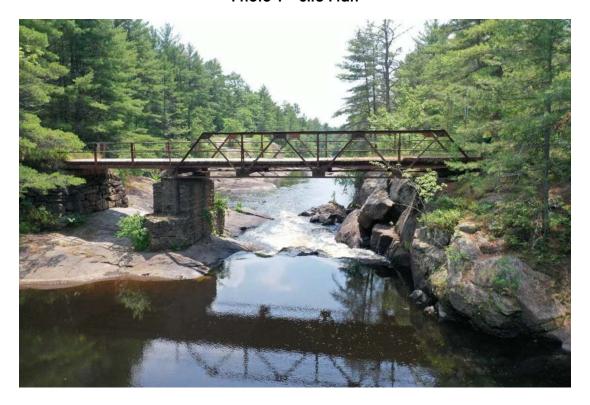


Photo 2 – North Elevation



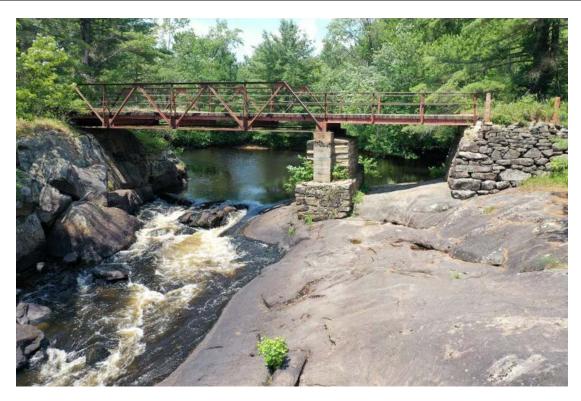


Photo 3 – South Elevation



Photo 4 – Bridge Deck, Looking East



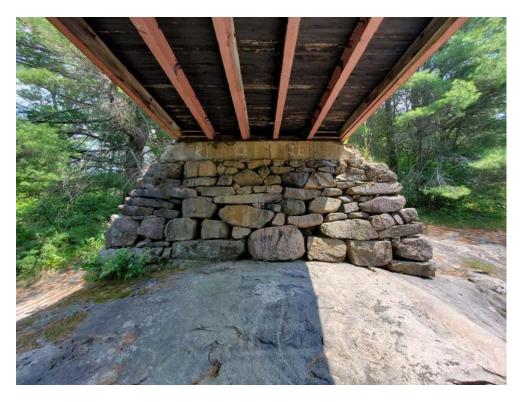


Photo 5 – East Stacked Stone Wall Abutment with Concrete Top



Photo 6 – Offset Pier





Photo 7 – West End Bearing on Bedrock

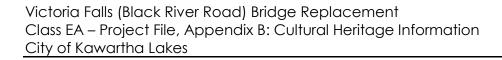


Photo 8 – Broken Wooden Approach Rail, Northeast Quadrant

## **Appendix B**

**Cultural Heritage Information** 







Cultural Heritage Information documents are available in separate files.

