

# LAKE MANITOBA LAKE ST. MARTIN

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## OUTLET CHANNELS PROJECT

MANITOBA TRANSPORTATION AND  
INFRASTRUCTURE

### Access Management Plan

June 30, 2022

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## DISCLAIMER

This document was developed to support the Environmental Management Program (EMP) for the Lake Manitoba and Lake St. Martin Outlet Channels Project (the Project). It has been prepared by Manitoba Transportation and Infrastructure as a way to share information and facilitate discussions with Indigenous rights-holders, stakeholders and the public. It has been prepared using existing environmental and engineering information and 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. This draft plan should be read as a whole, in consideration of the entire EMP, and sections or parts should not be read out of context.

Revisions to draft plans have been informed by and will be based on information received from the engagement and consultation process, the Environmental Assessment process, Project planning activities, and on conditions of provincial and federal environmental regulatory approvals received for the Project. As these will be living documents, any changes to the plans that occur after Project approvals are received will be shared with regulators, Indigenous rights-holders and stakeholders prior to implementation of the change. Either a revision number or subsequent amendment would be added to the specific environmental management plan to communicate the revision or change.

## 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 Provincial Road (PR) 239, and other ancillary infrastructure.

Manitoba Transportation and Infrastructure is the proponent for the proposed Project. After receipt of the required regulatory approvals, Manitoba Transportation and Infrastructure will develop, manage and operate the Project. This Access Management Plan (AMP) 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 intent of the EMP is to facilitate the timely and effective implementation of the environmental protection measures committed to in the Project Environmental Impact Statement (EIS), the requirements and conditions of the provincial licence issued under *The Environment Act*, the federal Decision Statement issued under *The Canadian Environmental Act 2012*, and other approvals received for the Project. This includes the verification that environmental commitments are implemented, monitored, evaluated for effectiveness, and adjustments made if/as required. It includes a commitment that information is reported back in a timely manner for adjustment, if required.

A key component for the success of the EMP is environmental monitoring, such that environmental management measures are inspected and modified for compliance with environmental and regulatory requirements, including those set out in provincial and federal approvals received for the Project. As indicated, monitoring results will be reviewed and used to verify predicted environmental assessment conclusions and effectiveness of mitigation measures. If unanticipated effects occur, or if mitigation measures are inadequate, adaptive management measures and subsequent monitoring will be applied as described further in individual environmental management and monitoring plans.

Monitoring results and application of adaptive management measures will inform follow-up reporting to regulators and any required revisions to environmental management plans. Manitoba Transportation and Infrastructure has initiated discussions with rights-holders and the Rural Municipality (RM) of Grahamdale in the Project area on the establishment of an Environmental Advisory Committee (EAC). The EAC would be a platform for sharing monitoring results and discussing issues of concern. In addition, MTI anticipates that the EAC will coordinate Indigenous Environmental Monitors and communications during the construction period and will be working with rights-holders and stakeholders on its structure and purpose.

Manitoba Transportation and Infrastructure remains committed to consultation and ongoing engagement with Indigenous rights-holders and stakeholders that are potentially impacted by the Project. Detailed EMP review discussions were incorporated into Indigenous group-specific consultation work plans. Engagement opportunities included virtual open house events, sharing draft environmental management and monitoring plans, sharing plan-specific questionnaires, and meetings to discuss related questions and recommendations.

The intent has been to offer multiple avenues to share information about the Project so that rights-holders and stakeholders would be informed and could provide meaningful input into Project planning. The original draft EMP plans and questionnaires that were posted on the Project website for public review and comment are being replaced by the second draft of each plan as it becomes available. Feedback and recommendations received were used to update the current version of the draft plans, which are posted to the Project website at: <https://www.gov.mb.ca/mit/wms/lmblsmoutlets/environmental/index.html>.

Figure A displays a summary of the EMP process. The EMP provides the overarching framework for the Project Construction Environmental Management Program (CEMP) and the Operation Environmental Management Program (OEMP). These will be updated prior to Project construction and operation, respectively, and will consider applicable conditions of *The Environmental Act* provincial licence, *Canadian Environmental Assessment Act 2012* federal Decision Statement conditions and other approvals, any other pertinent findings through the design and regulatory review processes, and key relevant outcomes of the ongoing Indigenous consultation and public engagement processes. Until such time, these plans will remain in draft form.

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 that will guide Manitoba Transportation and Infrastructure's development of the Project's contract documents and subsequently, the Contractor(s) activities, in an environmentally responsible manner and to meet regulatory compliance in constructing the Project. The OEMP will include some of 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

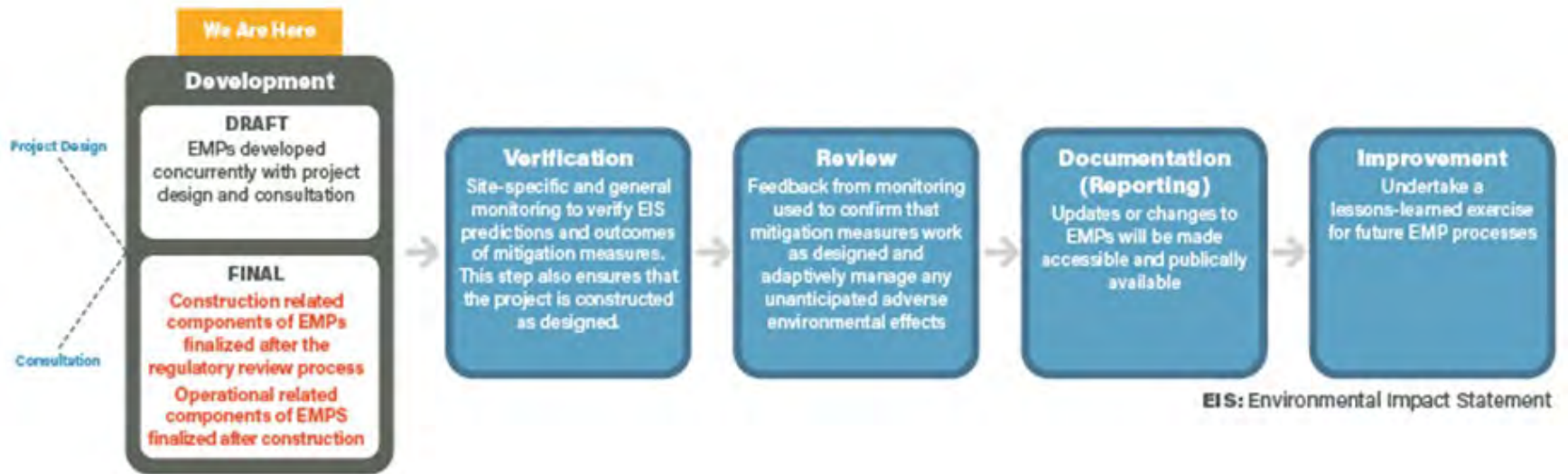


Figure A: EMP Process



## LIST OF ACRONYMS AND GLOSSARY OF TERMS

### Acronyms

AgBMP	Agricultural Biosecurity Management Plan
AMP	Access Management Plan
CEMP	Construction Environmental Management Program
EIS	Environmental Impact Statement
EMP	Environmental Management Program
km	kilometre
LMOC	Lake Manitoba Outlet Channel
LSMOC	Lake St. Martin Outlet Channel
OEMP	Operation Environmental Management Program
PDA	Project Development Area
PR	Provincial Road
PTH	Provincial Trunk Highway
the Project	The Lake Manitoba and Lake St. Martin Permanent Outlet Channels Project
RM	Rural Municipality
ROW	right-of-way
RVMP	Revegetation Management Plan
WCS	Water Control Structure

## Glossary of Terms

**Cofferdam:** An enclosure, usually only partially obstructing a waterbody, from which water is pumped to expose the bottom to permit construction.

**Contractor:** refers to the individuals, entities or groups contracted by Manitoba Transportation and Infrastructure to undertake specific Project construction, operation or maintenance activities, and includes all subcontractors and affiliates.

**Environmental Monitor:** refers to the individuals, groups or designated representatives engaged by Manitoba Transportation and Infrastructure to monitor, inspect, and document compliance with contractual and regulatory requirements associated with the construction activities and associated works for the Project. The monitor may also be an active member (or representative) of the Project's Environmental Advisory Committee.

**Fish productivity:** Rate of formation of organic matter over a defined period; this can include fish growth and the production of offspring.

**Harvesting:** Activities in which animal, plant and fish resources are obtained/conducted for domestic/recreational purposes, such as fishing, hunting, plant harvesting, and camping.

**Inspector:** refers to the individuals or designated representatives delegated by Manitoba Transportation and Infrastructure to monitor, inspect, document, and enforce compliance with contractual and regulatory requirements associated with the construction and/or maintenance activities and associated works for the Project.

**Owner:** refers to Manitoba Transportation and Infrastructure or a designated representative delegated by Manitoba Transportation and Infrastructure with overall responsibility for, and oversight of, Project design, construction and operation.

**Project Development Area (PDA):** is the physical space or directly affected area within which Project components and activities are located and the immediately adjacent area, including designated ROW.

**Rights-holders:** include First Nations, Metis Communities and other Indigenous communities who hold Aboriginal or Treaty rights that are protected under Section 35 of *The Constitution Act 1982*. Commonly, these include hunting, trapping, fishing or gathering rights.

**Quarry:** An open excavation or pit from which stone, gravel or sand is obtained by digging, cutting or blasting.

**Shoofly:** Short detour at Project site that allows traffic to be maintained during construction.

# Part 1: Introduction

## 1.0 PURPOSE AND SCOPE

The Access Management Plan (AMP) is a component of the overall Environmental Management Program (EMP) for the Lake Manitoba and Lake St. Martin Permanent Outlet Channel Project (the Project). The AMP provides a framework for access management related to the Lake Manitoba Outlet Channel (LMOC) and the Lake St. Martin Outlet Channel (LSMOC) and related infrastructure such as the water control structures.

The purpose of the AMP is to describe access control measures that will be present during construction and operation phases as they relate to protection of natural resources, public and worker safety and site security. The AMP addresses access-related issues of concern expressed by stakeholders, the public, and rights holders during the Indigenous and Public engagement process, as well as any relevant regulatory requirements. .

The AMP is intended to be a living document that will be revised if/as required to address any changes that may be required to improve effectiveness or address issues. In particular, during the detailed design stage of the Project additional information to be added to the AMP will include a description of the construction methods to be implemented, additional general arrangement layout drawings for the Project Development Area (PDA), and typical details for items such as security gates, fencing, warning signs, and buoys.

