

**PROVINCIAL PUBLIC WORK CLASS ENVIRONMENTAL ASSESSMENT PROCESS FOR
THE MINISTRY OF INFRASTRUCTURE**

**CONSULTATION AND DOCUMENTATION REPORT
(C&D Report)**

This report is completed and signed by Ministry of Infrastructure (MOI), Infrastructure Ontario (IO) or other Agency under MOI (MOI/IO/Agency) staff or its agents for all Category "B" and Category "C" undertakings. This is an electronic form available from the MOI/IO/Agency. The form is designed so that any field can be enlarged to incorporate all required information. The form may be used in either electronic or hard copy form. All questions must be addressed, as appropriate.

Project Information

MOI/IO/Agency staff or service provider's name: Shaun Moffatt, Sr. Environmental Scientist – KGS Group		Phone: (204) 896-1209
Project number and name: KGS Group Project No.22-1316-001 – FWHP Flood Mitigation and Road Improvements		
PIMS Installation number (N#): Not Applicable (N/A)	PIMS Building (B#) or Land (P#) number(s): N/A	
Brief description of undertaking (see Class EA list of undertakings and/or Appendix 1): Landscaping – physical alteration of existing grounds to protect against nuisance (1:5-year) flooding from Kaministiquia River including raising River Road (east side of park) between 0 and 0.5 m with an average raise of 0.3 m and the west trail between 0 and 0.5 m with an average raise of 0.2 m, as well as installation of gates on existing culverts (KGS Group, 2023a).		
Review of alternatives to the undertaking (optional): N/A		

NOTE: All following sections must be completed if appropriate (e.g. If questions/sections are not applicable, N/A (Not Applicable) should be entered).

PART I – PROJECT AND SITE DESCRIPTION

1. Identify Undertaking(s)

Property Management and Development	Realty Transactions and Approvals
<input type="checkbox"/> Building Additions <input type="checkbox"/> Building Alteration and Restor'n (Int & Ext) <input type="checkbox"/> Building Maintenance or Repair (Int & Ext) <input type="checkbox"/> Co-development Agreements <input type="checkbox"/> Contaminant Search <input type="checkbox"/> Construction of New Facility <input type="checkbox"/> Decommissioning <input type="checkbox"/> Demolition <input type="checkbox"/> Design Services <input type="checkbox"/> Feasibility Studies <input type="checkbox"/> Grounds Maintenance <input checked="" type="checkbox"/> Landscaping <input type="checkbox"/> Reconstruction <input type="checkbox"/> Relocation – Heritage Only <input type="checkbox"/> Market & Realty Services <input type="checkbox"/> Building Maintenance (Interior & Exterior) <input type="checkbox"/> Other (describe):	<input type="checkbox"/> Acquisition <input type="checkbox"/> Disposition <input type="checkbox"/> Disposition w/ESA, to Conservation Body <input type="checkbox"/> Disposition w/ESA, to Non-Conservation Body <input type="checkbox"/> Easements <input type="checkbox"/> Expropriations <input type="checkbox"/> Lease Purchase <input type="checkbox"/> Leasing, or Licensing From, No Change in Use <input type="checkbox"/> Letting, or Licensing To, No Change in Use <input type="checkbox"/> Leasing, or Licensing From, w/Change in Use <input type="checkbox"/> Letting, or Licensing To, w/Change in Use <input type="checkbox"/> Planning Approvals (Land Development) <input type="checkbox"/> Sale of Density or Air Rights <input type="checkbox"/> Severance <input type="checkbox"/> Voltage Rights (Power Poles & Guy Wires) <input type="checkbox"/> Other (describe):

2 Client Ministry, Agency, Board or Commission: Ministry of Tourism, Culture, and Sport (MTCS)
3. Site Tenant: Fort William Historic Park (FWHP)
4. Client's Intended Land Use for Site: Continued use as a Provincial tourist attraction
5. Site Description and Features (Attach Site Plan if available): FWHP was opened in 1973 and is a reconstruction of the North West Company's trading post consisting of 52 structures, furnishings and landscapes to reflect the original CA 1815 site. The developed portion of the site is situated on the Pointe de Meuron peninsula, located on the north bank of the Kaministiquia River in Thunder Bay, Ontario. The information presented in this report pertains to the entire FWHP property as shown in Figure 01 unless otherwise noted. The construction area for the proposed project, as shown in Figure 01, is located within the floodplain area of the property which contains approximately 80% of FWHP's infrastructure.
Legal Address (if available): CON 1 N/R PT LT 19 INCL PT RD CLSD B/L RP55R7448 PT1
Municipal Address: 1350 King Road, Thunder Bay Ontario
Site Area: Total area within the FWHP property limits (north side, south side and island) is approximately 110 ha, while approximately 12.2 ha of the flood plain on the Pointe de Meuron peninsula behind the raised River Road and west trail will be protected up to the 1 in 5-year flood.
Brief Description of Site Features (Optional): The general topography of the construction area is relatively flat with some elevated areas at the north part of the property where the proposed raised elevation of River Road and the west embankment will tie into. The average ground level of the floodplain area varies approximately between 185.0 and 186.5 m. The generalized stratigraphy of the area consists of layered sands and silts underlain by grey/red varved clay.