## **Appendix C**

**Consultation Documents and Correspondence** 



## City of Kawartha Lakes - Victoria Falls (Black River Road) Bridge - Consultation Contact List

Group	First Name	Last Name	Role	Company / Agency	Address	Address City Postal Code Phone (#)		Email		
Municipal	Ron	Taylor	Chief Administrative Officer	CKL	26 Francis Street, P.O. Box 9000	Lindsay	K9V 5R8	705-324-9411 ext. 1264	Email clerk	
Municipal	Cathie	Ritchie	City Clerk	CKL	26 Francis Street, P.O. Box 9000	Lindsay	K9V 5R8	705-324-9411 ext. 1295	clerks@kawarthalakes.ca	
Municipal	Juan	Rojas	Director of Engineering and Corporate Assets	CKL	26 Francis Street, P.O. Box 9000	Lindsay	K9V 5R8	705-324-9411 ext. 1151	irojas@kawarthalakes.ca	
Municipal	Bryan	Robinson	Director of Public Works	CKL	26 Francis Street, P.O. Box 9000	Lindsay	K9V 5R8	705-324-9411 ext. 1122	brobinson@kawarthalakes.ca	
Municipal	Martin	Sadowski	Senior Engineering Technician	CKL	26 Francis Street, P.O. Box 9000	Lindsay	K9V 5R8	705-324-9411 ext. 2342	msadowski@kawarthalakes.ca	
Municipal / Private	Brian	Westlake	South side of reserve	Longford Reserve Ltd.	2200 Miriam Drive	Bracebridge	P1L 1X1	705-645-2711	westlakes@sympatico.ca	
Municipal / Private	Ken	Bahen	South side of reserve	Longford Reserve Ltd.	2200 Miriam Drive	Bracebridge	P1L 1X1	705-645-2711	ken.bahen@sympatico.ca	
Municipal / Private	Jen	Longford	North side of reserve	Longford Reserve Ltd.	2200 Miriam Drive	Bracebridge	P1L 1X1	705-645-2711	jen.longford@icloud.com	
Provincial	Jon	Orpana	Environmental Assessment Coordiantor	MECP	1259 Gardiners Road, P.O. Box 22032	Kingston	K7M 8S5	613-548-6918	jon.orpana@ontario.ca	
Provincial	Trevor	Harris	Acting District Planner (Lands & Waters Technical Specialists)	Ministry of Natural Resources & Forestry	106 Monck Street	Brancroft	K0L 1C0	613-202-1283	trevor.harris@ontario.ca	
	Т	Τ.	I		-	1		T	T	
Parliament	Laurie	Scott	MPP	Haliburton-Kawartha Lakes-Brock	14 Lindsay Street N	Lindsay		705-324-6654	laurie.scotco@pc.ola.org	
Parliament	Jamie	Schmale	MP	Haliburton-Kawartha Lakes-Brock	68 McLaughlin Road	Lindsay	K9V 6B5	705-324-2400	jamie.schmale@parl.gc.ca	
Peterborough County-City Paramedics	Randy	Mellow	Paramedic Chief	CKL / Peterborough County-City	310 Armour Road	Peterborough	K9H 1Y6	705-743-5263 ext. 4111	rmellow@ptbocounty.ca	
CKL Paramedic Services HQ	Cindy	Minaker	Administrative Assistant	CKL	4 Victoria Avenue N	Lindsay	K9V 0K6	705-924-9411 ext. 3314	cminaker@kawarthalakes.ca	
CKL Fire Services	Mark	Pankhurst	Fire Chief	CKL	9 Cambridge Street North	Lindsay	K9V 4C4	705-324-5731 ext. 520	mpankhurst@kawarthalakes.ca	
CKL Police Services	Mark	Mitchell	Chief of Police		6 Victoria Avenue N	Lindsay	K9V 4E5	705-324-5252	info@klps.ca	
Ontario Provicinal Police - Kawartha Detachment		•	Police Administration	OPP	3028 Highway 35	Lindsay	K9V 4R1	705-324-6741		
First Nation	Karry	Sandy-Mackenzie	Communications / Claims Coordinator	Williams Treaties First Nation	8 Creskwick Court	Barrie	L4M 2J7		k.a.sandy-mackenzie@rogers.com inquiries@williamstreatiesfirstnations.ca	
First Nation	Emily	Whetung	Chief	Curve Lake First Nation	22 Winookeeda Road	Curve Lake		705-657-8045	emilyw@curvelake.ca	
First Nation	Julie	Kapyrka	Lands Resource Consultation Liaison	Curve Lake First Nation	22 Winookeeda Road	Curve Lake		705-657-8045	juliek@curvelake.ca	
First Nation	Kaitlin	Hill	Lands Resource Consultation Liaison	Curve Lake First Nation	22 Winookeeda Road	Curve Lake		705-657-8045	kaitlinh@curvelake.ca	
First Nation	Dave	Mowat	Chief	Alderville First Nation	11696 Second Line Rd., P.O. Box 46	Roseneath		905-352-2011	dmorat@alderville.ca	
First Nation	Dave	Simpson	Consultation Coordinator	Alderville First Nation	11696 Second Line Rd., P.O. Box 46	Roseneath		905-352-2011	consultation@alderville.ca	
First Nation	Laurie	Carr	Chief	Hiawartha First Nation	123 Paudash Street	Keene	K0L 2G0	705-295-4421	chiefcarr@hiawathafn.ca	
First Nation	Tom	Cowie	Community Consultation Worker	Hiawartha First Nation	197 Sopers Lane	Keene	K0L 2G0	705-295-7773 ext. 73	tcowie@hiawarthafn.ca	
First Nation	Sean	Davison	Community Consultation Worker	Hiawartha First Nation	197 Sopers Lane	Keene	K0L 2G0	705-295-7773 ext. 71	sdavison@hiwarthafn.ca	
First Nation	Kelly	LaRocca	Chief	Mississauga of Scugog Island First Nation	22521 Island Road	Port Perry	L9L 1B6	905-441-4836	klarocca@scugogfirstnation.com	
	Dave	Mowat	Community Consultation Specialist	Mississauga of Scugog Island First Nation	22521 Island Road	Port Perry		905-985-3337 ext. 229	dmowat@scugogfirstnation.com	

What to do:

Step 1: Look for the type of EA project in column B that applies to you.

