

LAKE MANITOBA LAKE ST. MARTIN

OUTLET CHANNELS PROJECT

MANITOBA INFRASTRUCTURE

Heritage Resources Protection Plan

November 25, 2020

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DISCLAIMER

This document was developed to support the Lake Manitoba and Lake St. Martin Outlet Channel Environmental Management and Monitoring Program. This document has been prepared by Manitoba Infrastructure as a way to share information and have discussion with Indigenous Communities and Groups and the public. This document has been prepared using existing environmental and preliminary engineering information, professional judgement as well as information from previous and ongoing public and Indigenous engagement and consultation. The contents of this document are based on conditions and information existing at the time the document was prepared and do not take into account any subsequent changes. The information, data, recommendations, and conclusions in this report are subject to change as the information has been presented as draft and will not be considered complete until further engagement and consultation is complete. The plans may be further revised based on information and direction received from provincial and federal environmental regulators. This draft report be read as a whole, and sections or parts should not be read out of context.

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PREFACE

The Lake Manitoba and Lake St. Martin Permanent Outlet Channels Project (the “Project”) is proposed as a permanent flood control mitigation for Lake Manitoba and Lake St. Martin to alleviate flooding in the Lake St. Martin region of Manitoba. It will involve the construction and operation of two new diversion channels: the Lake Manitoba Outlet Channel (LMOC) will connect Lake Manitoba to Lake St. Martin and the Lake St. Martin Outlet Channel (LSMOC) will connect Lake St. Martin to Lake Winnipeg. Associated with these outlet channels are the development of bridges, control structures with power connections, a new realignment of PR 239, and other ancillary infrastructure.

Manitoba Infrastructure (MI) is the proponent for the proposed Project. After receipt of the required regulatory approvals, MI will develop, manage and operate the Project. This Heritage Resources Protection Plan (HRPP) is one component of the overall Environmental Management Program (EMP) framework which describes the environmental management processes that will be followed during the construction and operation phases of the Project. The goal of the EMP is to confirm that the environmental protection measures committed to in the Environmental Impact Statement (EIS) and the conditions of the Environment Act Licence and Federal Decision Statement Conditions are undertaken in a timely and effective manner. This includes the verification that environmental commitments are executed, monitored, evaluated for effectiveness, and that information is reported back in a timely manner to the Project management team for adjustment if required.

Manitoba Infrastructure remains committed to ongoing engagement and consultation with Indigenous groups and other stakeholders that are potentially impacted by the Project. Detailed EMP review discussions have been incorporated into community-specific consultation work plans and additional engagement opportunities will be provided prior to EMP finalization. Engagement opportunities include virtual open house events and EMP-specific questionnaires. EMP-specific questionnaires will be provided to Indigenous groups and stakeholders to obtain feedback and views on the draft plans, in addition to exploring opportunities for Indigenous participation in follow-up monitoring. Feedback and recommendations will be used to inform the completion of the plans.

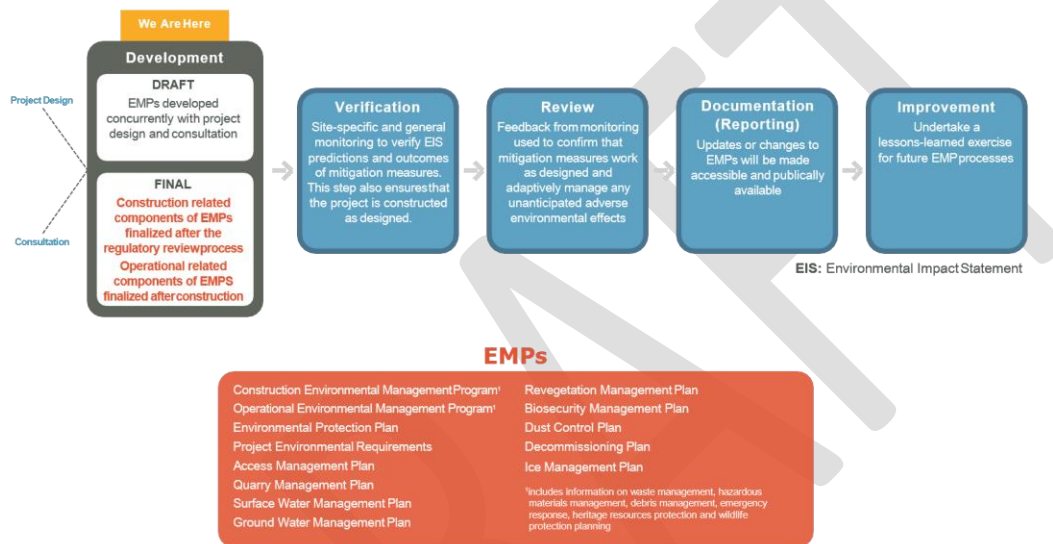
The EMP provides the overarching framework for the Construction Environmental Management Program (CEMP) and an Operation Environmental Management Program (OEMP), which will be finalized as separate documents prior to Project construction and ideally operation, respectively. Their finalization will consider applicable conditions of the Environment Act Licence and associated approvals, any other pertinent findings through the design and regulatory review processes and key relevant outcomes of the ongoing Indigenous and public engagement and Consultation processes.

The purpose of the CEMP and OEMP is to guide how environmental issues will be addressed during construction and operation, respectively and how adverse effects of activities will be mitigated. The CEMP is supported by several specific or targeted management plans (e.g. surface water, groundwater, sediment, etc.), as shown in the Figure below, that will guide MI’s development of the Project’s contract documents and subsequently, the Contractor(s) activities, in constructing the Project in an environmentally responsible manner. The OEMP will likely include the same targeted plans developed to manage issues during construction, but prior to construction completion they would be revised and adapted to suit the specific

needs during the operation phase. The intent of this HRPP is to provide information on effects to heritage resources during Project construction and operation, to protect both previously known heritage resources and newly documented heritage resources that may be encountered. The HRPP will also meet monitoring requirements that will be set out in provincial permits with respect to heritage resources.

Environmental Management Program Process and Associated Environmental Management Plans

Environmental Management Program (EMP) Process



**LAKE MANITOBA
LAKE ST. MARTIN**
OUTLET CHANNELS PROJECT

EXECUTIVE SUMMARY

The Lake Manitoba and Lake St. Martin Outlet Channels Project (the Project) is a proposed permanent flood control mitigation project to alleviate flooding in the Lake St. Martin area of Manitoba. The Project involves the construction of two new water diversion channels. The Lake Manitoba Outlet Channel (LMOC) is approximately 24.1 km long with a channel inlet positioned at Watchorn Bay on Lake Manitoba and an outlet positioned at Birch Bay on Lake St. Martin. The Lake St. Martin Outlet Channel (LSMOC) is approximately 23.8 km long with a channel inlet positioned at the east end of Lake St. Martin and an outlet positioned south of Willow Point in Sturgeon Bay on Lake Winnipeg. The Project Development Area (PDA) for both channels is approximately 400 m wide. Associated works and activities for the Project include temporary construction camps and staging areas, temporary access routes, realignment of existing drainage infrastructure, measures to divert surface water and groundwater, and erosion and sediment control.