As the overall Project has two very distinct sections (LMOC and LSMOC) in different geographic areas, different AMP strategies are required for each. The LMOC is primarily located near and through developed private farmland with several provincial and municipal roads with many road access points. The LSMOC is primarily located in isolated, undeveloped Crown land used predominantly for traditional resource use activities, with few access points. As a result, the LMOC AMP has a focus on road and land access around and through the Project site, while the LSMOC AMP focuses on the natural environmental and access issues related to traditional resource use. Both areas require an AMP that deal with common important access - related issues, but each requires a focus on the unique issues for the type of surrounding terrain. Given the unique site characteristics of each of the channels, the AMP is organized into three parts:

- Part 1 includes information that is common to both the Lake Manitoba and Lake St. Martin Outlet Channels.
- Part 2 includes information that is specific to the Lake Manitoba Outlet Channel.
- Part 3 includes information that is specific to the Lake St. Martin Outlet Channel.

## 2.0 OBJECTIVES

The primary objectives of the AMP are to:

- Provide safe, coordinated access to the PDA during construction and operation.
- Provide safe passage for local residents and visitors to the area (both Indigenous and non-Indigenous) through the PDA at identified crossing locations.
- Support sustainable use through the protection of the area's natural resources.
- Allow the Owner and contractors to construct, operate and maintain the Project year-round.
- Provide security for Project personnel and property.

In addition to the objectives of the AMP, other considerations include:

- Preserve and respect the socio-economic, cultural and heritage values of the lands around the Project.
- Prescribe measures to minimize potential negative direct and indirect effects on Project access.
- Protect land users from hazards resulting from construction and operation of the Project.
- Minimize land user conflicts.
- Provide public education and communication about the Project to promote safety for all and to maintain an understanding among specific relevant groups and the public-at-large regarding the access management measures being implemented and maintained, and the rationale for doing so.

## 3.0 OCCUPATIONAL SAFETY, HEALTH AND RISK MANAGEMENT

Occupational safety, health and risk management are issues that apply to all Manitoba Transportation and Infrastructure facilities and operations, employees, contractors, and visitors. Effectively managing risks to the safety, health and well-being of employees, visitors and the public arising out of the work activities performed by or on behalf of the Department is an important priority. The AMP will help manage the safety of Manitoba Transportation and Infrastructure employees, contractors, visitors and the public so that they are not adversely affected by Project construction or operations and that adherence to *The Workplace Safety and Health Act* and its associated regulations is achieved.

Strategies will be implemented so that the Project does not adversely affect worker and public safety, and these will include education and training, communication, fencing and signage. This AMP is organized into sections that address how information about the Project and access restrictions will be communicated from Manitoba Transportation and Infrastructure to residents of local Indigenous communities and non-Indigenous communities, access management measures that will be implemented during construction, and access management measures that will be implemented during Project operations. During the construction and operation phases, best practices relating to public safety around water control structures as outlined in industry guidelines shall be followed.

## Part 2: Lake Manitoba Outlet Channel

### 4.0 PROJECT INFORMATION

#### 4.1 Project Description

The Project will involve the construction and operation of the LMOC and associated components including a water control structure with power connections, bridges, realignment of Provincial Road (PR) 239, and other ancillary infrastructure. Details are provided in the EMP Framework document. The construction methodology for the LMOC is described in the Construction Environmental Management Program (CEMP).

#### 4.2 Site Characterization

The LMOC is primarily located near and through developed private farmland with a number of provincial and municipal roads with many road access points. The location of the LMOC generally follows Birch Creek, which includes several small lakes and wetlands, from Lake Manitoba to Lake St. Martin in a north-easterly direction (Figure 1). The LMOC is situated to the west of Birch Creek.

Birch Creek and its associated wetlands forms a natural boundary between the east and west sides of the Rural Municipality (RM) of Grahamdale. There are currently six road crossings across the Birch Creek wetland area that allow traffic movements. The first and main crossing over the Birch Creek wetland area is Provincial Trunk Highway (PTH) 6, which is the major north-south corridor in this area of the province and is the primary link to Northern Manitoba. This is a paved, limited access highway. The next three crossings (Township Line Road, Carne Ridge Road, and PR 239 [Steep Rock Road]) allow east-west traffic movement from PTH 6 to the community of Steep Rock and the surrounding area on the east side of Lake Manitoba, which is composed of cottage developments and farmland. Township Line Road and Carne Ridge Road are low volume gravel roads in reasonable condition that are used by local traffic to access farmland and cottages to the south of Steep Rock. PR 239 is a paved provincial roadway that is the main access to Steep Rock and the surrounding area, as well as the primary route used to transport materials from the Graymont's Faulkner lime production (Graymont) facility to PTH 6. This road is in relatively poor condition and requires regular patching due to the age of the pavement, the heavy truck traffic from Graymont's facility and increased recreational traffic. The remaining two crossings (Iverson Road and Birch Bay Road) are to the east of PTH 6 and are very low volume narrow gravel roads that service the local farmland in the immediate area.

All of these roads will be affected by the construction of the LMOC as it will sever a number of the roads and change the traffic flow patterns, especially for the farmers with land throughout the general PDA.

PART 2: LAKE MANITOBA OUTLET CHANNEL  
PROJECT INFORMATION

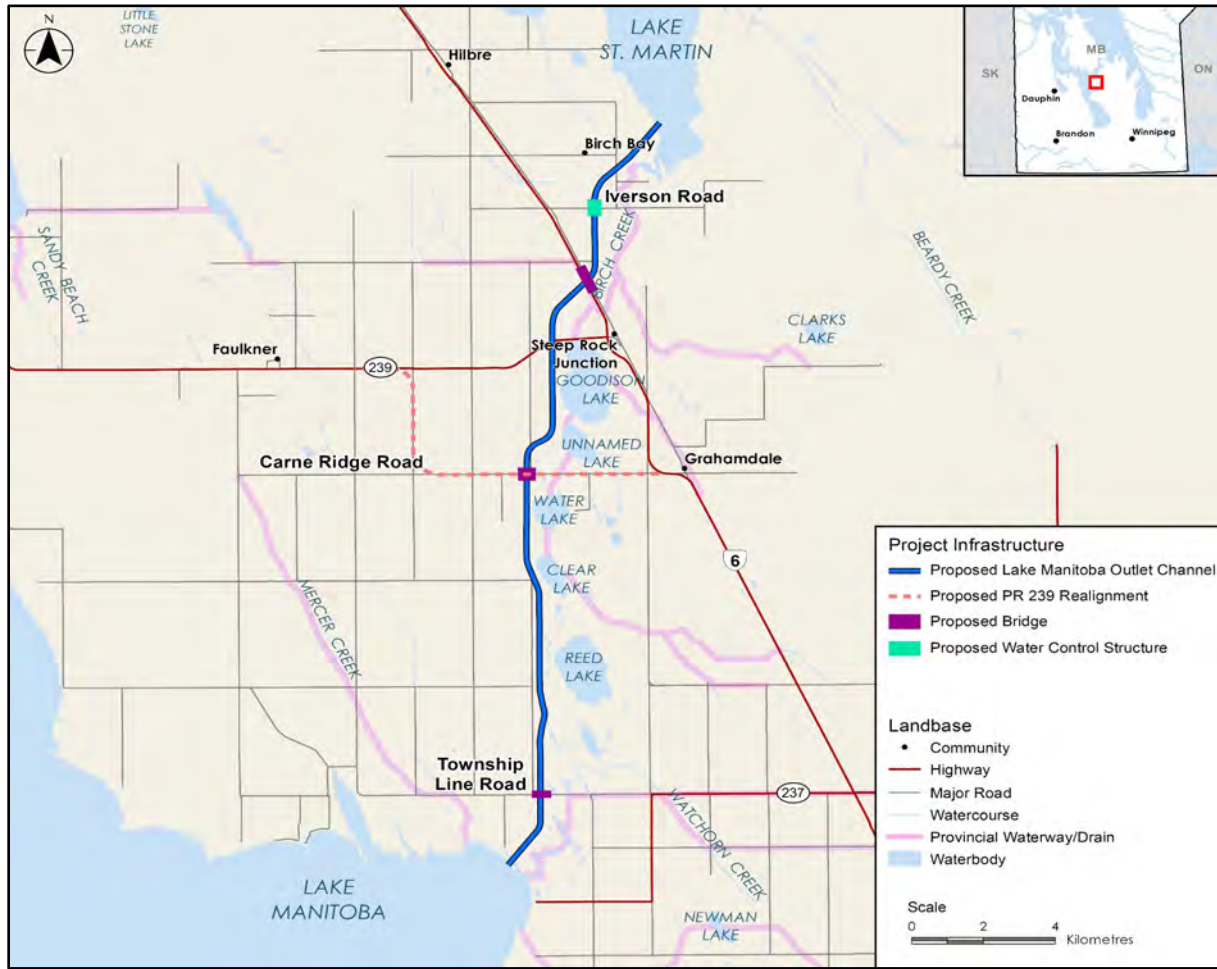


Figure 1: LMOOC Project Area

### 4.3 Project Engagement

Since 2013, Manitoba Transportation and Infrastructure has held several open houses in the RM of Grahamdale as well as other impacted communities in Winnipeg, Portage la Prairie, Lundar and Ashern and continues to meet with the local municipal council, rights-holders, stakeholders and other interest groups to keep them apprised of Project progress.

Engagement of Project stakeholders whose access may be impacted during the LMOC construction and operation was preceded by developing a tiered list of stakeholders with the top tier comprised predominantly of the RM of Grahamdale, directly impacted property owners, and Graymont's facility at Steep Rock. These stakeholders were engaged directly to gain their input and discuss access management options. Remaining stakeholders were informed via mail outs and other suitable communication media.

Ongoing engagement will be facilitated by means of focused meetings with individual landowners, the RM of Grahamdale and other interest groups. Additionally, consultation efforts with rights-holders also continues and those consultations will assist in further development of the AMP.

As stakeholder engagement progresses, the AMP will be updated and provided for consideration by stakeholders, reviewed by the Owner and approved by the local traffic authority, the RM of Grahamdale, in collaboration with Manitoba Transportation and Infrastructure's Highway Planning and Design section. The AMP will be subject to periodic review and updates when construction sequencing and tendering strategies are finalized or new information from ongoing engagement and consultation efforts dictates adjustments.