PART II – PROVISIONAL ENVIRONMENTAL ASSESSMENT CATEGORIZATION

(Ref: Class EA Section 2)

1. Does client ministry/municipality have an applicable Class EA process or approval for the proposed undertaking? Yes No

If YES, receive written confirmation from client that it intends to use its own process. (Document identified as Item 8 in Appendix 4 to be completed and kept in project file.) In this case, no further EA work is required by MOI/IO/Agency.

If NO, continue.

2. Identify provisional EA Category of Project using the Class EA, Fig.2.1 (Flowchart), Category Listing Matrix, and Appendix 1.

If Category is in doubt, use Class EA Table 2.1 Category Identification Table.

Provisional Category A B C D

3. Provisional Environmental Assessment Categorization Summary

- For Category A projects, proceed without further EA action unless a heritage feature of the site or building is involved.
- **For Category B projects, complete remainder of this report and Sign-Off Declaration in Part V.**
- For Category C projects, complete remainder of this report and Sign-Off Declaration in Part V and then refer to Class EA, Section 5 for next steps.

PART III – SITE ANALYSIS, CONSULTATION AND DOCUMENTATION (“YES” answers require resolution in Part IV of this report. Ref: Class EA Section 4).

<p>1. EXISTING LAND USE STATUS (Under “Source” give name & phone number of Authority contact that provided the information. If information was derived from public records, give cross-reference.)</p>	
<p>a. Current Official Plan and Zoning Designations: Natural Heritage System and Community; Zoning By-law 1/2022: Environmental Protection (EP) and Community Zone (CM). Source: Zachary Mezzatesta, Planning Technician – City of Thunder Bay, Development & Emergency Services Department, Planning Services Division</p>	
<p>b. Floodplain Designation: Kaministiquia River Floodplain Source: Michelle Sixsmith, Development Regulations Officer – Lakehead Regional Conservation Authority; Zachary Mezzatesta, Planning Technician – City of Thunder Bay, Development & Emergency Services Department, Planning Services Division If yes, describe: Lower elevation areas of the property, including the southern portion of the Pointe de Meuron peninsula within which the project is located, is within the Kaministiquia River Floodplain.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>c. Designated Prime Agricultural Areas where Specialty Crop Lands and Prime Agricultural Lands (Class 1, 2 and 3) predominate: No agricultural lands present. Source: Zachary Mezzatesta, Planning Technician – City of Thunder Bay, Development & Emergency Services Department, Planning Services Division If yes, describe: N/A</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>d. Environmentally Significant Areas (ESAs): MNRF considers the oxbow to be an ESA and the City of Thunder Bay Official Plan designates land regulated by the LRCA (i.e., the Kaministiquia River Floodplain) as a “Natural Corridor”. Source: Jeff Black, Management Biologist – MNRF Thunder Bay-Ignace District; Zachary Mezzatesta, Planning Technician – City of Thunder Bay, Development & Emergency Services Department, Planning Services Division If yes, describe: The Oxbow in the river immediately upstream of the project area, which separates the FWHP infrastructure on Pointe de Meuron from the island is ideal habitat for several fish species, including black crappy and northern pike.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>e. Surface or underground easements? Source: Maintenance Services – Fort William Historical Park, MTCS If yes, describe: Underground Electric, Sanitary Sewer, Gas Pipeline, Underground Telephone, Communications Cable, Storm Sewers, Water Pipeline, Chiller Line throughout the developed areas of the property.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>f. From the above contacts / research, in your opinion, will the undertaking require an application under the <i>Planning Act</i> to bring current land use into conformity with intended land use? If YES, has MOI/IO/Agency, or anyone else, applied for a change in land use under the <i>Planning Act</i>?</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<p>g. Directly adjacent to major transportation routes? If yes, describe and determine whether proposed undertaking will negatively impact local traffic: N/A</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>h. Canadian Environmental Assessment Act trigger? (For example, identified on the List of Physical Activities). If YES, follow federal-provincial co-ordination guidelines.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>2. ENVIRONMENTAL CONDITION OF THE PROPERTY</p>	
<p>In order to complete this Section, the MOI/IO/Agency or its Service Provider has the option of completing a Phase 1 Environmental Site Assessment Report (by a qualified assessor) or completing a visual Inspection.</p> <p>If a Phase 1 Environmental Site Assessment report has been completed and is on file with MOI/IO/Agency please detail reference information:</p> <p>Describe resolution of any issues in Part IV.</p>	