An Environmental Management Plan Framework (EMPF) document has been developed to provide a structure that facilitates the management, monitoring, and mitigation of potential environmental effects during the construction and operating phases of the Project. Environmental protection plans are a component of the EMP Framework that provides site-specific, detailed protection measures to be followed by contractors and personnel to minimize these potential effects during and after Project construction.

The protection of heritage resources constitutes one aspect of the EMPF. Heritage resources are protected under Manitoba's *Heritage Resources Act* (1986) and are managed by the Heritage Resources Branch (HRB) under the Ministry of Sport, Culture, and Heritage. A Heritage Resources Protection Plan (HRPP) has been developed to provide for this protection. The objective of the HRPP is to provide for two facets of heritage protection:

1. the protection of previously known heritage resources; and
2. the protection of heritage resources and human remains should they be unearthed or discovered during the construction and operating phases of the Project.

This HRPP also describes the roles and responsibilities of Manitoba Infrastructure (MI) and its contractors towards heritage protection throughout the life of the Project.

This HRPP includes a system to manage known heritage resources within the Project. Known heritage resources fall under three classifications: 1) Heritage Sensitive Areas; 2) Known Heritage Resources; and 3) Culturally Important Areas.

1. **Heritage Sensitive Areas (HSAs)** are those portions of the PDA in which pre-construction desktop screening and subsequent field assessments suggest a high potential for archaeological materials. Environmental Inspectors (referred to as Environmental Officer in the EMPF) will take extra measures to inspect soil layers within HSAs and enact the Chance Find Procedure if heritage resources are encountered.
2. **Known Heritage Resources** are heritage sites within the PDA that were identified during the pre-construction HRIA. All heritage sites will be mitigated during pre-construction to a level that satisfies the requirements of HRB and the Heritage Resources Act. However, some sites may hold the potential to contain additional archaeological materials that were not recovered pre-construction.

Most known heritage sites in the PDA will be treated as HSAs (above), in which the Environmental Officer will take extra measures to inspect soil layers and enact the Chance Find Procedure if heritage resources are encountered. For a known heritage site in which HRB requires an Archaeologist to be present for heritage monitoring, the Archaeologist will take the extra measures to inspect soil layers and manage any heritage resources that may be exposed during construction.

3. **Culturally Important Areas (CIAs)** are locations within the PDA that hold historic, social, economic, and/or spiritual value to the inhabitants of the Project Local and Regional assessment areas. Environmental Inspectors will take extra measures to identify cultural resources in the CIA, document any potential impacts to a CIA, and enact the Chance Find procedure if cultural resources are encountered or impacted.

This HRPP also includes **Procedures for Chance Find Heritage Resources**, a system to manage heritage resources that are unearthed or discovered during the construction and operating phases of the Project. The following describes the general procedures that will be followed if heritage resources are encountered during construction activities for the Project.

1. All construction activities at the location of the find will cease immediately. An immediate work-stop buffer zone will be enacted around the find.
2. All heritage resource items will be left in the same position in which they were noted or discovered.
3. The Environmental Officer (or their delegate) will enact the Chance Find Procedure.
4. A buffer zone will be erected around the find at a minimum of 50 m in radius. The zone must be established with a highly visible physical barrier. No construction activities will take place within the buffer zone.
5. The Environmental Officer will contact an Archaeologist. The Environmental Officer will supply information about the find to the Archaeologist, who will then determine the significance of the find and the appropriate next steps in procedure.
6. The Archaeologist will work with HRB to determine if additional measures are required for the find.
7. The Archaeologist will conduct, or oversee others who will conduct activities relating to any additional measures as required. These activities may include salvage archaeology, mitigation strategies, and/or on-going monitoring and supervision of the removal of soils associated with the site until the Archaeologist is satisfied that the heritage resource is no longer endangered by the construction activity.
8. Once HRB (and/or other parties as outlined in agreements with MI) is satisfied with the outcome of the investigation, construction activities can commence in the find area unless alternate measures have been established.

This HRPP also outlines additional procedures that must be followed for specific heritage resources. These include:

- Human remains
- Hearths and stained soils
- Stone Configurations
- Petroglyphs and Pictographs; and
- Cultural Use Areas

Activities relating to heritage resources that occur during the Project must be documented by a qualified professional archaeologist holding a valid heritage permit. The heritage permit requires the archaeologist to submit a detailed report to the HRB on behalf of MI outlining construction activities and their impacts on heritage resources, the procedures that were followed as laid out by this HRPP, and recommendations for site treatment and protection in relation to future development.

The statements made in this Executive Summary are subject to WSP Canada Group Limited's Standard Limitations found in the HRPP report and should be read in its entirety with the remainder of the HRPP report.

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GLOSSARY OF TERMS AND ACRONYMS

Acronyms

%	Percent
CEAA	Canadian Environmental Assessment Act
CHRPP	Culture and Heritage Resources Protection Plan
CIA	Culturally Important Area
EAO	Environmental Assessment Officer
EIS	Environmental Impact Statement
EOC	Emergency Outlet Channel
EPP	Environmental Protection Plan
ESS	Environmental Sensitive Site
FN	First Nation
GPS	Global Positioning System
HRB	Historic Resources Branch
HRIA	Heritage Resources Impact Assessment
HRPP	Heritage Resources Protection Plan
HSA	Heritage Sensitive Area
IEI	Indigenous Environmental Inspector
INAC	Indigenous and Northern Affairs Canada
INR	Indigenous and Northern Relations
IPEP	Indigenous and Public Engagement Process
IRTC	Interlake Reserves Tribal Council
km	Kilometre
km ²	Square kilometre
LAA	Local Assessment Area
LM&LSMRRRC	Lake Manitoba and Lake St. Martin Regulation Review
LMOC	Lake Manitoba Outlet Channel's

LSMOC	Lake St. Martin Outlet Channel's
m	Metre
MI	Manitoba Infrastructure
MMF	Manitoba Metis Federation
NAC	Northern Affairs Communities
PA	Project Archaeologist
PDA	Project Development Area
PM	Project Manager
PR	Provincial Road
PTH	Provincial Trunk Highway
RAA	Regional Assessment Area
RCMP	Royal Canadian Mounted Police
RM	Rural Municipality
ROW	Right of Way
Reg.	Regulation
TK	Traditional knowledge

Glossary of Terms

Animal Remains: The remains of animal bodies, often recovered in skeletal form.

Artifact: Any object manufactures, used, moved, or modified by human beings.