### 4.4 Notifications

Manitoba Transportation and Infrastructure will provide notifications on relevant information related to this plan as a part of ongoing engagement processes for the Project. Information will be shared with the EAC for dissemination to rights-holders, the RM of Grahamdale and local landowners during the construction phase, and communication protocols will be developed with input from rights holders and stakeholders for the operations phase.

Notifications regarding potential for flooding and subsequent need for operation of the Project will follow established procedures for other flood infrastructure. A notification system is being developed so that interested individuals or groups would receive notifications from Manitoba Transportation and Infrastructure on flood outlooks and advisories as well as infrastructure operations. Any interested individual or group can sign up to receive these notifications. When immediate public notification is required, notification may include use of the National Public Alerting System. In addition to this process, Manitoba Transportation and Infrastructure has also been notifying Indigenous communities on Lake Manitoba and Lake St. Martin regarding Portage Diversion operations via email. This process could be extended to include notifications for Project operation upon request.



## 5.0 CONSTRUCTION

### 5.1 Construction Access

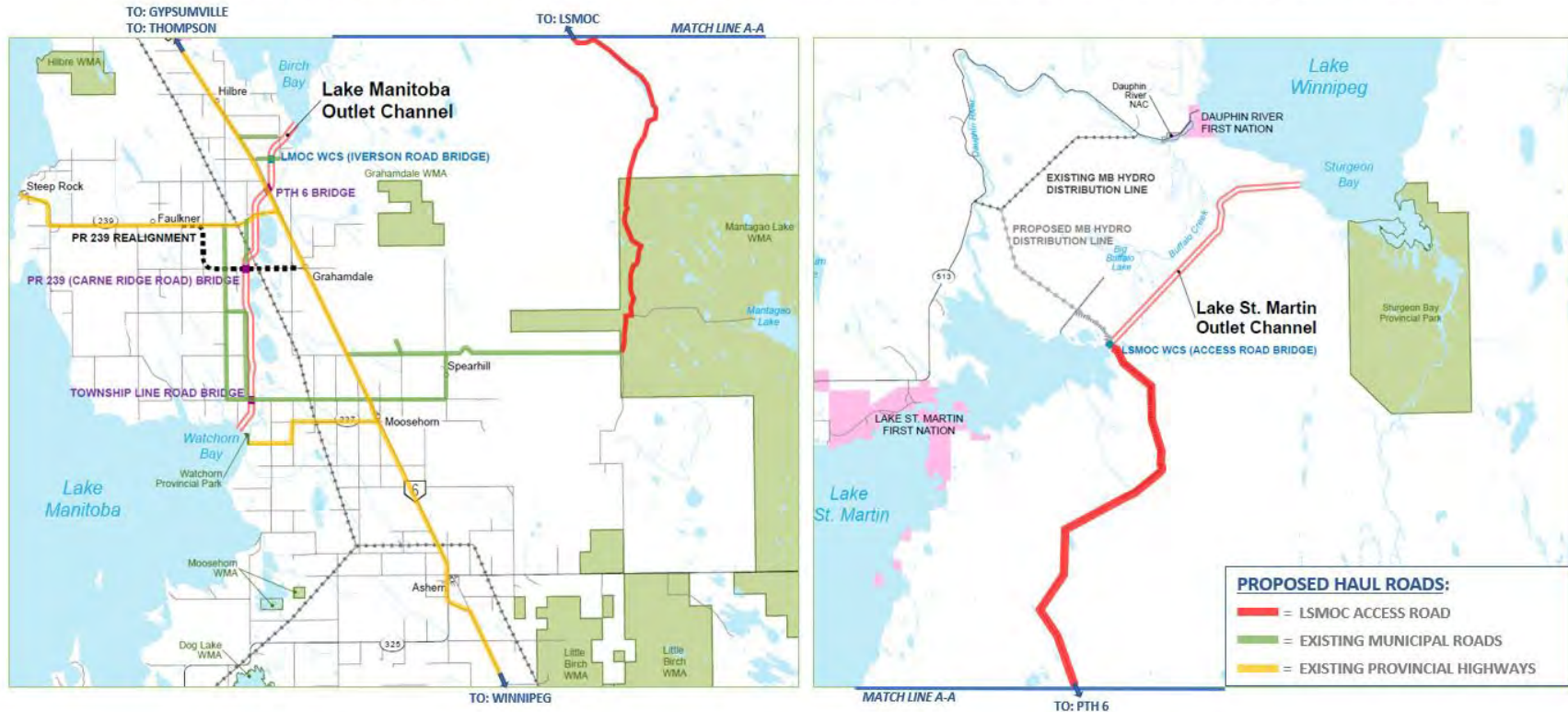
In consideration of public safety, access to the LMOC PDA will be restricted and controlled through a limited number of controlled access points on the west side of PDA. Emergency personnel may be exempted, depending on the situation. As far as practically possible, construction access to the Project site will be segregated from public travel routes by means of designated construction-only access routes and locations. This is also in keeping with the RM of Grahamdale's continued efforts to mitigate the anticipated impacts of construction activities on the community and road users.

As shown in Figure 2, a number of proposed access or haul roads have been identified for construction of the LMOC. PTH 6 will be the primary access route to the LMOC construction sites for the movement of equipment, materials and personnel. Secondary access to the southern and central outlet channel and bridge construction sites of the LMOC will utilize sections of PR 237 (a.k.a. Township Line Road), Carne Ridge Road (future PR 239) and the existing PR 239 (a.k.a. Steep Rock Road). Secondary access to the northern construction sites, which includes the outlet control structure and the PTH 6 bridge across the LMOC, will utilize Iverson Road as a dedicated construction access with detours for east-west public access across the LMOC, along Bankert and Birch Bay Roads.

To further mitigate the impact on the municipal road network and consequent interference with local agricultural, residential, recreational and commercial traffic, several potentially suitable locations for construction contractor's camps and lay down areas have been identified, and the conceptual locations are illustrated in Figure 2-1 of Appendix 2A. These conceptual locations will be evaluated during detailed design to assess whether they may be suitable to create permanent outlet channel infrastructure access points after construction for use by authorized personnel performing inspection, maintenance, and operations activities.

It should be noted that in general, suitable locations for contractor camps and laydown areas are determined by Contractors and Manitoba Transportation and Infrastructure's strategies for sequencing, tendering and procuring the construction. Additionally, a Project Area Entry Checkpoint will be established to provide a single, established location at which all incoming machinery must be checked for adequate cleanliness prior to entry into the Project area to access the PDA (see the Agricultural Biosecurity Management Plan (AgBMP) for additional details).

## Lake Manitoba & Lake St. Martin Outlet Channels – Proposed Site Access Roads



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



Figure 2: Proposed Site Access Roads

## 5.2 General Access Restrictions

During construction there will be access restrictions to the Project components. The PDA will not be accessible during construction, due to safety concerns. Access will be controlled by temporary perimeter fencing and signage in the vicinity of public roads. Access to the camp areas will be controlled and there will be no unauthorized public visits allowed to the contractor's construction camp, work areas, and laydown yards.

Use of the PDA by individuals not directly associated with the Project may be authorized for certain user groups under certain conditions. Prior to the start of construction, Manitoba Transportation and Infrastructure will establish a process to obtain permission to access the site. This process will likely include the following:

- Contacting the Owner (or designate) to request permission. Information to be provided from prospective users will include timelines of requested access, location within the PDA of requested access, and activities that the user plans to conduct.
- Upon site access during construction, users would be required to check in with the contractor's security personnel.
- Upon departure from the site during construction, users would be required to check out with the contractor's security personnel.

### 5.2.1 Firearms

Restrictions will be placed on firearms (e.g., rifles, handguns, shotguns, bows) as a measure to manage the safety of personnel at the site. Project workers will not be permitted to possess, transport, use, or store firearms within the PDA. In the event that a worker is found to have a firearm within the PDA, the worker will be disciplined accordingly.

### 5.2.2 Recreational Vehicles

Project workers will not be permitted to use, transport or store personal recreational vehicles (all-terrain vehicles, snowmobiles) on the Project site. This will help to reduce the potential impacts on habitats (ruts or damage to vegetation) and to manage access. Use of the surrounding Crown land outside of the PDA will not be restricted.

### 5.3 Site Security

Most of the LMOC right-of-way (ROW) is adjacent to private farmland with many potential access points. As noted previously, several proposed construction laydown areas have been strategically identified for various stages of construction. Access to active construction sites will be controlled by individual contractors with the use of dedicated security personnel, limiting and controlling access points to active construction zones, and installation of temporary perimeter fencing and signage around construction sites, camps, laydown areas and areas with potential public access concerns. Access points and construction site perimeters will be monitored during construction and security staff will record and notify the Inspector of any attempts to access the site by any unauthorized personnel.

### 5.4 Access Control

Access restriction measures for the Project will include road controls (gates), signage and fencing (both temporary and permanent). Certain areas (e.g., the water control structure [WCS]) will have gates and fences installed to protect the public from potential hazards created by the new construction. Signs will be posted at various locations indicating areas where public access is restricted, and in areas where members of the public need to be informed about potential safety issues (e.g., inlet, outlet and WCS areas), as a further precautionary measure. Signage will follow relevant Canadian standards and with Manitoba Transportation and Infrastructure corporate policies. Signage will be regularly monitored and maintained.

During construction of the new bridges and control structure across the LMOC, the east-west municipal roadway connectivity will be maintained by means of shoofly detours on Township Line and Carne Ridge/new PR 239 roads and the provision of a municipal road detour at Iverson Road. A shoofly detour will also be available where PTH 6 crosses the outlet channel ROW (between Carne Ridge and Iverson Roads) during construction of the new bridge at that location. The existing PR 239 will remain open until the construction of the realigned sections of new PR 239 and PTH 6, through Grahamdale, are complete. It is also anticipated that the existing PR 239 will remain open until the new PR 239 bridge crossing has been completed, at which point traffic will be switched over to the new PR 239 access, with the existing PR 239 closed across the LMOC ROW. Specific traffic flow management plans for individual construction sites will be developed as a part of detailed design and implemented by contractors to accommodate local user needs.

### 5.5 Access to Waterbodies

Construction activities at the inlet of the LMOC in Watchorn Bay on Lake Manitoba and the outlet of the LMOC near Birch Bay on Lake St. Martin will include excavation of the lake bed extending from the shoreline. Although the current boat traffic in these areas is minimal, to address the potential impacts of this work on navigation, safety measures, such as warning signage and marker buoys will be installed.

Signage will also be required to warn recreational vehicle operators and ice fishers of thin ice near these areas during winter months. Safety measures implemented will be in accordance with the applicable requirements from Transport Canada, *The Canadian Navigable Waters Act* and other applicable regulations and policies.