Site inspection date: May 12, 2011	
a. Was there evidence on the land or in buildings of any of the following: (X for YES)	
<input type="checkbox"/> Incineration <input type="checkbox"/> Leaking or unprotected above ground storage tanks <input type="checkbox"/> Stained surfaces <input type="checkbox"/> Oily sheens on water <input type="checkbox"/> Unprotected industrial drums <input type="checkbox"/> PCB ballasts/transformers <input type="checkbox"/> Vegetation damage <input type="checkbox"/> Underground storage tank(s)	<input checked="" type="checkbox"/> Fill added <input checked="" type="checkbox"/> Leaded paint (any building constructed prior to 1980 may contain leaded paint) <input type="checkbox"/> Discarded batteries <input type="checkbox"/> Friable asbestos <input type="checkbox"/> Pesticide/herbicide containers <input type="checkbox"/> Signs of above-noted items on adjacent properties <input type="checkbox"/> Other potential contaminants (specify):
b. Record the results of environmental review or summarize Phase 1 Environmental Site Assessment with respect to:	
i. current and past uses of site: Current – FWHP, a cultural and historical institution; Past – None known ii. adjacent uses: Low density residential iii. underground and aboveground storage tanks: No underground storage tanks; two 1,350 L aboveground storage tanks (these are not located within the project area). iv. records of old landfills or previous complaints or violations on site: None known v. use of potentially hazardous substances on site: Treated wood stringers are used at the wharf area above the normal water level. vi. other local findings (e.g. natural gas wells, radon gas, radioactivity, etc): None known vii. Have other contaminant assessments taken place on this site? If yes, reference information: None known	
c. In your opinion, does the site contain evidence of actual contamination? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
A “YES” answer is warranted if there is question of the nature or extent of contamination or the use of hazardous substances. If YES, document any proposed investigation in Part IV.	
3. ENVIRONMENTALLY SIGNIFICANT AREAS (ESA) (Ref: Class EA, Glossary)	
These areas will consist of those that have been designated by any of the agencies listed in this Section.	
a. MNRF Contact Name: Jeff Black, Management Biologist – Thunder Bay-Ignace District	
Wetlands?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Areas of Natural and Scientific Interest (ANSIs)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Habitats designated by <i>Endangered Species Act</i> ?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Habitats designated or proposed of rare, vulnerable, threatened or endangered species?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Floodplains (MNR responsible for floodplain management where no Conservation Authorities exist)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
b. Conservation Authority Contact Name: Michelle Sixsmith, Development Regulations Officer – Lakehead Regional Conservation Authority	
ESAs? N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Floodplains?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
c. Municipal Contact Name: Zachary Mezzatesta, Planning Technician – City of Thunder Bay, Development & Emergency Services Department, Planning Services Division	
ESA designation in Official Plans?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Groundwater recharge or discharge sites? Unknown to this department	<input type="checkbox"/> Yes <input type="checkbox"/> No
d. Is any portion of the property designated by the:	
i. Niagara Escarpment Plan as Natural or Rural Protection Area?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Oak Ridges Moraine Conservation Plan as Natural Core Area, Natural Linkage Area and/or as a Key Natural Heritage Feature?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
e. Is any part of the property an ESA? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Is site adjacent to an ESA?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If No, proceed to 4.	
If YES, describe: The City of Thunder Bay Official Plan designates land regulated by the LRCA (i.e. the Kaministiquia River Floodplain) as a “Natural Corridor”	

which is considered an ESA. The MNR considers the Oxbow in the river immediately upstream of the project area, which separates the FWHP infrastructure on Pointe de Meuron from the island as an ESA because it is ideal habitat for several fish species, including black crappy and northern pike.	
f. If the site is part of an ESA, and a sale or disposal is intended, is the purchaser a conservation body, and if so, is the intended use for conservation purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
g. In your opinion, based on the above contacts and any current, relevant MOI/IO/Agency feasibility studies, could the intended undertaking cause any local, long term changes significant enough to threaten the ESA?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If YES, document measures to mitigate such impacts in Part IV, OR proceed with a Category C assessment.	
4. DISTINCTIVE ENVIRONMENTAL FEATURES	
a. Does visual inspection or research reveal any natural features (other than ESAs noted above) such as floodplain, high groundwater level, groundwater wells, streams, rivers, natural corridors (e.g., hedgerows), woodlots, wetlands, springs, water bodies, topography, prevailing slope direction, steep slopes, ravines, and rock outcrops?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If NO, then proceed to b.	
If YES, describe: Unevaluated wetlands are present northwest adjacent the oxbow bend upstream of the project area.	
b. Do municipal or other authorities or interest groups contacted above identify any Distinctive Environmental Features as described in 4 a. above that warrant protection?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
If NO, then proceed to c.	
If YES, describe: The unevaluated wetlands are a feature regulated under the LRCA's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations, although in accordance with the Conservations Authority Act the Government of Ontario will not require a permit for this project. Additionally, the City notes the site is adjacent the Kaministiquia River, which is known fish habitat and has steep slopes with unstable banks susceptible to erosion and flooding.	
Source: Michelle Sixsmith, Development Regulations Officer – Lakehead Regional Conservation Authority; Zachary Mezzatesta, Planning Technician – City of Thunder Bay, Development & Emergency Services Department, Planning Services Division	
c. Is there a potential to impact any species at risk and their habitats, as designated by the <i>Species at Risk Act</i> and the <i>Endangered Species Act</i> ?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Source: Jeff Black, Management Biologist – Thunder Bay-Ignace District	
d. In your opinion, would any of the observed features be affected by the implementation of the undertaking as currently planned?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If YES, describe effects and any required mitigation and monitoring in Part IV, below.	
5. SERVICING CAPACITY RE: SEWERAGE, WATER, ROADS, GAS, HYDRO, ETC.	
a. Is a septic system present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. Is a new septic system proposed or is expansion proposed to existing system?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If YES, note in Part IV and if applicable, attach technical research supporting site's capacity to sustain a septic system.	
c. Is potable groundwater well(s) present or proposed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If NO, then proceed to e.	
d. Is groundwater used for potable purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If NO, specify why and if applicable, note in "Contaminants" section above and describe resolution in Part IV, below.	
If YES, and if the proposed undertaking is anticipated to cause any negative effects to	