Step 2: Complete columns C to J for that project.

Step 3: Send this form in Excel format to the MECP regional office email address where the project is located.

MECP regional office email addresses are listed at 
www.ortatio.ca/page/preparing-enricommental-assessments

www.ontario.ca/page/preparing-environmental-assessments									
	Class EA/Streamlined EA	Proponent Name	Proponent Contact	Project Name	Project Schedule	Project Type	Project Location	MOECC Region	Project Initiation Date
1	CO - Remedial flood and erosion control projects								
2	GO Transit - Class EA								
3	Hydro One - Minor transmission facilities								
4	MEA - Class EA for municipal infrastructure projects	City of Kawartha Lakes & D.M. Wills Associates Limited	City: Martin Sadowski (msadowski@kawarthalakes.ca) & Kyle Riddell, P.Eng. (kriddell@dmwills.com)	Victoria Falls (Black River Road Bridge Replacement	Schedule B	Municipal road projects	Kawartha Lakes, City of	Eastern	12/1/202
5	Ministry of Infrastructure - Public work								
6	MNDM - Activities of the Ministry of Northern Development and Mines under the Mining Act								
7	MNRF - Provincial parks and conservation reserves								1
8	MNRF - Resource stewardship and facility development projects								
9	MTO - Provincial transportation facilities								
10	O. Reg. 101/07 - Waste management projects								
11	O. Reg. 116/01 - Electricity projects								
12	OWA - Waternower projects								

Enter the proponent's name.

Enter the name and email address
of the person who the MECP
should contact about your project.

This should be the same contact
person who is listed on the notice.

Select the name of the municipality or unorganized/unsurveyed area where your project is located from the drop-down menu.

Select the MECP region from the drop-treason from the drop-stream lined EA process down meru. Read was initiated (e.g. notice of the MECP regions' commencement). This date worksheet to firm day be when the project on notice was first published. where your project is located.

## Kyle Riddell

From: Challice, Adam (MNRF) <Adam.Challice@ontario.ca>

Sent: Wednesday, December 23, 2020 1:19 PM

To: Kyle Riddell

Subject: RE: City of Kawartha Lakes - Replacement of Victoria Falls (Black River Road) Bridge -

Information Request

Hey Kyle – yes sorry my bad – start date is July 16<sup>th</sup> as the dfo timing restriction recommendation goes till July 15<sup>th</sup>.

From: Kyle Riddell < KRiddell@dmwills.com>

Sent: December 23, 2020 1:16 PM

To: Challice, Adam (MNRF) < Adam. Challice@ontario.ca>

Subject: RE: City of Kawartha Lakes - Replacement of Victoria Falls (Black River Road) Bridge - Information Request

### CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Thanks Adam.

I just want to confirm the start date - should that be July 16? That's the start date I've typically seen.

Thanks,

Kyle Riddell, P.Eng.

----- Original message -----

From: "Challice, Adam (MNRF)" < <a href="mailto:Adam.Challice@ontario.ca">Adam.Challice@ontario.ca</a>>

Date: 2020-12-23 1:07 p.m. (GMT-05:00)

To: Kyle Riddell < KRiddell@dmwills.com >, "Harris, Trevor (MNRF)" < trevor.harris@ontario.ca >

Subject: RE: City of Kawartha Lakes - Replacement of Victoria Falls (Black River Road) Bridge - Information Request

### Hi Kyle,

Apologies I didn't respond back sooner. The in-water works timing window is July 15<sup>th</sup> – September 30<sup>th</sup>. This section of the Black river is a mixed bag of cold, cool and warmwater fish species. Let me know if any further questions.

Regards,

Adam Challice
Management Biologist
Ministry of Natural Resources and Forestry
Bancroft District – Minden Area
adam.challice@ontario.ca

From: Kyle Riddell < KRiddell@dmwills.com>

Sent: December 23, 2020 11:24 AM

To: Harris, Trevor (MNRF) < <a href="mailto:trevor.harris@ontario.ca">trevor.harris@ontario.ca</a>; Challice, Adam (MNRF) < <a href="mailto:Adam.Challice@ontario.ca">Adam.Challice@ontario.ca</a>;

Subject: RE: City of Kawartha Lakes - Replacement of Victoria Falls (Black River Road) Bridge - Information Request

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Hello Adam,

I just wanted to follow up on the email below to see if you can provide the in-water timing work windows please.