## 5.6 Land-Based Trails

Due to safety concerns, snowmobile trails within the Project site will not be accessible to members of the public during construction; including all snowmobile traffic within the ROW. The contractor and all of its associated employees will not be permitted to use these trails for recreational purposes.

## 5.7 Decommissioning Temporary Access

Temporary facilities and work areas, including laydown areas and construction camps that will not be needed for future maintenance activities, will be decommissioned and reclaimed following construction. Designated areas and temporary access roads will be leveled to natural or pre-existing grade and slope. Access routes will be contoured, de-compacted and trimmed to encourage natural revegetation. Closure of temporary construction work areas will typically consist of redistributing organic materials to encourage natural vegetation regeneration. Reseeding will occur, as required, following the Revegetation Management Plan (RVMP) for the Project. Decommissioning measures associated with temporary components are described in greater detail in the Site Decommissioning Plan.

## 6.0 OPERATION

To meet the objectives of the AMP, implementation of the required changes to the provincial and municipal road networks illustrated in Figure 2-1 (Appendix 2A), will need to be completed and fully functional, prior to the final completion of the LMOC.

With the road network changes completed, the impact to local road users during periods when the LMOC gates are open should be minimal. It should be limited to the additional traffic generated by the increased presence of operational staff involved with operating and maintaining the outlet channel infrastructure and environmental monitoring. During extreme flooding events, numbers of staff associated with operating, maintaining and safeguarding the outlet channel infrastructure may increase, but generally will be using the existing road network and predefined locations to gain access to different sections of the outlet channel infrastructure.

During periods when the LMOC WCS gates are closed (i.e., the majority of time), impacts to the road network and road users as a result of increased vehicular traffic will be negligible and limited to activities associated with periodic maintenance inspections and environmental monitoring. The establishment and maintenance of revegetation of the outlet channel embankments may require some additional activity initially but will diminish as permanent vegetation cover is established.

As a result of the design approach for the new PR 239 / Carne Ridge Road bridge crossing structure, the use of PR 239 for local, commercial and recreational traffic during operational periods, should not be impacted.

### 6.1 Operation Access

The outlet channel will have a total of four bridge structure crossings located at Township Line Road, Carne ridge Road / PR 239, PTH 6 and Iverson Road (Figure 1). It is anticipated that all of the bridge crossing structures and appurtenant roadways including the realigned sections of PR 239, will remain traversable when the gates of the LMOC are open.

Manitoba Transportation and Infrastructure maintenance and operations staff will use sections of the outlet channel embankments (spoil berms), located within the LMOC ROW, to maintain, inspect and/or operate the outlet channel infrastructure. Access to these areas will be off limits to the public.

### 6.2 General Access Restrictions

Access to Project infrastructure, including the outlet channel as well as the inlet, outlet and control structure, will be restricted post-construction. Infrastructure that poses a hazard or presents a security risk will be fenced, including the WCS (excluding the Iverson Road bridge crossing). The LMOC will be a critical component of provincial flood mitigation infrastructure and will also be registered as a provincial waterway. Warning signs indicating no unauthorized personnel will be installed at various locations along the LMOC.

Use of the PDA by individuals not directly associated with the Project may be authorized for certain user groups under certain conditions. Prior to the start of construction, Manitoba Transportation and Infrastructure will establish a process to obtain permission to access the site. This process will likely include the following:

- Contacting the Owner (or designate) to request permission. Information to be provided from prospective users will include timelines of requested access, location within the PDA of requested access, and activities that the user plans to conduct.
- Upon site access during construction, users would be required to check in with the contractor's security personnel.
- Upon departure from the site during construction, users would be required to check out with the contractor's security personnel.

Irregular ice formation in proximity to the bridges over the LMOC and at the WCS may present substantial safety hazards to recreational vehicle operators. These hazardous conditions may be amplified by winter operation of the channel. Despite access not being permitted to LMOC infrastructure, warning signs and markers will be installed near these structures to indicate the unsafe areas to promote safety.

### 6.3 Access Control

Access restriction measures for the LMOC will include road controls (gates), signage and fencing. Certain areas will have gates and fences installed to protect the public from potential hazards created by the new construction, such as at the WCS.

Signs will be posted at various locations indicating areas where public access is restricted, and in areas where members of the public need to be informed about potential safety issues, such as at the inlet, outlet and water control structure areas, as a further precautionary measure. Signage will be in line with relevant Canadian standards and with Manitoba Transportation and Infrastructure corporate policies. Signage will be regularly monitored and maintained.

### 6.4 Access to Waterbodies

Manitoba Transportation and Infrastructure will provide, install and maintain safety measures that may include warning signage, marker buoys and possibly safety booms, at the inlet of the LMOC in Watchorn Bay on Lake Manitoba and the outlet of the LMOC near Birch Bay on Lake St. Martin to deter the entry of watercraft into the LMOC and prohibit unauthorized use. The safety measures implemented will be in accordance with the applicable requirements from Transport Canada, *The Canadian Navigable Waters Act* and other applicable regulations and policies.

## 6.5 Winter Travel Restrictions

During the winter, there may be changes to how ice forms near the inlet of the LMOC in Watchorn Bay on Lake Manitoba and near the outlet of the LMOC near Birch Bay on Lake St. Martin. This may affect the ability of people to travel safely on ice with recreational vehicles in these local areas. Warning signage will be installed in front of the inlet and outlet to identify areas where unsafe ice conditions may be present.

## 6.6 Road Network Continuity

The construction of the LMOC will impact, and in some cases sever, the at-grade municipal roads and existing PR 239 access near PTH 6. Alterations to the municipal roads, PR 239 and PTH 6 to achieve continued access for all stakeholders have been identified in Figure 2-1 (Appendix 2A). Once approved, these changes will be scheduled, communicated and implemented as construction of the LMOC advances.

As illustrated in Figure 2-1 (Appendix 2A), the existing alignment of Birch Creek south of PTH 6, which includes a succession of small lakes and wetlands, is located on the east side of the proposed LMOC alignment. These features create a natural divide in the RM, with east-west crossings south of PTH 6 limited to Township Line Road, Carne Ridge Road and PR 239 (Steep Rock Road). By realigning PR 239 to follow the existing Carne Ridge Road alignment west of Burnett Road, the number of crossings west over the Lake Manitoba Outlet will be reduced to two. These are at Township Line Road and Carne Ridge Road, which will become the realigned portion of PR 239 (new PR 239). The realignment of PR 239 will improve recreational access to Steep Rock and the surrounding area, as well as improve public safety, by reconstructing the PTH 6/Carne Ridge Road (new PR 239) intersection. This new intersection will meet Manitoba Transportation and Infrastructure's current standards and remove the existing intersection that is on a tight curve with poor sightlines.

With the proposed road changes, and the use of shoofly and municipal detour routes, the effect on road continuity is expected to be minimal during construction and a positive change post construction.



## 7.0 MONITORING AND ADAPTIVE MANAGEMENT

Adaptive management is a process to improve practices by learning about their effects and then making changes in those practices as new information is available. Adaptive management uses the Project designs while learning from field performance to manage risk and allow the incorporation of new knowledge into subsequent steps. The AMP is a living document that may be modified to improve its effectiveness.

Therefore, monitoring of the AMP will be done to:

- Determine whether the measures set out in the AMP are effective.
- Reduce uncertainty in implementing the AMP.
- Adapt and improve measures in the AMP in response to actual experience (adaptive management).

Sources of monitoring information may include the following:

- Security reports from the security guard.
- Resource user access request and Manitoba Transportation and Infrastructure's response.
- Monitoring reports developed and provided to the Owner to be acted upon, as necessary.

Information collected from monitoring and routine inspections will be used by Manitoba Transportation and Infrastructure to assess the effectiveness of plan and restriction measures on an annual basis during construction, and for the first 3 years of operation. A summary report of the results of the yearly assessment will be provided to regulators as applicable.

Based on reviews of the monitoring information, input from regulators, rights holders, the RM of Grahamdale and other stakeholders, adjustments will be made to the AMP, if required, to optimize its effectiveness in addressing safety concerns and traditional land uses. Changes to the AMP would be discussed with rights-holders, the RM of Grahamdale and regulators in advance of changes being implemented. If and where required, public access to provincial water infrastructure can be prohibited or restricted by regulation under *The Water Rights Administration Act*.

## Part 3: Lake St. Martin Outlet Channel

### 8.0 PROJECT INFORMATION

#### 8.1 Project Description

The Project will involve the construction and operation of the LSMOC and associated components including water control structures with power connections, drop structures, and other ancillary infrastructure. Details are provided in the EMP Framework. The construction methodology for the LSMOC is described in the CEMP.

#### 8.2 Site Characterization

The LSMOC is located in isolated, undeveloped Crown land in Manitoba's Interlake Region between the northeastern most extent of Lake St. Martin and Sturgeon Bay on Lake Winnipeg (Figure 3). This area is considered semi-remote as road access was seasonal prior to March 2022, with the nearest permanent residence located approximately 6.1 kilometres (km) from the channel in Dauphin River FN. Current access to the LSMOC site is via the Lake St. Martin Access Road (formerly a 19.5 km winter road) that extends northward from the existing forestry road (Idylwild Road) to the LSMOC channel inlet and the Emergency Outlet Channel (Reach 1), as shown in the maps provided in Appendix 3A. The current winter road access to Reach 3 will be replaced by the maintenance access road described in Section 9.1.