Cairn: A cluster or pile of stones, often built to mark trails, burial sites, or food or tool caches.

Chance Find: A heritage resource (including human remains) that is unearthed or discovered during the construction and operating phases of a project.

Culturally Important Area: Locations within the project that hold historic, social, economic, and/or spiritual value to the inhabitants of the Local and Regional assessment areas.

Cultural Use Area: An area that exhibits evidence of past cultural activities, such as culturally modified trees or ceremonial sites.

Erratic: A rock or boulder that is different from the surrounding rock, often deposited through glacial or hydrological action.

Feature: a non-portable object or alteration to the landscape that has cultural significance.

Forensic: Relating to a crime.

Funerary Object: Artifacts that have been buried with an individual.

Hearth: The physical remains of a firepit.

Heritage Resource: The physical remains of past cultural groups.

Heritage Resources Protection Plan: The managing document plan detailing the methods and procedures of heritage resource protection for the project.

Heritage Sensitive Area: Locations within the project in which there is a high potential for archaeological materials.

Heritage Site: The specific location in which a cluster of heritage resources in a direct temporal and spatial relationship are documented.

Historic artifact: An artifact identified as belonging to the time period after European contact, ranging from the early Fur Trade Period (late 17th Century) to the mid-20th Century.

Historic feature: A building or structure identified as belonging to the time period after European contact, ranging from the early Fur Trade Period (late 17th Century) to the mid-20th Century.

Human remains: The remains of human bodies, often recovered in skeletal form.

Lithic debitage: Stone debris created and left over from the manufacture of stone tools.

Petroglyph: A figure or scene inscribed onto a rock surface by grinding, pecking, or incising.

Pictograph: A figure or scene painted on a rock surface.

Pottery: Storage vessels fashioned from fired clay.

Pre-Contact Period: The period of time in Canadian human history before the arrival of Europeans. In Manitoba this is generally considered to range from 13,000 years before present to the late 17th Century.

Stone Configuration: Features constructed of cobbles and boulders in a meaningful way.

1.0 INTRODUCTION

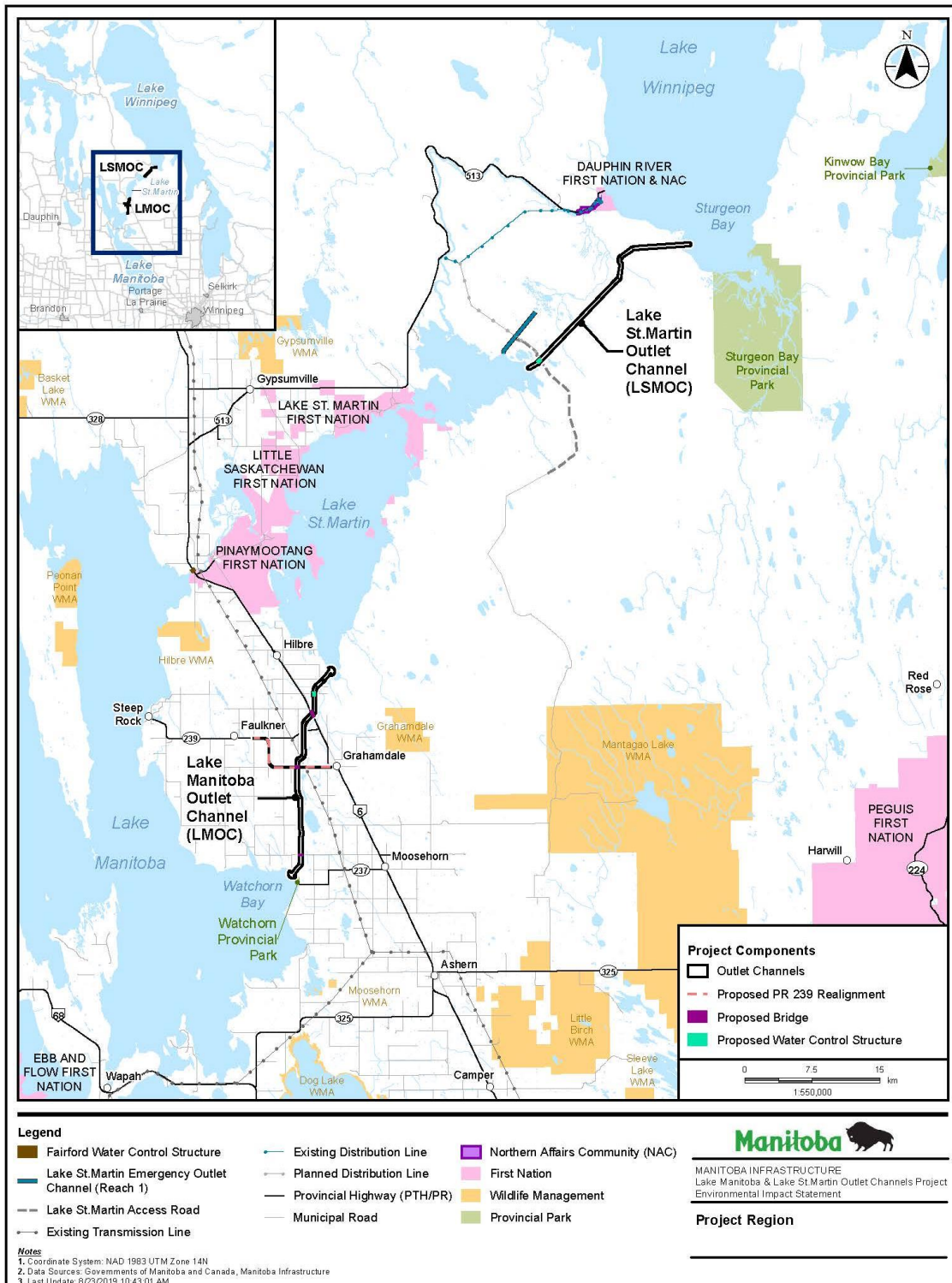
Manitoba Infrastructure (MI) is in the process of seeking environmental approvals for the Lake Manitoba and Lake St. Martin Outlet Channels Project (the Project). The Project involves the construction of two new water diversion channels as a permanent flood control mitigation system to alleviate flooding in the Lake St. Martin area of Manitoba (Figure 1). The Lake Manitoba Outlet Channel (LMOC) will connect Lake Manitoba with Lake St. Martin. The LMOC is approximately 24.1 km long with a channel inlet positioned at Watchorn Bay on Lake Manitoba and an outlet positioned at Birch Bay on Lake St. Martin. The LMOC includes a water control structure and three road bridges. The Lake St. Martin Outlet Channel (LSMOC) will connect Lake St. Martin to Lake Winnipeg. The LSMOC is approximately 23.8 km long with a channel inlet positioned at the east end of Lake St. Martin and an outlet positioned south of Willow Point in Sturgeon Bay on Lake Winnipeg. The LSMOC includes a combined bridge/water control structure and multiple drop structures. The Project Development Area (PDA) for both channels is approximately 400 m wide. Associated works and activities for the Project include temporary construction camps and staging areas, temporary access routes, realignment of existing drainage infrastructure, measures to divert surface water and groundwater, and erosion and sediment control.