Thank you,



**Kyle Riddell, P.Eng.** · Structural Engineer

### D.M. Wills Associates Limited

150 Jameson Drive · Peterborough, ON · K9J 0B9 Tel: (705) 742-2297 ext. 313 · Fax: (705) 748-9944

Cell: (705) 872-7050

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From: Harris, Trevor (MNRF) [mailto:trevor.harris@ontario.ca]

Sent: Tuesday, December 1, 2020 3:01 PM To: Kyle Riddell <a href="mailto:KRiddell@dmwills.com">KRIddell@dmwills.com</a>

Cc: Aleksa Mitrovic <amitrovic@dmwills.com>; Challice, Adam (MNRF) <Adam.Challice@ontario.ca>

Subject: RE: City of Kawartha Lakes - Replacement of Victoria Falls (Black River Road) Bridge - Information Request

Hello Kyle,

It appears that this is municipal road and the road and bridge have been excluded from the provincial park boundary. However you will need to confirm that with Ontario Parks and the municipality. Ontario Parks, which is now under the Ministry of Environment Conservation and Parks (MECP) does manage provincial parks, and is responsible for the Provincial Parks and Conservation Reserves Act.

The municipality does not require authorization from MNRF under the Public lands Act to repair or replace a municipal bridge on a municipal road.

Also I've copied Adam Challice, Management Biologist, who will be able to provide in-water timing windows information for this location.

Regards,

Trevor Harris Lands and Waters Technical Specialist Ministry of Natural Resources and Forestry Bancroft District

Email: trevor.harris@ontario.ca

From: Kyle Riddell < KRiddell@dmwills.com >

Sent: December 1, 2020 1:04 PM

**To:** Harris, Trevor (MNRF) < <a href="mailto:trevor.harris@ontario.ca">trevor.harris@ontario.ca</a>>

Cc: Aleksa Mitrovic <a href="mitrovic@dmwills.com">amitrovic@dmwills.com</a>>

Subject: City of Kawartha Lakes - Replacement of Victoria Falls (Black River Road) Bridge - Information Request

### **CAUTION** -- **EXTERNAL** E-MAIL - Do not click links or open attachments unless you recognize the sender.

Hello Trevor,

D.M. Wills Associates has been contracted by the City of Kawartha Lakes to complete an environmental assessment for the detailed design for the replacement of Victoria Falls (Black River Road) Bridge, located within the geographical boundaries of Queen Elizabeth II Wildland Provincial Park.

The bridge is located at the following coordinates:

• UTM: 17T 653274m E, 4966267m N

Lat, Long: 44.83335, -79.06089

We have completed preliminary background research using the resources on NHIC and Fish ON-Line / ARA:

- 1. The NHIC indicated that there are two unevaluated wetlands just north of the bridge location. As well as various other locations throughout the Provincial Park.
- 2. Fish ON-Line / ARA offered the following information:

Location	Waterbody Name	Waterbody GPS	Watercourse Classification (i.e. warmwater, coldwater)	Habitat Information (Include details for fish passage barriers, known spawning habitats, groundwater upwellings, migratory corridors, etc.)	Historical Data (Include details on the historical fish species present, and ifthe waterbody is considered to support any vulnerable, threatened, or endangered aquatic species.)	MNRF Fisheries Management Objectives (If applicable, include details.)
Victoria Falls / Black River Road Bridge	Black River	17T 653390 m E, 4966294 m N	Cold	Unknown	Fish ON-Line: Brook Trout, Muskellunge, Pumpkinseed, Rock Bass, Smallmouth bass, Yellow Perch  ARA Summary Species: Brook Stickleback, Brook Trout, Creek Chub,	None

We are asking for the information above to be confirmed and are requesting additional Natural Heritage Information / Fisheries Information that might be beneficial to protecting the natural features adjacent to the proposed construction works (i.e. turtle nesting season, breeding bird season, OWES reports, habitat mapping of the rivers/creeks etc.).

Furthermore, as the work is within a Provincial Park I understand that we don't need a work permit under the Public Lands Act, as stated in Provincial Parks and Conservation Reserves Act 2006, c. 12, s. 56; however please confirm. I am also looking to confirm if a permit is required under the Provincial Parks and Conservation Reserves Act; NHIC does not show this park as a Conservation Reserve, and any forms I see related to this are directed to cottagers so I am not positive that we require one (I am also not positive if this Act is enforced by the MNRF or if it is enforced directly by Ontario Parks; please also confirm). Lastly, I would like to confirm if the current MNRF mapping / records show a road allowance over Black River, and if Ontario Parks has any ownership of the bridge.