PART 3: LAKE ST. MARTIN OUTLET CHANNEL  
PROJECT INFORMATION

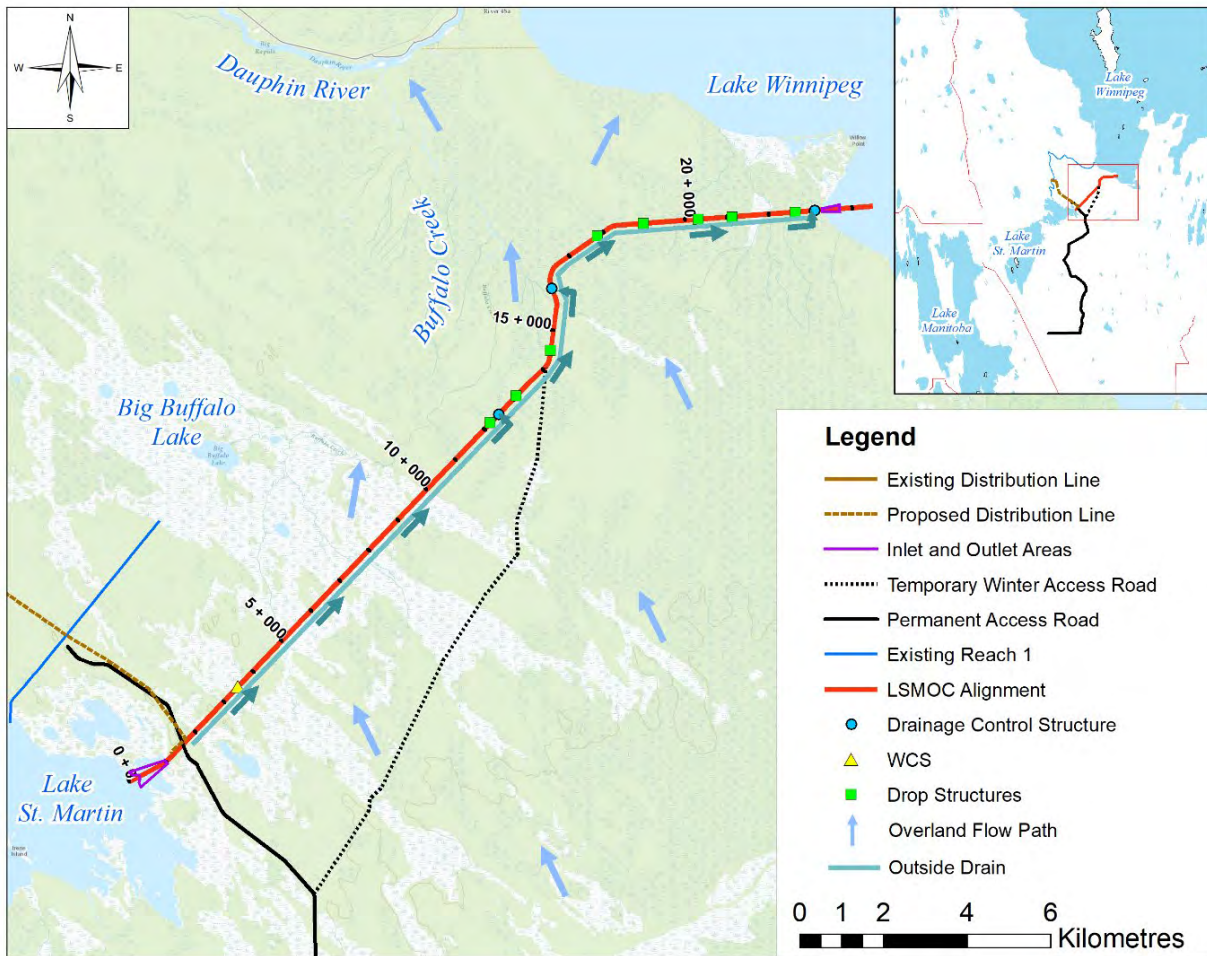


Figure 3: LSMOC Project Area

## 8.3 Project Engagement

Since 2013, Manitoba Transportation and Infrastructure has held several open houses in the RM of Grahamdale as well as other impacted communities in Winnipeg, Portage la Prairie, Lundar and Ashern, and continues to meet with the local municipal council, Indigenous communities, stakeholders and other interest groups to keep them apprised of Project progress.

Engagement of Project stakeholders was conducted with those whose access would most likely be impacted during LSMOC construction and operation. These rights-holders and groups were engaged directly to gain their input and discuss access management and other EMPs. Remaining stakeholders were informed via mail outs and other suitable communication media.

As stakeholder engagement and Indigenous engagement and consultation progresses, the AMP will be updated and provided for consideration by stakeholders and rights-holders, reviewed by the Owner and approved by the traffic authority (i.e., the RM of Grahamdale) in collaboration with Manitoba Transportation and Infrastructure's Highway Planning and Design section. The AMP will be subject to periodic review and updates when construction sequencing and tendering strategies are finalized or new information from ongoing engagement and consultation efforts dictates adjustments.

## 8.4 Notifications

Manitoba Transportation and Infrastructure will provide notifications on relevant information related to this plan as a part of ongoing engagement processes for this Project. Information will be shared with the EAC for dissemination to rights-holders, the RM of Grahamdale and local landowners during the construction phase, and communication protocols will be developed with input from rights holders and stakeholders for the operations phase.

Notifications regarding potential for flooding and subsequent need for operation of the Project will follow established procedures for other flood infrastructure. A notification system is being developed so that interested individuals or groups would receive notifications from Manitoba Transportation and Infrastructure on flood outlooks and advisories as well as infrastructure operations. Any interested individual or group can sign up to receive these notifications. When immediate public notification is required, notification may include use of the National Public Alerting System. In addition to this process, Manitoba Infrastructure has also been notifying Indigenous communities on Lake Manitoba and Lake St. Martin regarding Portage Diversion operations via email. This process could be extended to include notifications for Project operation upon request.

## 9.0 CONSTRUCTION

### 9.1 Construction Access

PTH 6 will be the main access road for the transportation of equipment, materials, and personnel from Winnipeg and other commercial centres. Construction-related access to the LSMOC will be via the Lake St. Martin Access Road (formerly a 19.5 km winter road) that extends northward from the existing forestry road (Idylwild Road) to the LSMOC channel inlet and the Emergency Outlet Channel (Reach 1), as shown in the maps provided in Appendix 3A and Figure 2. A temporary construction access road will also be developed within the LSMOC ROW. Where access routes are accessible to the public, signage will be erected indicating no unauthorized access. The only channel crossing planned for the LSMOC access road is the combined bridge and WCS.

### 9.2 General Access Restrictions

During construction public access will be restricted. Access will be controlled by a gate on the access road. Access to the camp area will be controlled and there will be no unauthorized public visits allowed to the access roads, borrow areas, and the contractor's construction camp, work areas, and laydown yards.

Use of the PDA by individuals not directly associated with the Project may be authorized for certain user groups under certain conditions, if it does not present a safety risk (i.e., Indigenous peoples who intend to carry out traditional practices to the extent that such access is safe). For the purposes of carrying out traditional practices, access through the PDA to the surrounding region during all phases of the Project may be authorized by the Owner or designate, depending largely on whether such access is safe. Additional details on access and use of lands are being considered.

Prior to the start of construction, Manitoba Transportation and Infrastructure will establish a process for individuals/groups to obtain permission to access the site. This process will likely include the following:

- Contacting the Owner (or designate) to request permission. Information to be provided from prospective users will include timelines of requested access, location within the PDA of requested access, and activities that the user plans to conduct.
- Upon site access during construction, users would be required to check in with the security guardhouse.
- Upon departure from the site during construction, users would be required to check out with the security guardhouse.

Construction-related traffic will be restricted to the temporary construction access within the ROW, as well as the existing access road to the LSMOC from PTH 6, to the extent practical and required during construction and maintenance. Existing trails and other travel routes will not be altered adjacent to the PDA other than as required for construction and maintenance purposes. Existing roads, road allowances, trails, portages and other travel ways will not be blocked or altered as a result of clearing and grubbing activities so as not to

interfere with other users. The Contractor will repair roads if they are damaged during construction. Transportation of workers between construction camp/accommodations and worksites will be done in groups (e.g., vans) and using the PDA itself for access, to reduce the potential number of vehicles on the road network. Work will be conducted in a manner that minimizes the raising of dust, and only water or approved dust suppressants will be used for dust control.

### 9.2.1 Firearms

Restrictions will be placed on firearms (e.g., rifles, handguns, shotguns, bows) as a measure to manage the safety of personnel at the site. Project workers will not be permitted to possess, transport, use, or store firearms on the Project site. In the event that a worker is found to have a firearm within the PDA, the worker will be disciplined accordingly. Some exceptions may be made for Indigenous peoples who intend to carry out traditional activities in the area, if the activity does not present a safety risk and if approval is granted by Manitoba Transportation and Infrastructure in advance.

### 9.2.2 Recreational Vehicles

Project workers will not be permitted to use, transport or store personal recreational vehicles (all-terrain vehicles, snowmobiles) on the Project site. This will help to reduce the potential impacts on habitats (ruts or damage to vegetation) and to manage access. Where access permission has been granted for resource users to carry out harvesting activities, recreational vehicles may be permitted if the activity does not present a safety risk, as determined by Manitoba Transportation and Infrastructure.

Use of the surrounding Crown land outside of the access road and PDA will not be restricted.

## 9.3 Site Security

During construction, access to the PDA will be monitored and restricted through the use of a security gatehouse. It will be staffed by a security guard 24 hours a day.

Any visitors to the LSMOC will be required to check in at the security guardhouse. The security guard will coordinate an escort for any person authorized to enter the PDA. For safety reasons, access to the PDA will only be permitted if prior arrangements have been made through Manitoba Transportation and Infrastructure.

The security guard will be responsible to notify the Inspector of any attempts to access the PDA by any unauthorized personnel.

Security staff will be responsible for the following:

- Prevent unauthorized user access.
- Distribute appropriate information to personnel entering the site.
- Confirm that approved resource harvesters are transporting any firearms in a safe manner (as described above).

- Conduct patrols of the site, including in the camp and the work areas, to inspect for un-authorized personnel and/or activities, and facilitate adherence to camp rules.
- Notify the Owner (or designate) of security issues and any instances of trespassing, who will then liaise with the RCMP as required.

## 9.4 Access Control

Access restriction measures for the Project will include road controls (gates), signage and fencing (both temporary and permanent). Certain areas (e.g., the WCS) will have gates and fences installed to protect the public from potential hazards created by the new construction. Warning signs will be installed along the ROW to indicate that unauthorized personnel are not permitted. Signage indicating access restrictions due to safety concerns will be prominently displayed and a security gate will be installed on the access road.

Signs will be posted at various locations indicating areas where public access is restricted, where firearms are not allowed, and in areas where people need to be informed about potential safety issues, such as at the inlet, outlet and water control structure areas, as a further precautionary measure. Signage will be in line with relevant Canadian standards and with Manitoba Transportation and Infrastructure corporate policies. Signage will be regularly monitored and maintained.

## 9.5 Access to Waterbodies

Construction activities on Lake St. Martin and Lake Winnipeg will be focused around the water inlet and outlet locations, where construction will include excavation off the shoreline of the lake with the use of a cofferdam. To address the potential impacts of the Project to navigation, the inlet and outlet designs will include safety measures that will comply with Transport Canada approval requirements, such as warning signage, buoys, and a safety boom to delineate the regions of increased water velocities and to notify water users (Appendix 3A). Signage may also be required to warn of thin ice near the inlet and outlet due to winter operation. Conditions at the inlet prior to operation may present challenges for buoy or boom installation (e.g., ice conditions). Project activities at the inlet and outlet will adhere to requirements from Transport Canada under *The Canadian Navigable Waters Act*.