local potable water supply(ies), describe resolution in Part IV, below.	
e. Based on information gathered, will the undertaking require new or different servicing?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If YES, specify anticipated resolution of new or different service in Part IV, below.	
6A. BUILT HERITAGE/CULTURAL LANDSCAPE ANALYSIS	
Background	
a. Are there any building(s) present on the subject property?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If NO, then proceed to c.	
b. What is the date of construction of the building(s)? 1973 to 1984 Source: Fort William Historical Park Cultural Heritage Evaluation Report	
Protection and Recognition	
c. Is the property (check all applicable):	
i. Designated under Part IV of the <i>Ontario Heritage Act</i> , or	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Listed under Part IV of the <i>Ontario Heritage Act</i> , or	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Part of a conservation district under Part V of the <i>Ontario Heritage Act</i> ?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iv. Subject to a municipal heritage easement?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
v. Subject to an Ontario Heritage Trust easement?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If YES, provide reference(s): N/A	
Contact MOI/IO/Agency heritage staff for information to complete this section, as required.	
For each protection mechanism describe whether or not it will affect the undertaking. If the protection mechanism affects the undertaking, document the appropriate mitigation measures in Part IV of this document.	
MOI/IO/Agency Heritage Management Process (to be completed with information supplied by MOI/IO/Agency Heritage Staff) MOI/IO/Agency Heritage Staff Contact Name: John Westlake, Manager, MTCS Agency Relations and Accountability Division	
d. Has the local community been contacted regarding heritage interest in the property?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If YES, provide contact information and response: Details of the public consultation are provided in Section 5 of the Fort William Historical Park/Reconstructed Fort William – Cultural Heritage Evaluation Report (November 2020) If NO, provide rationale:	
e. Has the building/property been the subject of an MOI/IO/Agency heritage evaluation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If YES, provide reference: Fort William Historical Park/Reconstructed Fort William – Cultural Heritage Evaluation Report (November 2020)	
If NO, document findings of MOI/IO/Agency Heritage Staff review and relevant effects in Part IV of the document and proceed to h.	
f. Have the recommendations in the MOI/IO/Agency heritage evaluation been confirmed by the MOI/IO/Agency?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If NO, contact MOI/IO/Agency heritage staff and document appropriate mitigation measures in Part IV of this document, proceed to g.	
If YES, is this an MOI/IO/Agency Heritage Place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If NO, this property is not considered an MOI/IO/Agency Heritage Property; proceed to 6B.	
g. If the property is an MOI/IO/Agency Heritage Place, is there an MOI/IO/Agency Conservation Plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If NO, contact MOI/IO/Agency heritage staff and document appropriate mitigation measures in Part IV of this document).	
If YES, is the undertaking accommodated by the Plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No

If NO, contact MOI/IO/Agency heritage staff and document appropriate mitigation measures in Part IV of this document.	<input checked="" type="checkbox"/> N/A
6B. ARCHAEOLOGICAL ANALYSIS (Applies to all projects)	
h. Does this property have archaeological potential according to MOI/IO/Agency heritage staff or as per the Ministry of Tourism, Culture and Sport's <i>Standard and Guidelines for Consultant Archaeologists 2012</i> 'Determining Archaeological Potential' or as per existing archaeological reports for the property?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
i. Will the undertaking: i. Cause a below grade ground disturbance (i.e., site grading, trenching)? ii. Involve new construction? iii. Involve a disposition (sale or transfer), easement, or acquisition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If YES (or unknown), procure or request MOI/IO/Agency heritage staff to assist in reviewing existing reports/procuring a licensed archaeologist to conduct a Stage 1 & 2 Archaeological Assessment and provide the draft final report to IO heritage staff for comment and direction.	
j. Aboriginal Engagement: MOI/IO/Agency has a statutory duty to accommodate aboriginal interests that may be articulated by the Class EA process. Are there likely Aboriginal interests based on geographical proximity or cultural affiliation (via archaeological evidence) for the property/undertaking that may be adversely affected by the proposed undertaking?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If YES or UNKNOWN, contact IO heritage staff for direction and include resolution in Part IV.	
6C ARTWORK (Not Applicable for Undeveloped Land)	
k. Are there any murals, artwork, sculptures, stained glass, or other similar features present in the location of the undertaking?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
If YES, does the Archives of Ontario consider the artwork significant?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Include reply on file and, if YES, describe effects, mitigation and monitoring requirements in Part IV. (Reply Not Applicable)	
7. SOCIO-ECONOMIC EFFECTS (use MOI/IO/Agency electronic socio-economic analysis tool as needed)	
a. Does the undertaking involve an application under the <i>Planning Act</i> ?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If NO, proceed to b.	
If YES, then defer socio-economic analysis to planning approval process and proceed to Part IV.	
b. Could the undertaking cause significant long-term changes to the social structure or the demographic characteristics of the surrounding community?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If the answer to this Question is YES then there must be a study completed to assess the impacts and identify mitigation and monitoring requirements.	