Note, I will be reaching out to the Park's superintendent to confirm any requirements they may have, as well as coordinating timing of works with them.

I believe you are the correct person to contact at the MNRF for this project, but if not, could you kindly direct me to the correct contact.

Thank you very much,



Kyle Riddell, P.Eng. · Structural Engineer

### D.M. Wills Associates Limited

150 Jameson Drive · Peterborough, ON · K9J 0B9 Tel: (705) 742-2297 ext. 313 · Fax: (705) 748-9944

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## **Kyle Riddell**

From: Kyle Riddell

Sent: Tuesday, December 1, 2020 12:01 PM

**To:** 'SAROntario@ontario.ca'

**Cc:** Aleksa Mitrovic

**Subject:** City of Kawartha Lakes - Victoria Falls (Black River Road) Bridge - SAR Information

Request

#### Hello:

My name is Kyle Riddell from D.M. Wills Associates Limited in Peterborough. We have been contracted by the City of Kawartha Lakes to complete an environmental assessment for the detailed design for the replacement of Victoria Falls (Black River Road) Bridge, located within the geographical boundaries of Queen Elizabeth II Wildland Provincial Park.

The bridge is located at the following coordinates:

UTM: 17T 653274m E, 4966267m N

Lat, Long: 44.83335, -79.06089

Preliminary SAR screening has been completed for the site and is summarized below:

- Bald Eagle (Special Concern)
- Monarch (Special Concern)
- Bobolink (Threatened)
- Yellow Banded Bumble Bee (Special Concern)
- Eastern Whip-Poor-Will (Threatened)
- Northern Bush Katydid (Threatened)
- Eastern Milksnake (Threatened)
- Eastern Ribbon Snake (Threatened)
- Snapping Turtle (Special Concern)

We are asking for the SAR information above to be confirmed and added to when required.

If you have any questions or require further information, please do not hesitate to contact me.

Thank you,



**Kyle Riddell, P.Eng.** · Structural Engineer

#### D.M. Wills Associates Limited

150 Jameson Drive · Peterborough, ON · K9J 0B9 Tel: (705) 742-2297 ext. 313 · Fax: (705) 748-9944

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# **Appendix D**

**Engineer's Cost Estimate** 





## Victoria Falls (Black River Road) Bridge Replacement Engineer's Cost Estimate



\$654,366.00

Date: Jan. 6, 2021

Item	Item	Item	Unit	Quantity	Estimators	Extension
#	Code	Description		Unit Price		
A1	SP	Mobilization and Demobilization	LS		\$45,000.00	\$45,000.00
A2	SP	Environmental / Watercourse Protection	LS		\$5,000.00	\$5,000.00
B1	MUNI.201	Close Cut Cleaing	M2	19:	\$15.00	\$2,925.00
B2	MUNI.201	Grubbing	M2	19:	\$10.00	\$1,950.00
В3	MUNI.201	Removal of Piled Boulders	M3	30	\$300.00	\$9,000.00
B4	MUNI.314	Granular A	T	300	\$35.00	\$10,500.00
B5	MUNI.510, SP	Removal of Bridge Structure	LS		\$42,000.00	\$42,000.00
B6	MUNI.703	Small Signs, Removal	EACH		2 \$200.00	\$400.00
В7	MUNI.721	Single Rail Steel Beam Guide Rail	M	32	2 \$180.00	\$5,760.00
B8	MUNI.732	Steel Beam Energy Attenuating Terminal System	EACH	4	\$5,000.00	\$20,000.00
B9	MUNI.802	Topsoil, Imported	M3	(	\$125.00	\$750.00
B10	MUNI.804	Seed and Matrix	M2	120	\$5.00	\$600.00
B11	MUNI.902	Earth Excavation for Structure	M3	79	\$30.00	\$2,370.00
B12	MUNI.902	Rock Excavation for Structure	M3	20	\$200.00	\$4,000.00
B13	MUNI.904	Concrete in Substructure	LS/M3	41.0	\$3,050.00	\$125,050.00
B14	SP	Permanent Modular Bridge	LS	1.0	\$270,000.00	\$270,000.00
					Sub-Total	\$545,305.00
					Contingency (20%)	\$109,061.00

TOTAL ESTIMATED PROJECT COST

## **Appendix E**

Drawings