A draft Environmental Protection Plan (EPP) has been developed to manage, monitor, and mitigate potential environmental effects during the construction and operating phases of the Project and is being shared with Indigenous Communities and Groups and the public for input prior to finalization. An EPP mapbook is being developed to be appended to the EPP and will provide site-specific detailed protection measures to be followed by contractors and construction personnel to minimize potential effects to environmentally sensitive sites (ESS). ESS are locations, features, areas, activities or facilities that were identified in the Project EIS to be ecologically, socially, economically, culturally or spiritually important or sensitive to disturbance and require protection during construction of the Project. The determination of ESS will include the consideration of Indigenous traditional knowledge.

The protection of heritage resources constitutes one aspect of the EPP. A Heritage Resources Protection Plan (HRPP) has been developed to provide for this protection. The details and procedures found within the following pages provide for two facets of heritage protection: 1) the protection of previously known heritage resources; and 2) the protection of heritage resources and human remains should they be unearthed or discovered during the construction and operating phases of the Project. The HRPP also provides for Culturally Important Areas (CIAs).

****NOTE: This document is a preliminary draft of the HRPP. The document will be updated and integrated with the field results of the Heritage Resource Impact Assessment after its completion and acceptance of its recommendations by the Historic Resources Branch.***

Figure 1: Project Area



2.0 PURPOSE AND OBJECTIVES

Heritage Resources are protected under Manitoba's *Heritage Resources Act* (1986). Found Human Remains, including partial remains and teeth, are protected under Manitoba's *Heritage Resources Act* (1986) and *The Policy Concerning the Reporting, Exhumation and Reburial of Found Human Remains* (1987). Heritage resources in Manitoba are managed by the Historic Resources Branch (HRB) under the Manitoba Ministry of Sport, Culture, and Heritage. This HRPP does not replace provincial legislation. Rather, the HRPP is a guideline written in accordance with provincial legislation and underlines the need to understand the protective measures that are based on provincial legislation. This document, therefore, should be considered as a heritage resource protection plan that advises practical responses to legislation, regulations, licenses, permits, standards, conditions, contracts, agreements, designs and specifications for specific situations at specific work locations.

Ownership of all heritage objects found within Manitoba rests with the Province of Manitoba. All heritage resources are protected under the *Heritage Act*. Deliberate destruction or disturbance of heritage resources is an offence under the Act.

The HRPP is designed to demonstrate and document due diligence. In this context, due diligence involves taking all reasonable, practical steps to protect heritage resources which may be unearthed or discovered during the construction phase of the Project regardless of cultural affiliation. The objectives and direction of this document stem from the Project's Environmental Impact Statement (EIS), which included a recommendation for a Culture and Heritage Resources Protection Plan (CHRPP) to be instated during the construction phase of the Project. The EIS provided an outline for a CHRPP and included the following measures (Stantec 2020:9.227):

- The HRB will be informed immediately if any heritage resources, or objects thought to be heritage resources, are discovered during site preparation and construction.
- Protective barriers will be placed around heritage resource sites that are inadvertently found during construction if required so that the area can be protected while work proceeds.
- All heritage resources discovered during site preparation and construction will be left in their original position until HRB is contacted and provides instruction.
- Orientation for Project staff working in construction areas will include heritage resource awareness and training including the nature of heritage resources and the management of any resources encountered.
- Orientation information will include typical heritage resource materials and reporting procedures.
- The Contractor will report heritage resource materials immediately to the Construction Supervisor and will cease construction activities in the immediate vicinity until the Project Archaeologist is contacted and prescribes instruction.
- The CHRPP will be adhered to during construction and operations phases of the Project.

This HRPP has been prepared to meet the measures listed above and is concerned with heritage resources and/or found human remains that are found on lands associated with the Project. Information regarding heritage resources and/or found human remains will be submitted to the HRB as per the terms of the

PURPOSE AND OBJECTIVES

Heritage Resources Act (1986) and to Manitoba Infrastructure (MI) as per the terms of the HRPP. In addition, any heritage resources and/or human remains that are accidentally discovered by Project workers outside the PDA but are carrying out Project-related activities will also be subject to the same conditions of documentation as described herein.

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3.0 HERITAGE RESOURCES DEFINITIONS

The following information on heritage resources is included in this HRPP to aid the understanding of identification of such resources by non-heritage specialists during the construction and operating phases of the Project.

Heritage resources are the physical remains of past culture groups. They are non-renewable forms of human art, workmanship or use that have been modified by or left behind due to human activities. This includes plant and animal remnants. The Manitoba *Heritage Resources Act* (1986) defines “Heritage Resources” as:

1. a heritage site;
2. a heritage object; and
3. any work or assembly of works of nature or of human endeavour that is of value for its archaeological, palaeontological, pre-historic, historic, cultural, natural, scientific or aesthetic features, and may be in the form of sites or objects or a combination thereof.

There are two types of heritage resources: (1) artifacts and (2) features.

1. Heritage **artifacts** are any object manufactures, used, moved, or modified by human beings. An artifact may be as small as a single stone flake (the by-product of stone tool production) or as large as a canoe. Other types of artifacts can include lithic tools, butchered animal bones, and Pre-Contact ceramics (pottery), as well as materials from the historic period including gun flints and parts, nails, ceramics, bottle glass and beads.
2. **Features** are *in situ* (in place) objects or alterations to the landscape that are non-portable: meaning they cannot be easily removed from their original location. Examples of features include petroforms (stones that have been placed in a shape or design, such as effigy of an animal, medicine wheel or thunderbird nest); pictographs (paintings on rock faces); or cairns (clusters of stones often used as way markers or could represent a burial site or food cache).

Heritage Site The specific location in which a cluster of heritage resources in a direct temporal and spatial relationship are documented.

