

# Lake Winnipeg East System Improvement Transmission Project Transmission Construction Access Management Plan



**MANITOBA HYDRO  
LAKE WINNIPEG EAST SYSTEM  
IMPROVEMENT**

**TRANSMISSION  
CONSTRUCTION ACCESS  
MANAGEMENT PLAN**



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## List of Acronyms

AC	Alternating current
AMP	Access Management Plan
ATK	Aboriginal Traditional Knowledge
ATV	All-terrain Vehicle
CEnvPP	Construction Environmental Protection Plan
ESS	Environmentally Sensitive Site
kV	Kilovolt
ORV	Off-road Vehicle
PR	Provincial Road
PTH	Provincial Trunk Highway
RCMP	Royal Canadian Mounted Police
ROW	Right-of-way
MCWS	Manitoba Conservation and Water Stewardship
IRMT	Integrated Resource Management Team

## 1.0 Introduction

Consistent with its corporate Environmental Management Policy, Manitoba Hydro has committed within the Lake Winnipeg East System Improvement Environmental Assessment Report (EA) to developing an access management plan (AMP) as part of a larger suite of mitigation measures to minimize potential negative environmental and socio-economic effects. The AMP is a direct response to recommendations made by Project study team specialists in supporting technical reports, key person interviews, stakeholder, public and Aboriginal engagement and Aboriginal traditional knowledge (ATK) studies. General and site specific access management mitigation strategies are detailed in the Lake Winnipeg East System Improvement (the Project) Environmental Protection Plan (EnvPP). This AMP is a component of the overall Lake Winnipeg East System Improvement Environmental Protection Program.

The Lake Winnipeg East System Improvement (LWESI) Transmission Project (the Project) is required to provide system upgrades in the region east of Lake Winnipeg (Map 1). The Project will serve existing and new load growth, and provide firm transformation and adequate voltage support for the communities located in and around the region. It is expected that this new development will meet the electrical requirements for at least the next twenty years. The Project includes the construction of a new 115 kilovolt (kV) transmission line from Powerview-Pine Falls, Manitoba to Manigotagan [Pine Falls–Manigotagan 115 kV Transmission Line (PQ95)], approximately 75 kilometers (km) north of Powerview-Pine Falls. The project will require the development of a new 115-66 kV transmission station (Manigotagan Corner Station) west of the intersection of Provincial Road #304 and the Rice River Road, near the community of Manigotagan. This station will serve as the terminal for the new 115 kV transmission line as well as the existing 66 kV sub-transmission lines in the Manigotagan area.

In this document access management for the Project is considered only during the construction phase of the development. The implementation of this AMP requires the performance of tasks prior to and during construction.

A high level outline of an operations and maintenance phase access management plan is discussed in section 5.0. Manitoba Hydro has committed to the development of the operations and maintenance access management plan with the understanding that much of its content will be dependent on experience and knowledge gained during the construction phase of the development.