## 9.6 Land-Based Trails

Due to safety concerns, trails, including trapping routes, within the Project development area (PDA) will not be accessible to members of the public during construction, with some exceptions for Indigenous peoples who intend to carry out traditional practices to the extent that such access is safe (i.e., does not temporally and spatially overlap with construction activities), if approval is granted by Manitoba Transportation and Infrastructure in advance. The contractor and all of its associated employees will not use the trails for recreational purposes.

## 9.7 Traditional Land Use and Resource Use

As Project construction may impact access to traditional resources and areas of current use, a schedule of construction and Project activities will be made available to rights-holders and Northern Affairs Communities engaged on the Project, so that areas and time periods of activity can be avoided. The complaints resolution process will be used as a means to identify and resolve conflicts.

## 9.8 Decommissioning Temporary Accesses

Temporary facilities and work areas, including laydown areas and construction camps that will not be needed for future maintenance activities, will be decommissioned and reclaimed following construction. Designated areas and temporary access roads will be leveled to natural or pre-existing grade and slope. Access routes will be contoured, de-compacted and trimmed to encourage natural revegetation. Closure of temporary construction work areas will typically consist of redistributing organic materials to encourage natural vegetation regeneration. Reseeding will occur, as required, following the RVMP for the Project. Reclamation of aggregate/quarry sites will occur following the completion of construction once the sites are no longer needed for operation and maintenance as described further in the Quarry Management Plan.

Decommissioning measures associated with temporary components are described in greater detail in the Site Decommissioning Plan.



## 10.0 OPERATION

Access limitations in the PDA during the operations phase relate to fenced areas around Project infrastructure and public safety considerations near the water inlet on Lake St. Martin and near the outlet on Lake Winnipeg. When construction of the Project is completed, portions of the temporary construction infrastructure not required during operations will be decommissioned and removed including temporary access roads, borrow areas, and the contractor's construction camp, work areas, and laydown yards. Figures provided in Appendix 3A show the permanent Project infrastructure that will be in place during operations.

### 10.1 Operation Access

Access to the LSMOC during operation will be via the Lake St. Martin Access Road, which also extends to the Emergency Outlet Channel (Reach 1), as previously described and shown in the maps provided in Appendix 3A. Permanent all-season maintenance roads will be constructed within the PDA along each side of LSMOC to provide maintenance access along the length of the channel. The cofferdam access road will also be retained for the life of the Project as it will be used for ongoing maintenance purposes (Figure 3-3, Appendix 3A). The only channel crossing planned for the LSMOC access road is the combined bridge and WCS.

### 10.2 General Access Restrictions

Unauthorized access to Project infrastructure, including the outlet channel, water control structure, channel inlet and outlet, will be restricted during the operations phase of the Project. Fencing will be erected around the permanent operations infrastructure (e.g., the water control structure) that could pose a hazard and/or security risk. Recreation will not be allowed along the outlet channels through the life of the Project. Despite access not being permitted to LSMOC infrastructure, Manitoba Transportation and Infrastructure will install warning signs indicating no unauthorized personnel to promote safety. A gate will be installed at the south end of the access road to restrict public access.

Irregular ice formation at the drop structures and WCS may present substantial safety hazards to recreational vehicle operators. These hazardous conditions may be amplified by winter operation of the channel. Despite access not being permitted to LSMOC infrastructure, warning signs and markers will be installed near these structures to indicate the unsafe areas to promote safety.

### 10.3 Access Control

Access restriction measures for the Project will include road controls (gates), signage and fencing. Certain areas will have gates and fences installed to protect the public from potential hazards (e.g., water control structure). Warning signs will be installed along the ROW to indicate that unauthorized personnel are not permitted. Signage indicating access restrictions due to safety concerns will be prominently displayed.

Signs will be posted at various locations indicating public access is restricted, and in areas where and in areas where people need to be informed about potential safety issues, such as at the inlet, outlet and water control structure areas as a further precautionary measure. Signage will be in line with relevant Canadian standards and with Manitoba Transportation and Infrastructure corporate policies. Signage will be monitored and maintained.

### 10.4 Access to Waterbodies

Safety measures implemented during Project construction at the inlet on Lake St. Martin and the outlet on Lake Winnipeg will be retained for the life of the Project. These include warning signage, buoys, and safety booms (Figure 3-1, Figure 3-2 and Figure 3-3 in Appendix 3A). Safety measures will adhere to requirements from Transport Canada under *The Canadian Navigable Waters Act* and other applicable regulations and policies.

### 10.5 Winter Travel Restrictions

During the winter, there may be changes to how ice forms near the water inlet on Lake St. Martin and near the outlet in Lake Winnipeg. This may affect the ability of people to travel safely on ice with recreational vehicles. Warning signage will be installed in front of the water inlet and outlet to identify areas where unsafe ice conditions may be present. Buoys at the intake will remain in place year round due to risk of thin ice to recreational vehicle operators travelling on the lake in the winter.

## 11.0 MONITORING AND ADAPTIVE MANAGEMENT

Adaptive management is a process to improve practices by learning about their effects and then making changes in those practices as new information is available. Adaptive management uses the Project designs while learning from field performance to manage risk and allow the incorporation of new knowledge into subsequent steps. The AMP is a living document that may be modified to improve its effectiveness.

Therefore, monitoring of the AMP will be done to:

- Determine whether the measures set out in the AMP are effective.
- Reduce uncertainty in implementing the AMP.
- Adapt and improve measures in the AMP in response to actual experience (adaptive management).

Sources of monitoring information may include the following:

- Gate records
- Security cameras
- Security reports from the security guard
- Resource user access request and Manitoba Transportation and Infrastructure's response
- Monitoring reports developed and provided to the Owner to be acted upon, as necessary
- Monitoring and mitigation measures conducted as a result of a specific complaint received by Manitoba Transportation and Infrastructure via the Complaint Resolution Process

Information collected from monitoring and routine inspections will be used by Manitoba Transportation and Infrastructure to assess effectiveness of plan and restriction measures on an annual basis during construction, and for the first 3 years of operation. A summary report of the results of the yearly assessment will be provided to regulators as applicable.

Based on reviews of the monitoring information, input from regulators, rights holders, and the RM of Grahamdale, adjustments will be made to the AMP, if required, to optimize its effectiveness in addressing safety concerns and traditional land uses. If and where required, public access to provincial water infrastructure can be prohibited or restricted by regulation under *The Water Rights Administration Act*.

# APPENDIX 2A

## LMOC Maps



LAKE MANITOBA

DOUBLE TURBIDITY CURTAIN  
(AS REQUIRED DURING EXCAVATION)

BARGE LANDING AND BOAT RAMP  
(AS REQUIRED DURING CONSTRUCTION)

CHANNEL  
RIGHT-OF-WAY LIMITS

OUTSIDE  
DRAIN

APPROXIMATE  
SHORELINE

SAFETY  
BOOM

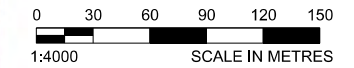
APPROXIMATE EXTENTS OF  
RIPRAP EROSION PROTECTION

CHANNEL  
RIGHT-OF-WAY LIMITS

WATCHORN CREEK

**NOTES:**

- EXISTING GROUND SURFACE DERIVED FROM THE FOLLOWING DATA SOURCES:
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  - 2014 BATHYMETRIC SURVEY BY KGS GROUP
  - 2015/2016 BATHYMETRIC SURVEY BY AAE TECH SERVICES INC.
- SPOIL PILES NOT SHOWN.



All units are metric and in metres unless otherwise specified.  
 Transverse Mercator Projection, NAD 1983, Zone 14  
 Elevations are in metres above sea level (MSL)

**DRAFT**

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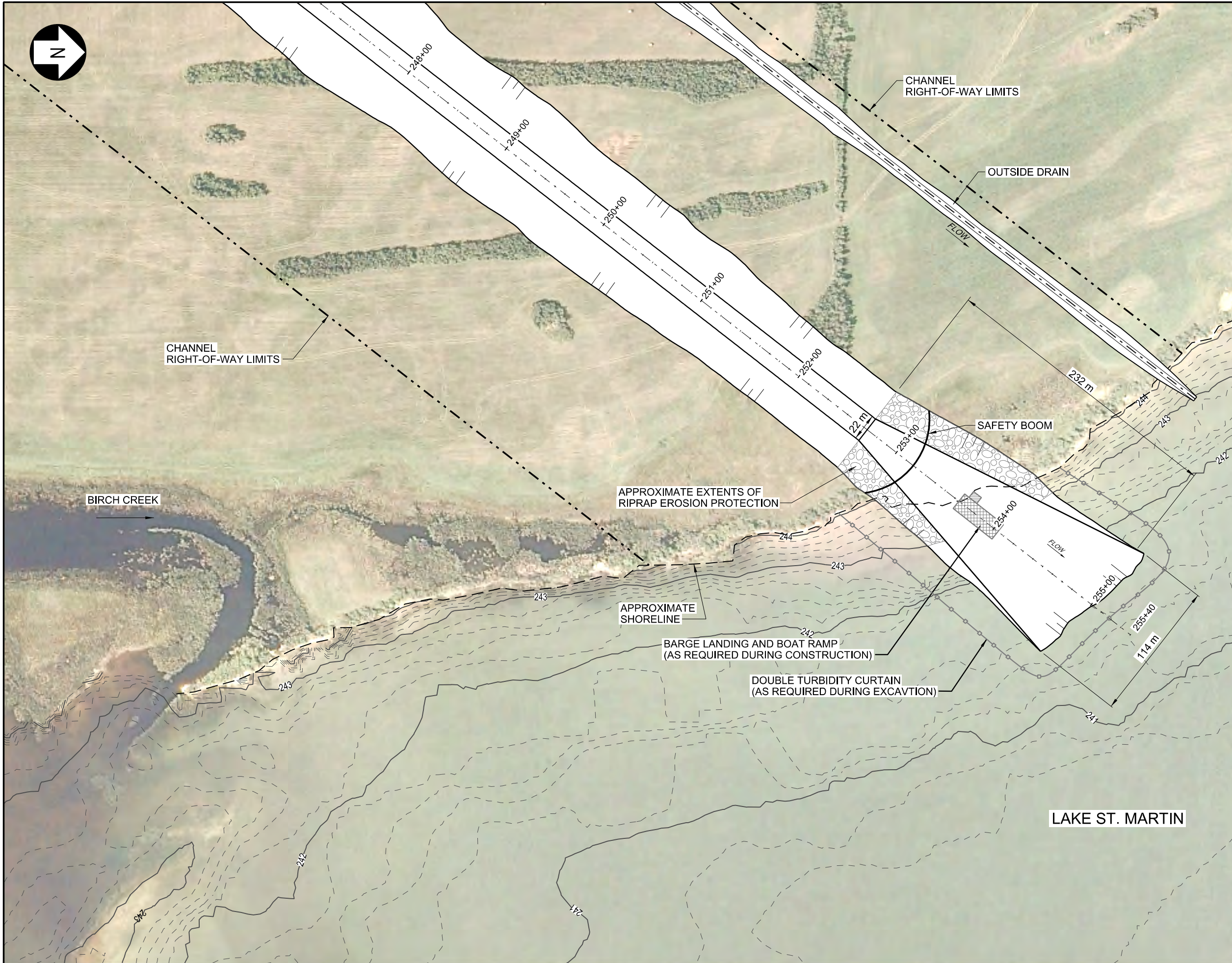
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EXCAVATION PLAN VIEW**