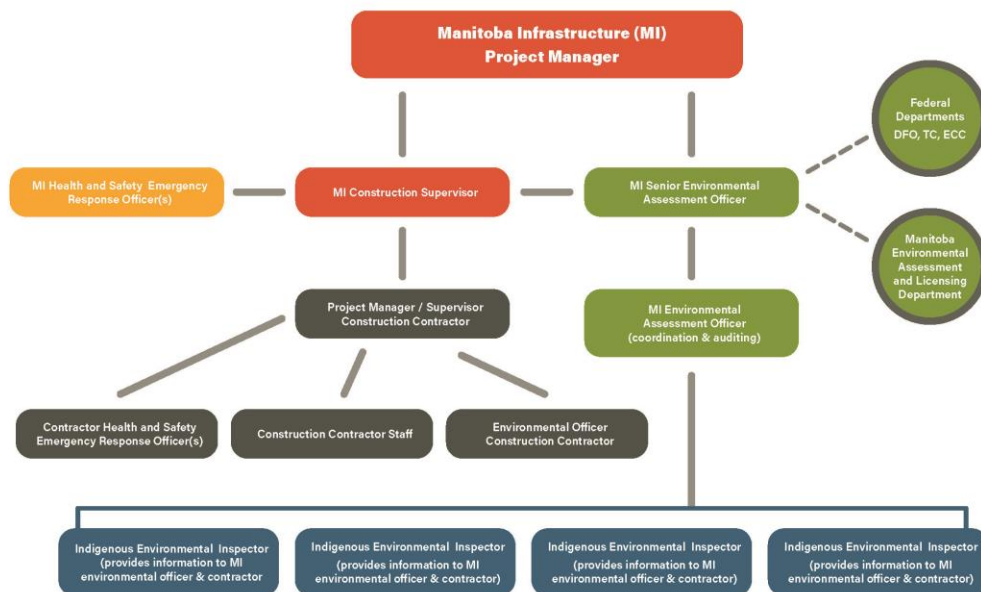
Chance Find is a heritage resource (including human remains) that are unearthed or discovered during the construction and operating phases of the Project.

4.0 PROJECT ROLES AND RESPONSIBILITIES

The Project is a sizeable endeavor and will involve a multitude of contractors, construction workers, and technical staff, overseen by various levels of management. Figure 2 outlines the organizational structure of the Project. In this structure, the MI Project Manager (PM) is responsible for overseeing the project site. Under the MI PM the workforce is divided into Construction Staff and Environmental Assessment Staff. Each plays a vital role in the protection and management of heritage resources.

Figure 2: Construction Organization Chart for Lake Manitoba and Lake St. Martin Outlet Channels Project

Lake Manitoba/Lake St.Martin Construction Organization Structure



Only an archaeologist (hereafter the Project Archaeologist) as assigned by MI will have the authority to handle and remove artifacts found within the project footprint under a valid heritage permit. The Project Archaeologist will be on-site in those areas and situations as dictated in Section 5. It is the responsibility of the workers on site to identify and protect heritage resources. The front lines of heritage management are the Indigenous Environmental Inspectors (IEI) and the Construction Contractor Staff. It is important that all workers that fall under these two categories be able to identify important heritage resources and be aware of the protocols regarding the protection of; or removal of and handling of artifacts (see Section 5.2 below).

Heritage resources may be found in many different locations of the Project and may be difficult to identify during active construction. Workers will receive heritage resources training prior to construction to aid workers in their ability to recognize heritage resources that are uncovered during construction. (see Line 12 in Table 3 of the EPP, which outlines orientation information). It is important to note that this training will only be on a basic level; they are not expected to act as Project Archaeologists when a potential heritage resource is encountered. Workers will be required to point out potential heritage resources during construction, but the Project Archaeologist will determine if the find is indeed a heritage resource.

Environmental Assessment Officers (EAOs), are responsible for ensuring that environmental issues, including heritage resources, are observed and reported and will be on site during active construction. If an IEI or construction worker identifies a potential heritage resource, they will contact the EAO or designated alternate (reference to the EAO throughout the rest of the document also refers to a designated alternate). The information will be shared with the environment and construction teams according to the organizational structure in Figure 2. The MI Construction Supervisor, or designated alternate (also referred to as Construction Inspector) will enact the Chance Find Procedure.

If any Construction Contractor Staff identifies a potential heritage resource, they will notify their immediate supervisor, who will then contact the MI Construction Supervisor. The MI Construction Supervisor will inform the environment team before enacting the Chance Find Procedure.

5.0 HERITAGE RESOURCES PROTECTION MEASURES

The following sections outline the protection measures that have been put in place for all heritage resources associated with the Project. Section 5.1 describes how known heritage resources will be managed during the construction and operation phases of the Project. Sections 5.2 and 5.3 outline the procedures that will be followed in the event of a Chance Find.

5.1 Managing Known Heritage Resources of the Project

As stated in the Section 1, this document provides for two facets of heritage protection: 1) the protection of previously known heritage resources; and 2) the protection of heritage resources and human remains should they be unearthed or discovered during the construction and operating phases of the Project. This section deals with the former, providing information and guidelines on heritage resources related to the Project as established by pre-construction heritage investigations and Indigenous rights-holder consultations.

Known information about heritage resources within the PDA fall under three classifications:

- 1) Heritage Sensitive Areas (HSAs);
- 2) Known Heritage Resources; and
- 3) Culturally Important Areas (CIAs).

The information found in each of these classifications was gathered during the pre-construction phase of the Project, and in turn influenced the specific strategies and measures to be followed during the construction and operating phases of the Project. The specific data that falls under each classification can be found in the EPP.

5.1.1 Heritage Sensitive Areas

HSAs are those portions of the PDA in which pre-construction desktop screening and subsequent field assessments suggest a high potential for archaeological materials. This high likelihood is based on an interpretation of topographic data with an archaeological focus, including the type of landform, the landform's relationship to the surrounding area, its proximity to major water sources, and its cultural and/or historical context. This data informed the predictive modeling on which the desktop screening was based. The results of the HRIA fieldwork then further refined this classification.

Portions of the PDA classified as HSAs during the desktop screening process were investigated during the pre-construction HRIA. Some HSAs were found to contain heritage resources. Certain HSAs in which heritage resources were not found during the HRIA may still be considered to contain a high potential for archaeological material, as the lack of known heritage resources does not necessarily eliminate the likelihood that heritage resources may exist in these areas. While archaeological materials are not expected to be encountered in such areas, MI is advised that even the most thorough archaeological study may not identify

all archaeological materials that may be present. Thus, HSAs may still require additional inspection measures during the construction phase of the Project.

An HSA is identified in the EPP as being an Environmental Sensitive Site (ESS). In the case of the HSA, the sensitivity is towards potential heritage resources. The EPP will highlight the location of the ESS within the PDA, identify any potential effects construction may have, and outline specific contractor protocols to follow when working within the ESS. Project Archaeologists are not required to be on site for heritage monitoring when construction activities occur within the HSA ESS. However, the EI will take extra measures to inspect soil layers within the ESS and enact the Chance Find procedure if heritage resources are encountered (see Section 5.2).

5.1.2 Known Heritage Sites within the PDA

Known heritage sites within the PDA were identified during the pre-construction HRIA. All heritage sites must be mitigated to a level that satisfies the requirements of HRB and the Heritage Resources Act before construction in the area can proceed. However, some sites may hold the potential to contain additional archaeological materials that were not recovered in the pre-construction surveys. The location of a known heritage site will be classified in the EPP as an ESS in the same manner as an HSA, in order to acknowledge that potential for more archaeological material.