PART IV – ANALYSIS OF ENVIRONMENTAL EFFECTS, AND REQUIRED MITIGATION AND MONITORING (Ref: Section 7 of Class EA)

Part IV of the C&D Report is used to discuss environmental effects and identify any required mitigation and monitoring that, when implemented, would negate or reduce the significance of any environmental effects.

See Appendix A for a list of parties contacted. See Appendix B for a list of issues raised and resolutions.

1. EXISTING LAND USE STATUS (e.g. Planning Policies, etc.)

Summary of Environmental Effects: There is no anticipated land use change from this project.

Mitigation Measures: Mitigation measures are not required.

Monitoring Measures: Monitoring measures are not required.

2. ENVIRONMENTAL CONDITION OF THE PROPERTY

Several biophysical environmental effects have been considered during the cursory assessment of the proposed work. Each environmental component (air, soil, etc.) has been examined individually and, as such, has been described separately below.

a) Summary of Environmental Effects (Air Quality): Proposed construction activities (e.g. excavation, placement of materials) may result in short-term and localized increases in fugitive dust levels, as well as greenhouse gasses and vehicle emissions from transporting materials to and from the site and use of construction equipment, and Volatile Organic Compounds (VOC) from fuels and other hazardous substances.

Mitigation Measures: Cover stockpiled materials, limit excavation to periods of low wind, limit unnecessary long-term idling of vehicles and equipment, use low sulphur fuel in construction equipment, and use of appropriate dispensing equipment to prevent spills which could subsequently result in further release of VOCs.

Monitoring Measures: Periodic examination of project site for accumulated dust and for sources of greenhouse gases and VOC's.

b) Summary of Environmental Effects (Soils): Proposed construction activities may result in loss or disturbance of small areas of soil and/or contamination from leaks and accidental spills/releases of fuels or other hazardous substances.

Mitigation Measures: limit the extent of excavation and clearing activities, stockpile soils for later use if possible, prevent leaks, spills and releases by providing secondary containment for storage of fuels/hazardous substance, require drip drays and spill clean-up equipment, and prepare an emergency (spill) response plan.

Monitoring Measures: Periodic inspection for leaks, spills and releases during construction.

c) Summary of Environmental Effects (Surface water/aquatic biota): There will be no in-water work as all the project components and construction activities are above the Ordinary High Water Mark (1:2 year flood level) and therefore no direct impact to fish and fish habitat. The work is however, being completed in close proximity to the Kaministiquia River and therefore construction activities may result in a short-term and localized increase in erosion and potential run-off of soils and subsequent sedimentation to the adjacent river, as well as contamination from leaks and accidental spills/releases of fuels or other hazardous substances, which would adversely affect surface water quality and aquatic biota.

Mitigation Measures: Use silt fencing along all riverbank slopes to reduce sedimentation, refuel vehicles and equipment at least 100 m from the riverbank, prevent leaks, spills and releases by providing secondary containment for storage of fuels/hazardous substance, require drip drays and spill clean-up equipment, and prepare an emergency (spill) response plan.

Monitoring Measures: Periodic inspection of the condition of all silt fencing and periodic inspection for leaks, spills and releases during construction.

d) Summary of Environmental Effects (Vegetation): Proposed construction may result in small scale loss and localized disturbance of terrestrial vegetation.

Mitigation Measures: Minimize loss and disturbance of vegetation by limiting construction activities to designated areas, and re-vegetating disturbed areas after construction.

Monitoring Measures: Periodic inspection of the re-vegetation areas to ensure success of the plantings.

e) Summary of Environmental Effects (Wildlife): Proposed construction may result in a small scale loss of wildlife habitat and short-term localized disturbance to wildlife and habitat from construction activities.

Mitigation Measures: Minimize loss and disturbance of vegetation by limiting construction activities to designated and, if possible, previously disturbed areas, and re-vegetating disturbed areas post construction.

Monitoring Measures: Periodic inspection of the re-vegetation areas to ensure success of the plantings.

3. ENVIRONMENTALLY SIGNIFICANT AREAS

Summary of Environmental Effects: MNRF has identified the oxbow bend in the river that is associated with the Island des Meuron (immediately upstream of the project site) as an ESA. This designation is due to the availability of fish habitat believed to be utilized by black crappie, northern pike and juvenile lake sturgeon (provincially rare species and listed as threatened under COSEWIC). The reach of the river which forks to the oxbow is considered a staging area for lake sturgeon. Further, MNRF indicated that the island itself encompasses a wetland which, though not listed by the province, may be provincially significant. Potential short-term impacts to surface water quality and aquatic biota within the Kaministiquia River were described in the section above and are not anticipated to adversely affect the ESA. The potential change in water level of up to 2 cm during a 1 in 5-year flood event (KGS Group, 2023b) is also not anticipated to have adverse impacts to the wetland situated on the Island des Meuron,

The City of Thunder Bay Official Plan designates land regulated by the LRCA (i.e. the Kaministiquia River Floodplain) as a “Natural Corridor” which is considered an ESA. The proposed project will protect this floodplain area from flooding during a 1 in 5-year flood event, however, the area will still flood and be unaffected by the project during flood events greater than this.