LAKE MANITOBA OUTLET CHANNEL

DATE:  
2022-04-20

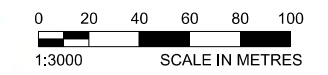
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**NOTES:**

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  - 2017 BATHYMETRIC SURVEY BY NORTH/SOUTH CONSULTANTS INC.
- SPOIL PILES NOT SHOWN.



All units are metric and in metres unless otherwise specified.  
Transverse Mercator Projection, NAD 1983, Zone 14  
Elevations are in metres above sea level (MSL)

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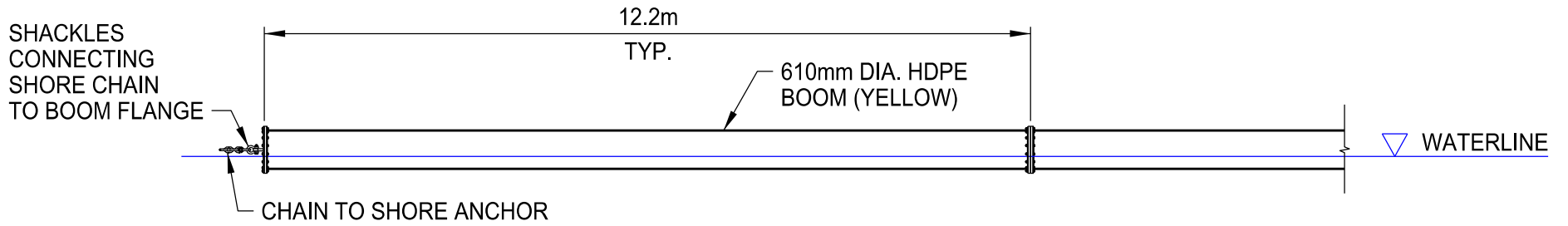
**PROPOSED OUTLET EXCAVATION PLAN VIEW**

LAKE MANITOBA OUTLET CHANNEL

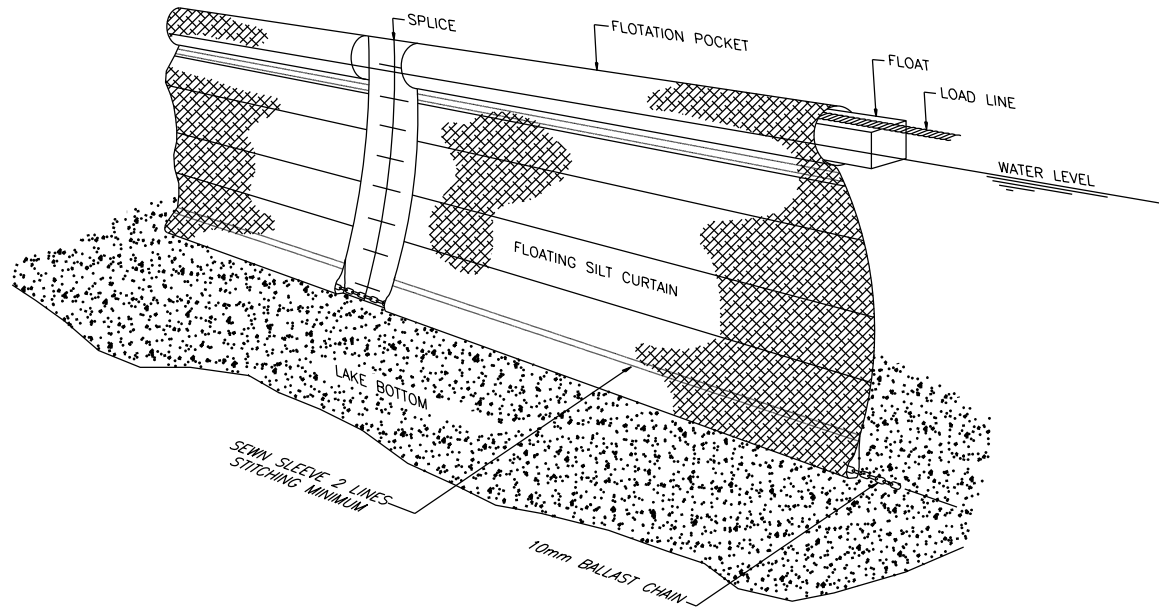
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**SAFETY BOOM ELEVATION**  
SCALE 1:100



**TURBIDITY CURTAIN**  
N.T.S.

All units are metric and in metres unless otherwise specified.  
Transverse Mercator Projection, NAD 1983, Zone 14  
Elevations are in metres above sea level (MSL)

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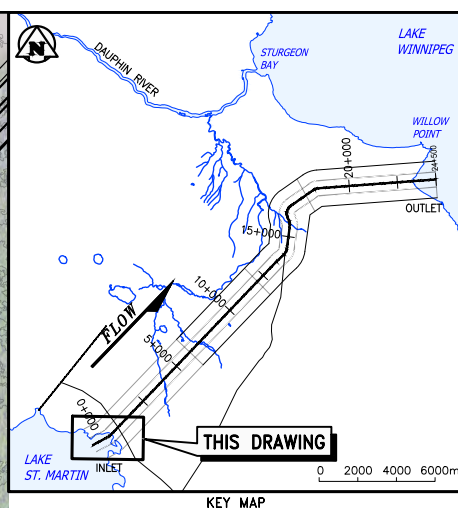
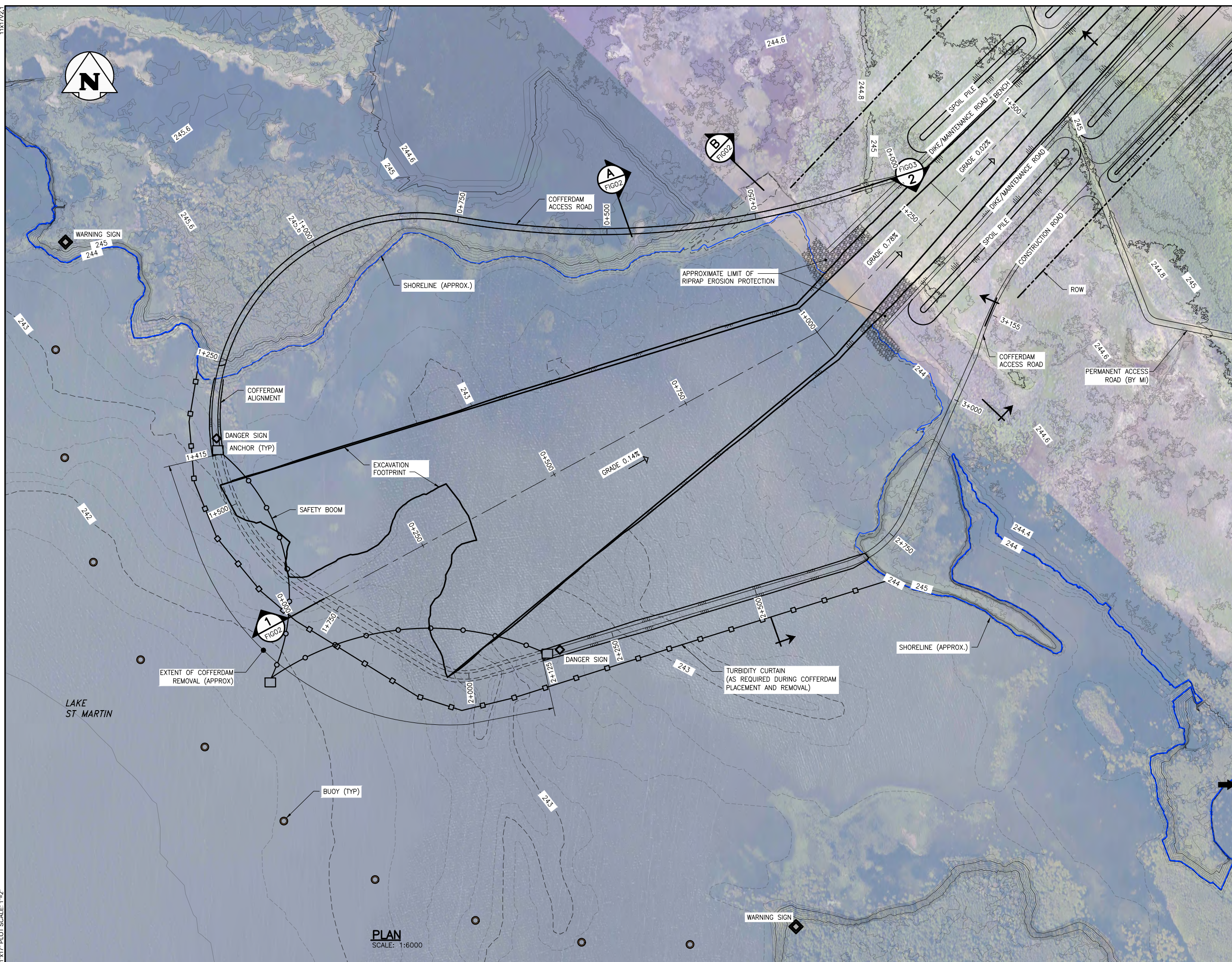
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	<b>SAFETY BOOM AND TURBIDITY CURTAIN DETAILS</b>	
LAKE MANITOBA OUTLET CHANNEL		
DATE:	2022-04-20	