The EPP will highlight the location of the heritage site within the PDA, identify any potential effects construction may have, and outline specific contractor protocols to follow when working within the ESS. For an ESS in which a Project Archaeologist is required to be present for heritage monitoring as directed by HRB, the Project Archaeologist will take the extra measures to inspect and provide direction for the excavation by mechanical means. For the remaining known heritage sites, the IEI will take extra measures to inspect soil layers within the ESS and enact the Chance Find procedure if heritage resources are encountered (see Section 5.2).

5.1.3 Culturally Important Areas

CIAs are locations within the PDA that hold historic, social, economic, and/or spiritual value to the inhabitants of the Project Local and Regional assessment areas. Examples of CIAs may include burial sites, sacred sites, ceremonial sites, specific berry or plant foraging areas, or specific hunting locations. The CIAs were identified during the pre-construction HRIA and is ongoing through rights-holder and stakeholder engagement. The location of a CIA will be classified in the EPP as an ESS without detailing sensitive information to protect the area. In the case of a CIA, the sensitivity is towards cultural resources.

The EPP will highlight the location of the ESS within the PDA, identify any potential impacts construction may have, and outline specific contractor protocols to follow when working within the CIA ESS. EIs will take extra measures to identify cultural resources in the CIA ESS, document any potential impacts to a CIA, and enact the Chance Find procedure if cultural resources are encountered or impacted (see Section 5.2).

5.2 Procedures for Chance Find Heritage Resources

As noted in Section 3, a Chance Find is a heritage resource (including human remains) that are unearthed or discovered during the construction and operating phases of the Project. It is possible for Chance Finds to occur during any phase of the Project and in any location within the PDA, even in areas that were considered a low probability for heritage resources during the pre-construction HRIA.

All workers on the Project should be aware of the protocols regarding the protection of; or removal of; and handling of artifacts. However, only the Project Archaeologist has the authority to handle and remove artifacts. When there is no Project Archaeologist on site, the EI will inform the team of the situation and the MI Construction Supervisor will enact the Chance Find procedures, which may involve the EAO bringing the Project Archaeologist on site.

The following describes the procedures that will be followed if heritage resources are encountered during construction activities for the Project.

1. All construction activities at the location of the find will cease immediately. An immediate work-stop buffer zone will be enacted around the find.
2. All heritage resource items will be left in the same position in which they were noted or discovered.
3. If a Construction Contractor Staff is the first to identify the find, they will notify their immediate supervisor, who will then contact the MI Construction Supervisor. The MI Construction Supervisor will then notify the Senior EAO.
4. If an IEI is the first to identify the find, they will notify the EAO and the MI Construction Supervisor of the situation.
5. The MI Construction Supervisor will enact the Chance Find Procedure.
6. A buffer zone will be erected around the find at a minimum of 50 m in radius. The zone must be established with a highly visible physical barrier. No construction activities will take place within the buffer zone. This buffer zone may be expanded or contracted at any time during the procedures below.
7. The initial physical barrier may be composed of wooden stakes with either the top 30 cm of each stake spray painted green or wrapped with green flagging, placed at a minimum of 10 m apart. All construction workers must adhere to the established boundaries and stay outside of the buffer zone.
8. The IEI and/or EAO will gather as much information about the find as possible to provide the Project Archaeologist with a complete picture of the situation that will aid in determining the significance of the find. This data should include the find's location, description, condition, and type of activity that led to it being found. The IEI and/or EAO should also take detailed notes, GPS coordinates, and photos of the find.
9. The EAO will contact the Project Archaeologist. In certain situations, an off-site delegate (commonly the Senior EAO) may have to be the one to contact the Project Archaeologist.
10. The EAO, or their delegate, will supply information about the find to the Project Archaeologist, who will then determine the significance of the find and the appropriate next steps in procedure. **(see special procedures for specific types of heritage resource below).**

- a. In certain circumstances the Project Archaeologist may determine it necessary to establish a more permanent, stable, or noticeable barrier around the heritage resource. In this event, the wooden staking will be replaced with snow fencing held with metal posts as directed by the MI Construction Supervisor.
11. If deemed necessary, the Project Archaeologist will come to site and conduct an investigation of the find based on professional guidelines. In this event, the Project Archaeologist will notify HRB of the find and obtain the required heritage permits for the investigation.
12. The Project Archaeologist will document the find with notes, photographs and recording of the GPS coordinates. Artifacts will be collected according to professional guidelines.
13. The Project Archaeologist will work with HRB to determine if additional measures are required for the find.
14. The Project Archaeologist will conduct, or oversee others who will conduct activities relating to any additional measures as required. These activities may include salvage archaeology, mitigation strategies, and/or on-going monitoring and supervision of the removal of soils associated with the site until the Project Archaeologist is satisfied that the heritage resource is no longer endangered by the construction activity.
15. Once HRB (and/or other parties as outlined below) is satisfied with the outcome of the investigation, construction activities can commence in the find area unless alternate measures have been established.

5.3 Additional Procedures for Specific Chance Find Heritage Resources

The following sections detail the types of heritage resources that may be encountered during construction activities of the Project. The general procedures above must be followed; however, for each type listed below, the additional procedures must be enacted.

5.3.1 Human Remains

Description

Human Remains, as defined by *The Heritage Resources Act*, Section 43(1), are “remains of human bodies that in the opinion of the minister have heritage significance and that are situated or discovered outside a recognized cemetery or burial ground in respect of which there is some manner of identifying the persons buried therein.” For practical purposes, human remains refer to the remains of human bodies, often recovered in skeletal form. This may range from a single bone or tooth to entire complete skeletons. It may be difficult for construction personnel to identify bone as human rather than animal. It is always best to err on the side of caution, assume the bone is human remains, and treat the find accordingly. The policies in which the Government of Manitoba protects and preserves found human remains are stated and described in the *Province of Manitoba Policy Concerning the Reporting, Exhumation, and Reburial of Found Human Remains* (1987). The procedures described below are governed by this document.

Any human bone uncovered during construction must be treated with the utmost respect. No human remains will be disturbed or removed from their original resting place unless the action is necessary,

unavoidable, and done at the direction of qualified personnel. No photographs or video recordings will be taken of the human remains unless directed by the Project Archaeologist, HRB, or the Royal Canadian Mounted Police (RCMP).

Funerary objects may also be found alongside human remains. Funerary objects are artifacts (such as clothing, cloth, pouches, stone tools, jewelry, special rocks, etc.) that have been buried with the individual. Funerary objects are considered sacred and must be treated with the same respect as the human remains and must not be separated from the human remains except by qualified personnel.