Mitigation Measures: Proposed measures to mitigate adverse effects on surface water and aquatic biota (as previously described) will mitigate adverse effects to ESA.

Monitoring Measures: Monitoring may include those previously described for surface water and aquatic biota.

4. DISTINCTIVE ENVIRONMENTAL FEATURES

Summary of Environmental Effects: The proposed project is not anticipated to adversely affect any other distinctive environmental features.

Mitigation Measures: Mitigation measures are not required.

Monitoring Measures: Monitoring measures are not required.

5. SERVICING CAPACITY

Summary of Environmental Effects: The proposed work will not result in modifications to existing utilities at the FWHP.

Mitigation Measures: Mitigation measures are not required.

Monitoring Measures: Monitoring measures are not required.

6A. BUILT HERITAGE ANALYSIS

Summary of Environmental Effects: The proposed project is not anticipated to alter the heritage value of the property or any buildings but rather to provide protection of these for up to the 1 in 5-year flood event (KGS Group, 2023b).

Mitigation Measures: Mitigation measures are not required.

Monitoring Measures: Monitoring measures are not required.

6B. ARCHAEOLOGICAL AND FIRST NATIONS ANALYSIS (see Part III, Section 6B for Declaration on the Protection of Archaeological Resources)

Summary of Environmental Effects: Stage 1 and Stage 2 Archaeological Assessments have been previously completed at the FWHP property. These assessments cleared the previously proposed dike alignment of archaeological concern and confirmed the location of a previously identified archaeological site;

the Pointe de Meuron Site (OcJi-4). The north end of the proposed road raising (near the visitor center) is approximately 150 m away from the known archaeological site and therefore the project is not anticipated to adversely affect archaeological resources.

Mitigation Measures: Should additional resources be uncovered by FWHP and its contractors during construction activities, then the MTCS Agency Relations and Accountability Division Manager will be notified immediately. A course of action regarding the protection of these resources would be jointly developed by MTCS and FWHP. FWHP will ensure that the contractors and subcontractors are aware of the need to protect archaeological resources and provide notification to FWHP.

Monitoring Measures: Specific monitoring measures will be developed with MTCS in response to any additional resources uncovered during construction.

6C. ART WORK

Summary of Environmental Effects: The mural wall registered with the Ontario Archives is located in FWHP's Visitor Centre and therefore will not be impacted by the construction of the proposed project. Additionally, the proposed project is designed to protect FWHP's Visitor Centre up to a 1 in 5-year flood and by extension protect the mural wall.

Mitigation Measures: Mitigation measures are not required.

Monitoring Measures: Monitoring measures are not required.

7. SOCIO-ECONOMIC EFFECTS (attach or have on file, completed MOI/IO/Agency socio-economic analysis tool as needed)

Several socio-economic effects have been considered during the cursory assessment of the proposed work. Each component has been examined individually and, as such, has been described separately below.

a) Summary of Environmental Effects (Noise and Vibration): Construction activities at the FWHP will result in a short-term and localized increase in noise and potentially vibration levels which could hinder visitor's enjoyment.

Mitigation Measures: Limit the work that is in direct proximity to where visitors may be present to periods outside of peak operation, when possible.

Monitoring Measures: Recording and responding to public complaints.

b) Summary of Environmental Effects (Human Health): The potential short-term and localized increase in dust from construction activities (excavation, hauling, etc.) can potentially increase incidences of acute and chronic respiratory conditions for workers and, if present, any surrounding residents.

Mitigation Measures: Use an approved dust suppressant, such as water, limit construction during high wind events and re-establish vegetation on disturbed areas.

Monitoring Measures: Inspecting the project study area for signs of dust accumulation and monitoring health complaints.

c) Summary of Environmental Effects (Public and Worker Safety): As the FWHP and its facilities will remain in use throughout the proposed project construction activities, there is the potential for safety issues to occur that could affect both workers and members of the general public. Work will be focused along the western shoreline on Point des Meuron and the existing road; however, there will also be the short-term presence of construction vehicles and equipment accessing the site off the main highway.

Mitigation Measures: Post signage indicating construction activities, instruct workers to be aware of public presence on site, and if required, erect fencing/barricades to indicate construction activities and to control public access.

Monitoring Measures: Inspection of the signs and fencing and recording any issues associated with public or worker safety.

8. OTHER ENVIRONMENTAL EFFECTS AND OTHER ISSUES

Summary of Environmental Effects: There are a variety of general environmental impacts associated with

project construction activities including, but not limited to, aesthetics, noise, dust, fuel/hazardous material spills or releases, potential for erosion and sedimentation, disturbances to visitor use, loss of vegetation and greenhouse gas emissions.