# Lake Winnipeg East System Improvement Transmission Project

## Project Infrastructure

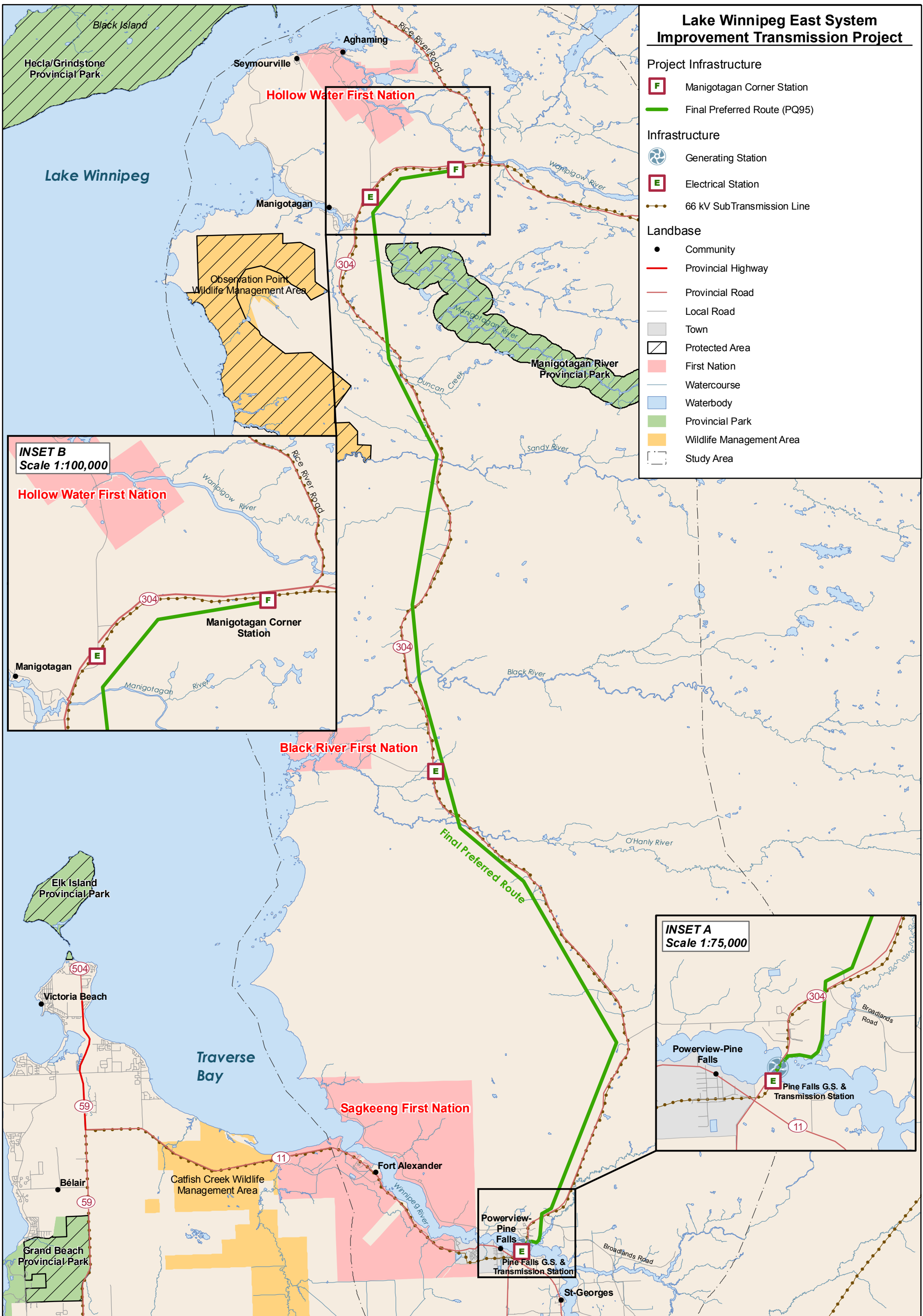
- F Manigotagan Corner Station
- Final Preferred Route (PQ95)

## Infrastructure

- Generating Station
- E Electrical Station
- 66 kV SubTransmission Line

## Landbase

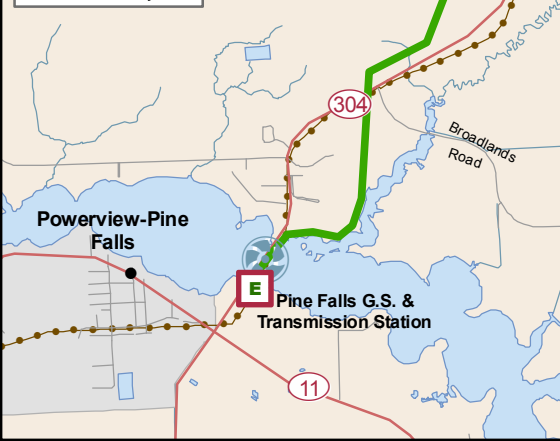
- Community
- Provincial Highway
- Provincial Road
- Local Road
- Town
- Protected Area
- First Nation
- Watercourse
- Waterbody
- Provincial Park
- Wildlife Management Area
- Study Area



**INSET B**  
Scale 1:100,000



**INSET A**  
Scale 1:75,000



Coordinate System: UTM Zone 14N NAD83  
 Data Source: MB Hydro, ProvMB, NRCAN  
 Date Created: January 02, 2013

0 6 12 Kilometres  
 0 4 8 Miles  
 1:200,000

## Project Study Area



## 2.0 Purpose and Objectives

The purpose of developing AMPs is to address issues of concern expressed by stakeholders, the public, and Aboriginals during Project engagement, and by study team specialists in their EIS supporting technical reports. The AMP is intended to address concerns regarding the preservation of environmental, socio-economic, cultural and heritage values within the Projects' area of direct impacts. The focus of this AMP is on the construction phase of the Project. A detailed operations and maintenance access management plan will be developed prior to Project commissioning.

The objectives of the AMP are to:

- Provide for safe, coordinated access onto and along the Project construction site for Project workers;
- Support sustainable use through the protection of natural resources within the Project area;
- Support the preservation of socio-economic, cultural, spiritual and heritage values within the Project area;
- Allow Manitoba Hydro staff and contractors to construct the Project year round (where applicable);
- Provide security for Project personnel and property; and
- Prescribe strategies and mitigation measures to minimize potential negative direct and indirect effects of Project access.