Additional Procedures

1. Steps 1 through 10 of the Procedures for Chance Find Heritage Resources (Section 5.2 above) will be followed. These tasks include immediate work stoppage in a 50 m radius from the find, the establishment of a physical buffer zone, and the enactment of the Chance Find Procedure by the MI Construction Supervisor.
2. All human remains and associated funerary goods will be left in the same position in which they were noted or discovered. The sole exception is if the human remains are found inside an excavator bucket that has not been dumped. In this case, the construction crew may empty the bucket by laying a tarp down on the ground immediately adjacent to the excavator (and within the 50 m buffer zone) and carefully empty the contents of the bucket onto the tarp.
3. A tarp will be placed overtop the remains to protect it from sight and the elements. The tarp must be secured only on the edges.
4. All heavy equipment will vacate the area within the 50 m, with spotters taking care to avoid any other potential bone or artifacts in the vicinity.
5. In the case of human remains, a more permanent buffer than wooden staking is required. Once the heavy equipment has vacated the 50 m area, snow fencing (or a similar barrier) must be erected.
6. After the erection of the barrier / snow fencing, all construction workers, contractors, and members of the public must remain outside of the buffer unless directed by the MI Construction Supervisor at the direction of Project Archaeologist, HRB, or the RCMP. All activity concerning the human remains must be conducted as much as possible out of sight of casual viewers.
7. The EAO will contact the Project Archaeologist, who will contact HRB. The Project Archaeologist and/or HRB will determine if the remains are human or non-human. The determination may be made from off-site based on supplied evidence, or may require an on-site visit for verification.
8. If the Project Archaeologist is off-site, the EI may be asked to perform certain tasks to assist the Project Archaeologist in determining the significance of the find. These tasks may include photographing the remains, the site area, the funerary objects, or soils and soil discolorations. These tasks must only be done if directed by the Project Archaeologist and/or HRB.
9. If the skeletal remains are identified as human, then the HRB will immediately contact the RCMP. Proper jurisdiction will be determined by the RCMP and HRB. If the remains are identified as animal, the appropriate procedures will be followed (see Section 5.3.2, Animal Remains).
10. The RCMP will determine if the remains are forensic (ie. relating to a crime).
11. If the remains are determined to be forensic, or cannot be immediately classified as non-forensic, then the RCMP will have jurisdiction over the area and the custody and recovery of the remains.

12. If the RCMP determines the remains are non-forensic, then HRB will have jurisdiction over the area and the custody and recovery of the remains.
13. HRB will work with MI to contact relevant parties of the find and take any appropriate action that was previously agreed upon with said parties.
14. HRB will determine if the removal of the human remains is necessary. HRB will lead the exhumation of the remains, or may delegate the Project Archaeologist to conduct the exhumation.
15. If the Project Archaeologist leads the exhumation, all proper permits will be acquired and proper exhumation procedures will be followed. Standard guidelines for reporting will also be followed.
16. Technical reports submitted and approved by MI and HRB will be shared with relevant parties, as part of legislative requirements and contractual agreements.
17. Once HRB and other relevant parties are satisfied with the outcome of the investigation, construction activities can commence in the find area unless alternate measures have been established.
18. All visitors to the site must adhere to Project Risk and Safety Plan.
19. The situation may also arise in which the Project Archaeologist, during the investigation of a general Chance Find Heritage Resource, unearths human remains. In this situation, the Procedure for Human Remains will be immediately enacted for the entire heritage site.

5.3.2 Animal Remains

Description

Animal remains refer to the remains of animal bodies, often recovered in skeletal form. This may range from a single bone or tooth to entire complete skeletons. Animal remains may exist within the PDA for natural or cultural reasons. Natural reasons include situations in which an animal died naturally or was killed by other animals. In such cases the animal remains are not usually considered a heritage resource. Cultural reasons involve human activity. Such activity includes hunting, butchering, transporting, or otherwise modifying animal remains. Animal remains that are associated with human activity may be considered heritage resource.

It may be difficult for construction personnel to distinguish between animal bone and human bone. If a bone cannot be clearly identified as animal rather than human, it is always best to err on the side of caution. The find should be treated as human remains, and the procedures in Section 5.3.1 should be followed until the find is proven otherwise.

Additional Procedures

1. Steps 1 through 10 of the Procedures for Chance Find Heritage Resources (Section 5.2) will be followed. These tasks include immediate work stoppage in a 50 m radius from the find, the establishment of a physical buffer zone, and the enactment of the Chance Find Procedure by the EI.
2. If the find is possibly human, then Steps 1 through 7 of the Procedures for Human Remains (Section 5.3.1) will be followed. These tasks include the establishment of a snow fence buffer. The Project Archaeologist and/or HRB will determine if the remains are human or non-human.

3. If the find is determined to be human, then the Procedures for Human Remains (Section 5.3.1) will continued to be followed.
4. If the find is determined to be non-human, the procedures below will be followed.
5. If the find is definitely non-human, the Project Archaeologist will then determine if the find is considered a heritage resource. If deemed necessary, the Project Archaeologist will come to site and conduct an investigation of the find based on professional guidelines. In this event, the Project Archaeologist will notify HRB of the find (if they were not already part of the investigation) and obtain the required heritage permits for the investigation.
6. The Project Archaeologist will document the find with notes, photographs and recording of GPS coordinates. Artifacts will be collected according to professional guidelines.
7. The Project Archaeologist will work with HRB to determine if additional measures are required for the find.
8. The Project Archaeologist will conduct, or oversee others who will conduct activities relating to any additional measures as required. These activities may include salvage archaeology, mitigation strategies, and/or on-going monitoring and supervision of the removal of soils associated with the site until the Project Archaeologist is satisfied that the heritage resource is no longer endangered by the construction activity.
9. Once HRB (and/or other parties as outlined below) is satisfied with the outcome of the investigation, construction activities can commence in the find area unless alternate measures have been established.

5.3.3 Artifacts: Stone Tools, Lithics, and Pottery

Description

Common Pre-Contact artifacts recovered from heritage sites include stone tools, lithics, and pottery. Tools fashioned from stone could take the form of spear and dart points, arrowheads, knives, scrapers, hammers, and adzes. The tools may as large as a person's forearm or as small as a thumbnail. They may be found complete or as only as fragments. Lithic debitage are the stone debris created and left over from the manufacture of stone tools. This material can also vary greatly in size; some stone flakes can be smaller than a pea. Pre-Contact pottery are storage vessels fashioned from fired clay. Vessels may be found complete or in small fragments.

Additional Procedures

The general Procedures for Chance Find Heritage Resources outlined in Section 5.2 will adequately address the concerns associated with these heritage objects. If evidence is found during the investigation that any of these heritage objects may be a funerary object, or associated with a burial or human remains, then the Procedure for Human Remains (Section 5.3.1) will be immediately enacted for the entire heritage site.