Mitigation Measures: Detailed specifications must be developed to address common project-specific environmental effects including, but not limited to, dust suppression, noise/vibration management, water/sediment management, waste management, spills protection and health and safety:

- Apply an approved dust suppressant during construction (i.e. water mist).
- Ensure refueling of equipment occurs on impermeable surfaces and/or with a fuel berm at connection points.
- Modifying working hours such that noise and vibration do not affect local residents.
- Self-contained waste facilities of sufficient volume for the construction team should be provided and maintained with a regular service schedule during construction.
- The Project Manager or their delegate should ensure that the appropriate and legal health and safety measures, including education, are provided to employees.
- Organize project schedule to limit disturbance to programming areas during peak periods.
- Limit visual disturbances to areas not typically utilized by visitors.
- Design alignment of dike to reduce impact to land use.

These measures may be introduced as necessary, other measures may be proposed, or these and other measures may not be required.

Monitoring Measures: It is the responsibility of the Project Manager to ensure that the mitigation measures are in place, and that the site is examined for potential disturbances to visitor use.

PART V – CONFIRMATION OF CATEGORY OF ENVIRONMENTAL ASSESSMENT AND SIGN-OFF DECLARATION

I hereby certify, to the best of my knowledge at this date, that the above description of the undertaking and affected site is correct, and that relevant directly affected parties noted in this C&D Report have been consulted by MOI/IO/Agency. The issues raised by the directly affected parties with regard to the above seven point site-specific analysis, including any environmental effects, mitigation, net effects and monitoring have been dealt with as described in this C&D Report and any appended attachments. The results of these investigations conclude that the undertaking(s) qualifies to be assessed under the Class EA process for MOI/IO/Agency as a:

Category B Undertaking

Category C Undertaking (Requires the Completion of an Environmental Study Report)

.....
NAME AND SIGNATURE OF RESPONSIBLE
MOI/IO/AGENCY SERVICE
PROVIDER(S)/ENVIRONMENTAL PRACTITIONER:

Shaun Moffatt, KGS Group



.....
DATE: August 16, 2023

.....
NAME AND SIGNATURE OF RESPONSIBLE
PROJECT MANAGER:

Patrick Morash, Ministry of Tourism, Culture and
Sport



.....
DATE: August 17, 2023

Project Number and Name: **KGS Group Project # 22-1316-001; FWHP Flood Mitigation and Road Improvements**

Technical Reports

This C&D Report has summarized the relevant findings from technical reports that were used to inform this Class EA. These reports have not been appended to this C&D Report but may be made available to the public upon request (e.g. FOI request). See Appendix C.

Appendix A: List of Parties Contacted and Meetings Held During Consultation Stage

Name of Ministry/Agency/ Department/ Organization	Name	Contact Information (optional)	Consultation Method	Comments Received? (Yes or No)	Concerns Received? (Yes or No) (If "Yes", provide information in Appendix B)
Federal					
N/A					
Provincial					
Infrastructure Ontario	Crystal Gotfryd, Director of Real Estate	Suite 2000, 1 Dundas St. W., Toronto, ON, M5G 1Z3	Letter	Yes	No
Environment, Conservation and Parks	Gavin Battarino, A/Supervisor – Project Review Unit	Environmental Assessment Branch 135 St. Clair Ave. W. 1 st Floor, Toronto, ON, M4V 1P5	Letter	Yes	No
Natural Resources and Forestry	Jeff Black, Management Biologist	Suite B001 435 James St. S., Thunder Bay, ON, P7E 6S7	Letter	Yes	No
Municipal					
City of Thunder Bay	Karen Lewis, General Manager	Development & Emergency Services Department 111 Syndicate Ave. S., Thunder Bay, ON, P7E 6S4	Letter	Yes	No
Indigenous					
N/A					
Other Interested Stakeholders					
Lakehead Region Conservation Authority	Michelle Sixsmith, Development Regulations Officer	130 Conservation Road, Box 10427, Thunder Bay, ON, P7B 6T8	Letter	Yes	No