# APPENDIX 3A

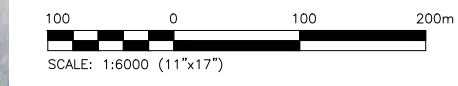
## LSMOC Maps



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- NOTES:**
1. ALL UNITS ARE METRIC AND IN METRES UNLESS OTHERWISE SPECIFIED. TRANSVERSE MERCATOR PROJECTION, AND 1983 CSRS, ZONE 14. ELEVATIONS ARE IN METRES ABOVE SEA LEVEL (MSL) AND ARE REFERENCING CANADIAN GEODETIC VERTICAL DATUM 1928 (CGVD28).
  2. COFFERDAM IMPERVIOUS FILL MATERIAL TO BE SOURCED FROM CHANNEL EXCAVATION.
  3. REMOVED COFFERDAM FILL TO BE PLACED IN CHANNEL SPOIL PILE

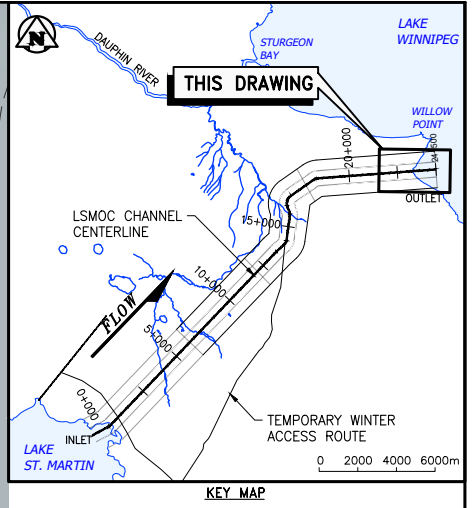
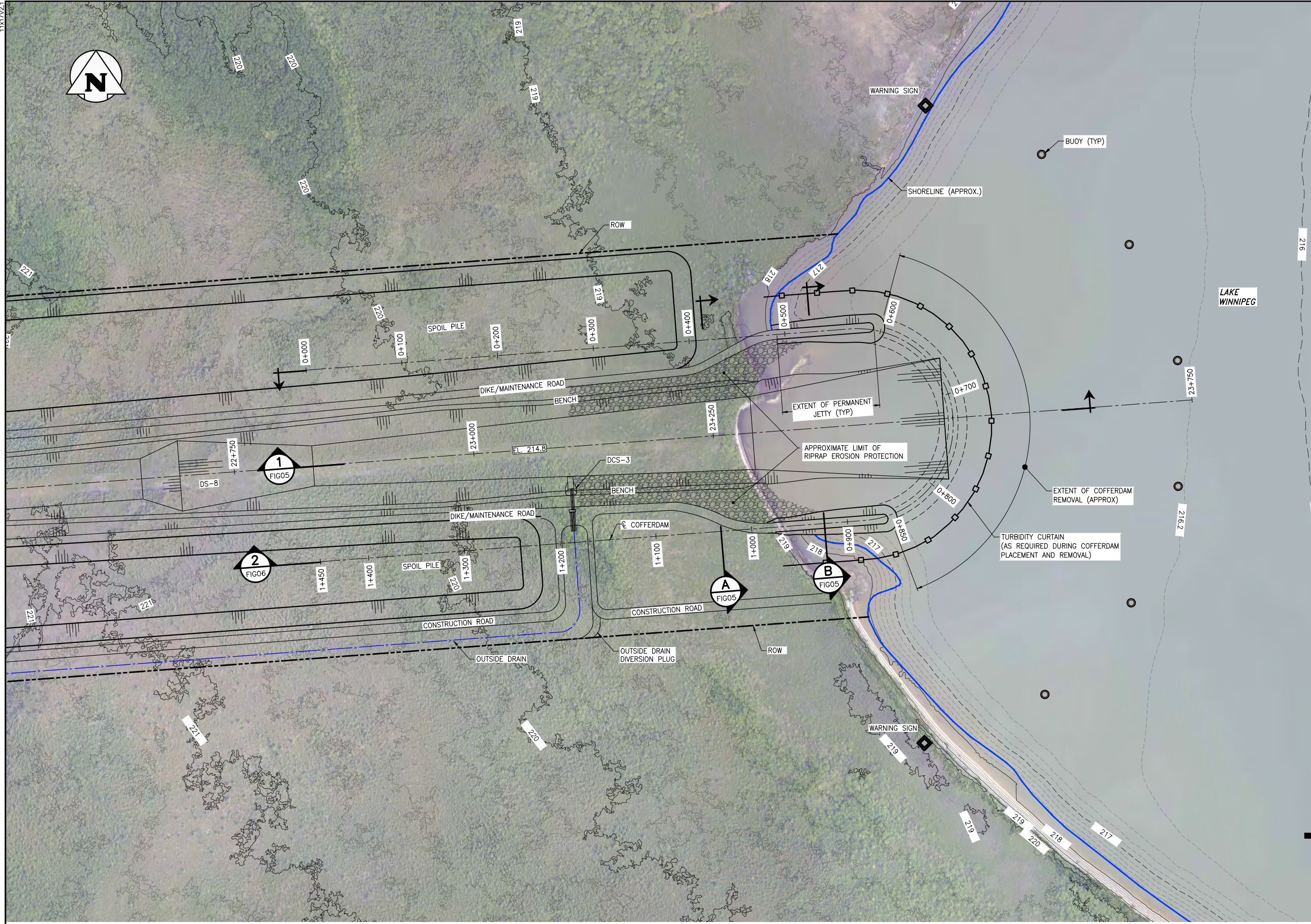


**PRELIMINARY**  
 NOT TO BE USED FOR CONSTRUCTION

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LAKE ST. MARTIN OUTLET CHANNEL PROJECT				
INLET AREA GENERAL ARRANGEMENT				
APRIL 2022		PIR-FIG01	REV.	A

**PLAN**  
 SCALE: 1:6000

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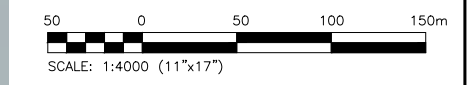


**LEGEND:**

DCS-3 DRAINAGE CONTROL STRUCTURE

**NOTES:**

1. ALL UNITS ARE METRIC AND IN METRES UNLESS OTHERWISE SPECIFIED. TRANSVERSE MERCATOR PROJECTION, AND 1983 CSRS, ZONE 14. ELEVATIONS ARE IN METRES ABOVE SEA LEVEL (MSL) AND ARE REFERENCING CANADIAN GEODETIC VERTICAL DATUM 1928 (CGVD28).
2. COFFERDAM IMPERVIOUS FILL MATERIAL TO BE SOURCED FROM CHANNEL EXCAVATION.
3. REMOVED COFFERDAM FILL TO BE PLACED IN CHANNEL SPOIL PILE



**PRELIMINARY**  
 NOT TO BE USED FOR CONSTRUCTION

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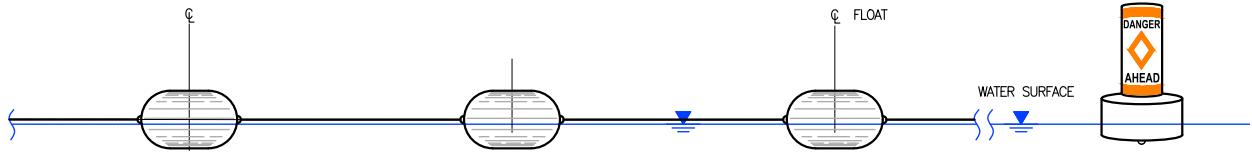


LAKE ST. MARTIN OUTLET CHANNEL PROJECT

OUTLET AREA GENERAL ARRANGEMENT

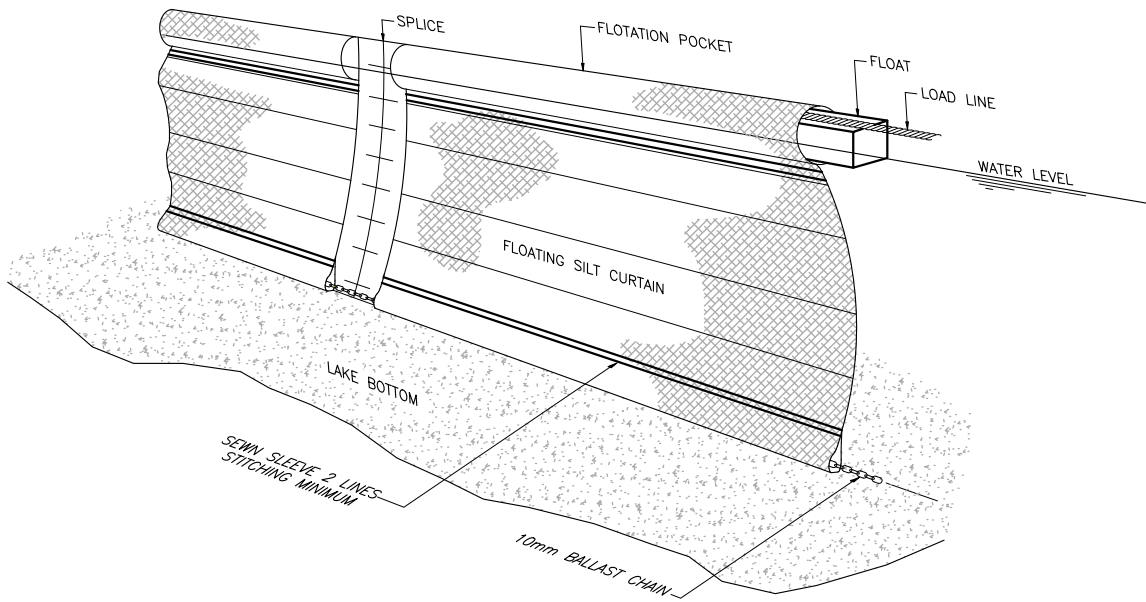
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**PLAN**  
SCALE: 1:4000



NOTE:  
SAFETY BOOM FLOTATION UNIT:  
COLOUR: INTERNATIONAL YELLOW

**SAFETY BOOM LINE WITH FLOTATION COLLAR CAN BUOYS**  
SCALE: N.T.S.



**TYPICAL CONSTRUCTION OF A TURBIDITY CURTAIN**  
SCALE: N.T.S.

➔	A	22/04/29	ISSUED FOR INFORMATION	SGB	CMS
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TYPICAL DETAILS					
APRIL 2022			PIR-FIG07	REV.	A

**PRELIMINARY**  
NOT TO BE USED FOR CONSTRUCTION