5.3.4 Artifacts: Historic Objects

Description

Artifacts deemed historic may date from as far back as the early Fur Trade Period (late 17th Century) and as recent as the mid-20th Century. Historic artifacts are often found along old trails or near fur trade posts or old cabin sites. Common fur trade era historic artifacts (circa 1650-1850) include gun flints and musket balls, blown glass bottles, earthenware ceramics, glass beads, bone buttons, and handmade nails. Common later historic artifacts (circa 1850-1940) include cartridge shell casings, molded or machine-made bottles, transfer-print ceramics, hole-in-top tin cans, metal buttons, and cut nails. The items may be found complete or only as fragments.

Additional Procedures

The general Procedures for Chance Find Heritage Resources outlined in Section 5.2 will adequately address the concerns associated with these heritage objects. If evidence is found during the investigation that any of these heritage objects may be a funerary object, or associated with a burial or human remains, then the Procedure for Human Remains (Section 5.3.1) will be immediately enacted for the entire heritage site.

5.3.5 Features: Hearths and Stained Soils

Description

Unusual soil staining could represent several cultural features. The most common is a hearth. A hearth is the physical remains of a firepit. Common characteristics of a hearth include white and grey ash, blackened earth, presence of charcoal, and the presence of burnt or calcined (white) bone fragments. The hearth may, but not always, be well-defined with a ring of stones. The hearth may also contain a large amount of stones within the pit.

Red or yellow soil staining may represent ochre, a mineral with special significance to Indigenous peoples. Dark black greasy soil may represent the remains of organic material. If this soil is found to be associated with cultural activity, it may represent a kill site or butchering site. Unusual staining could also indicate the presence of a burial.

Additional Procedures

1. The general Procedures for Chance Find Heritage Resources outlined in Section 5.2 will adequately address the concerns associated with these heritage objects.
2. In addition to those procedures, the feature must be covered with a tarp to protect it from the elements. The tarp must be secured only on the edges.
3. If evidence is found during the investigation that the stained soil may be associated with a burial or human remains, then the Procedure for Human Remains (Section 5.3.1) will be immediately enacted for the entire heritage site.

5.3.6 Features: Stone Configurations

Description

Stone configurations are features that are constructed of cobbles and boulders in a meaningful way. Stone configurations may have been built as trail markers, caches, ceremonial sites, dwelling foundations or rings, and burials or memorials. A common stone configuration is a cairn, a cluster or pile of stones that may be covering a burial site or a cache of food or tools. Indigenous peoples also made use of naturally-occurring stone features. In these instances, the feature is not modified in any way by humans, but was used as a marker or a ceremonial centre and may be considered sacred. One such feature is an erratic, a rock or boulder, usually very large, that is different from the surrounding rock, often deposited through glacial or hydrological action.

Additional Procedures

The general Procedures for Chance Find Heritage Resources outlined in Section 5.2 will adequately address the concerns associated with these heritage objects. If evidence is found during the investigation that the stone feature may be associated with a burial or human remains, then the Procedure for Human Remains (Section 5.3.1) will be immediately enacted for the entire heritage site.

5.3.7 Features: Petroglyphs and Pictographs

Description

A petroglyph is a figure or scene inscribed onto a rock surface by grinding, pecking, or incising. A pictograph is a figure or scene painted on the rock the surface. Both features may be considered sacred.

Additional Procedures

1. The general Procedures for Chance Find Heritage Resources outlined in Section 5.2 will adequately address the concerns associated with these heritage objects.
2. In addition to those procedures, the feature must be covered with a tarp to protect it from sight and the elements. The tarp must be secured only on the edges. If the location or position of the feature makes this task difficult, then the Project Archaeologist and/or HRB will decide on the best available technique.
3. If evidence is found during the investigation that the feature may be associated with a burial or human remains, then the Procedure for Human Remains (Section 5.3.1) will be immediately enacted for the entire heritage site.
4. As these features may hold sacred cultural significance, HRB will work with MI to contact relevant parties of the find and take any appropriate action that was previously agreed upon with said parties.
5. Technical reports submitted and approved by MI and HRB will be shared with relevant parties, as part of legislative requirements and contractual agreements.
6. Once HRB and other relevant parties are satisfied with the outcome of the investigation, construction activities can commence in the find area unless alternate measures have been established.
7. All visitors to the site must adhere to Project safety rules and regulations.

5.3.8 Features: Historic Buildings or Structures

Description

Buildings or structures deemed historic may date from as far back as the early Fur Trade Period (late 17th Century) and as recent as the mid-20th Century. Historic features can be made of wood or stone and could be found in various stages of declining condition. Historic features could include fur trade buildings or old cabin sites.

Additional Procedures

The general Procedures for Chance Find Heritage Resources outlined in Section 5.2 will adequately address the concerns associated with these heritage objects. If evidence is found during the investigation that the feature may be associated with a burial or human remains, then the Procedure for Human Remains (Section 5.3.1) will be immediately enacted for the entire heritage site.

5.3.9 Cultural Use Areas

Description

Cultural Use Areas are those areas that exhibit evidence of past cultural activities. They may not be considered archaeological, but are often still considered a heritage resource. Common evidence for Cultural Use Areas include culturally modified trees and brightly coloured cloth hung in trees.

Additional Procedures

1. The general Procedures for Chance Find Heritage Resources outlined in Section 5.2 will adequately address the concerns associated with these heritage objects.
2. If evidence is found during the investigation that the feature may be associated with a burial or human remains, then the Procedure for Human Remains (Section 5.3.1) will be immediately enacted for the entire heritage site.
3. As these features may hold sacred cultural significance, HRB will work with MI to contact relevant parties of the find and take any appropriate action that was previously agreed upon with said parties.
4. Technical reports submitted and approved by MI and HRB will be shared with relevant parties, as part of legislative requirements and contractual agreements.
5. Once HRB and other relevant parties are satisfied with the outcome of the investigation, construction activities can commence in the find area unless alternate measures have been established.
6. All visitors to the site must adhere to Project safety rules and regulations.

6.0 REPORTING AND CLOSURE

Activities relating to heritage resources that occur during the Project must be documented by a qualified Professional Archaeologist. To document the work, the archaeologist must hold a valid HRB heritage permit. As a condition for holding a heritage permit, the archaeologist must submit a detailed report to the HRB on behalf of MI, outlining construction activities and their impacts on heritage resources, the procedures that were followed as laid out by this HRPP, and recommendations for site treatment and protection in relation to future development.

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7.0 REFERENCES

7.1 Literature Citation

Government of Manitoba. 1986. Heritage Resources Act. Winnipeg.

Government of Manitoba. 1987. The Province of Manitoba Policy Concerning the Reporting, Exhumation, and Reburial of Found Human Remains. Winnipeg.

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