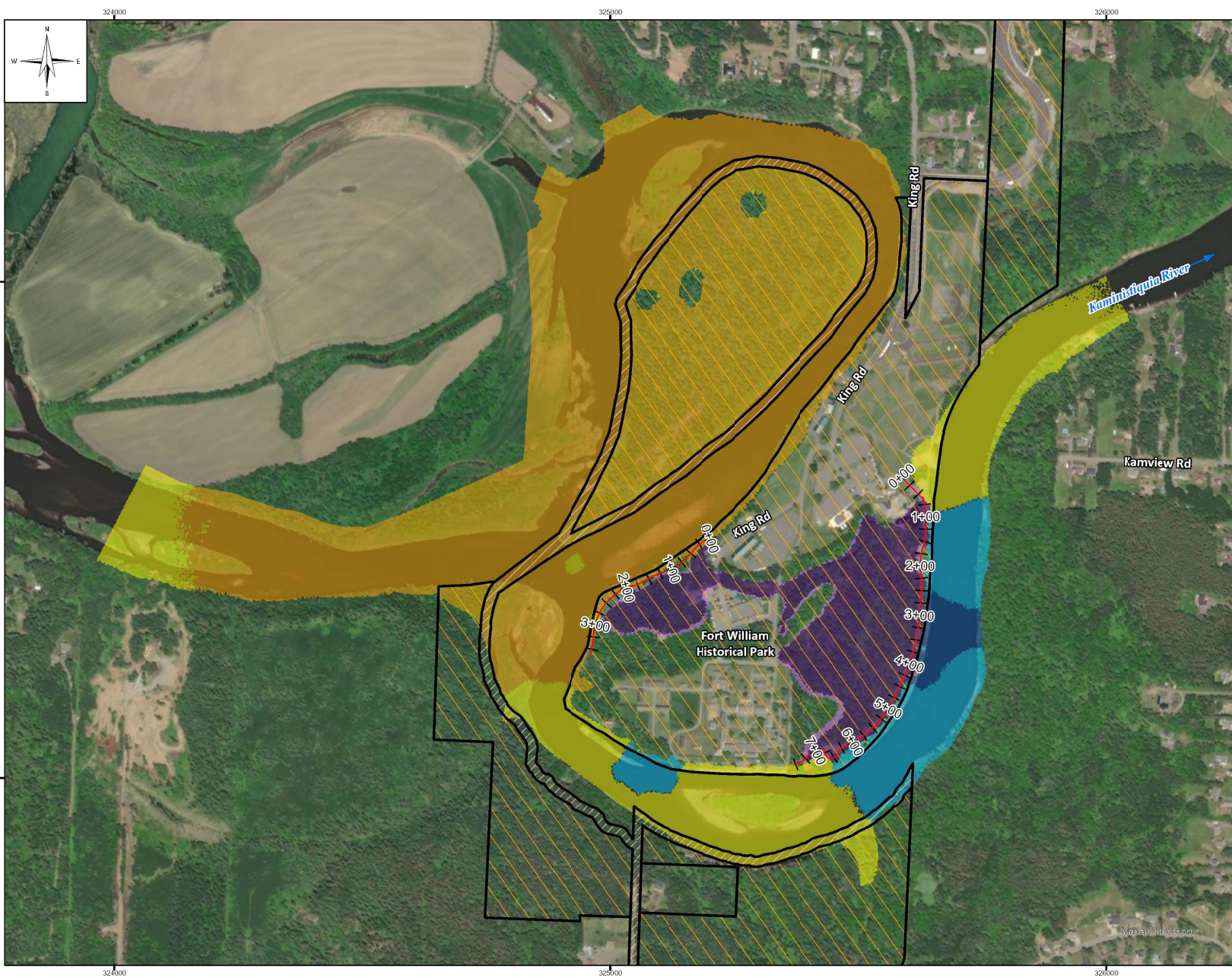
Location and Date	Consultation Method	Comments
N/A		

Appendix B: Comments/Concerns/Issues and Resolutions

Comments/Concerns/Issues	Resolutions
1. EXISTING LAND USE STATUS	
None raised during consultation	
2. ENVIRONMENTAL CONDITION OF THE PROPERTY	
None raised during consultation	
3. ENVIRONMENTALLY SIGNIFICANT AREAS	
None raised during consultation	
4. DISTINCTIVE ENVIRONMENTAL FEATURES	
None raised during consultation	
5. SERVICING CAPACITY	
None raised during consultation	
6A. BUILT HERITAGE ANALYSIS	
None raised during consultation	
6B. ARCHAEOLOGICAL AND FIRST NATIONS ANALYSIS	
None raised during consultation	
6C. ART WORK	
None raised during consultation	
7. SOCIO-ECONOMIC EFFECTS	
None raised during consultation	
8. OTHER ENVIRONMENTAL EFFECTS AND OTHER ISSUES	
None raised during consultation	

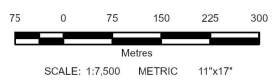
Appendix C: List of Technical Reports

- Fort William Historical Park. November 2020. Fort William Historical Park/Reconstructed Fort William – Cultural Heritage Evaluation Report (CHER). Revised from work and research originally completed by Commonwealth Resource Management in March 2015.
- KGS Group. March 2023a. Fort William Historical Park Flood Protection Conceptual Design.
- KGS Group. March 2023b. Hydraulic Assessment of Flood Protection for Fort William Historical Park.



- LEGEND:**
- Ground and Road Raise Alignment
 - Fort William Property
 - Road Allowance
- Water Level Change for a 1.5-year Flood (m)
- <= -0.020
 - 0.020 - -0.015
 - 0.015 - -0.010
 - 0.010 - -0.000
 - 0.000 - 0.000
 - 0.000 - 0.010
 - 0.010 - 0.015

- NOTES:**
1. Imagery Source: ESRI/MAXAR, dated 2022.
 2. All units are metric and in metres unless otherwise specified. Transverse Mercator Projection, NAD 1983, CSRS Zone 16. Elevations are in metres above sea level (MSL).



NO.	DATE	DESCRIPTION	ISSUED BY	CHECKED BY
0	23/08/16	ISSUED WITH FINAL REPORT	JRM	BAT
REVISIONS / ISSUE				



**FORT WILLIAM HISTORICAL PARK
 FLOOD MITIGATION AND ROAD
 IMPROVEMENTS**

SITE PLAN

AUGUST 2023	FIGURE 01	REV: 0
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