## 2.1 Construction Access Management Plan Coverage

From a geographic perspective the scope of this AMP includes the Project's transmission construction site (i.e., rights-of-way, camps, marshalling yards, borrow pits and access trails specifically constructed for Project purposes). Public access restrictions are primarily limited to the "active" construction site, for reasons of safety, and will generally not interfere with traditional traffic patterns. Seasonal and/or year round access restrictions may be implemented in "sensitive" areas as deemed necessary and approved by MCWS in the interest of mitigating the effects of improved access caused by construction.

This AMP also addresses Project specific issues relating to existing provincial and municipal roads and concerns relating to private lands within Manitoba Hydro's control. Manitoba Hydro will minimize damage to infrastructure and private lands from its activities, and where possible, limit third party access to the active construction site. Of greatest concern are areas with environmental sensitivities, and areas of work force concentrations (e.g. camps, marshalling yards).

### 3.0 Stakeholder Interests and Issues

During the course of data collection and information gathering for the Project Study Area and environmental studies (biophysical and social), access related concerns were raised. In response, Manitoba Hydro committed to developing access management plans for the construction and operation and maintenance phases of the Project. To ensure full consideration of access related issues and concerns, a review was conducted of all pertinent Project information, including engagement and meeting records, key person interviews, ATK information, regulator input and discipline specific technical reports.

The results of the above review identified potential user groups, stakeholders and discipline specific specialists with a variety of potential issues and concerns related to access. Most issues and concerns relate primarily with the construction phase of the Project while some carry over to the operations and maintenance phase as well.

The primary concerns for most of the user groups, stakeholders and study specialists are protection of the environment, wildlife species and interference with resource use practices/activities. Also important are safety to project personnel and the public, security of construction sites and property, minimizing the creation of new access as much as possible, and protection of cultural and heritage resources.

This AMP attempts to address and minimize potential access related effects, issues and concerns identified in Table 3-1; however, Manitoba Hydro recognizes that not all issues and concerns can be fully mitigated through the AMP and will be addressed through other components of the Environmental Protection Program.

**Table 3-1 List of Access Concerns/Issues/Opportunities**

- Safety of all people
  - Safe access to/from and through construction areas
- Security of property
- Ability to conduct work efficiently
- Unimpeded access to construction site
  - Timely permission to construct/use approaches to existing roads
  - Timely permission to use/construct crossings
- Creation of new access into formerly remote areas
  - Increased number of access routes
  - Access for outsiders
  - Increased off-road traffic
  - Increased pressure on resources (game, furbearers, gathering sites, etc.)
  - Increased animal and bird mortality due to collisions
  - Disturbance to remote trapper cabins
  - Increased risk of vandalism, theft
  - Increased risk of wild fire
- Fragmentation
  - Alter wildlife movement
  - Disruption to migration pathways
  - Reduced range connectivity
  - Loss of wilderness areas
  - Loss of functional habitat
- Increased hunting, trapping, fishing pressure
  - Improved subsistence hunting/harvesting
- Sensory disturbance to wildlife
- Interference with
  - recreational activities
  - resource use activities
  - transportation infrastructure
  - emergency measures routes/delivery
- ROW use as transport corridor
  - Trail network expansion by recreational off-road riding clubs, industry and the general public
- Respect for land (traditional and private)
- ROW as access opportunity
  - Improved/expanded access
  - Improved trapping, hunting success
  - Tourism
- Increased traffic on existing roads
  - Safety
  - Sensory disturbance to people and wildlife
  - Damage to infrastructure
  - Inconvenience (temporary closures)
- Loss/damage to habitat
  - Wildlife
  - Vegetation communities of concern

- Plants of conservation concern
- Harvestable plant species/communities
- Introduction/spread of non-native species
- Damage to cultural, heritage, sacred sites
- Increased predation
  - Change in prey/predator dynamics
  - Human use of trails
  - Increased predator rates of travel on packed trails
- Damage to aquatic environment/fish habitat
  - Deleterious materials
  - Stream bed/bank damage
  - Sedimentation
- Vehicle bird/mammal collisions

## 4.0 Construction Access – Access Management

This section discusses the proposed access strategies for construction purposes and describes the proposed access routes to be used for construction.

Manitoba Hydro is planning to construct the Project over a period of two years where most of the work will be conducted during the winter months on frozen ground conditions.

### 4.1 Roles and Responsibilities

A successful construction program requires commitment and cooperation from all participants. Instrumental for those involved is to fully understand their roles, responsibilities and lines of communication within the Project. For purposes of implementing this AMP, responsibilities rest with Manitoba Hydro's Construction Supervisor, Community Liaison, Senior Environmental Assessment Officer, Construction/Environmental Inspectors, and the Construction Contractors' Project Manager/Supervisor, and Environmental Officer/Supervisor. The communication and reporting structure is detailed in Figure 4-1. Their key responsibilities are shown in Table 4-1.

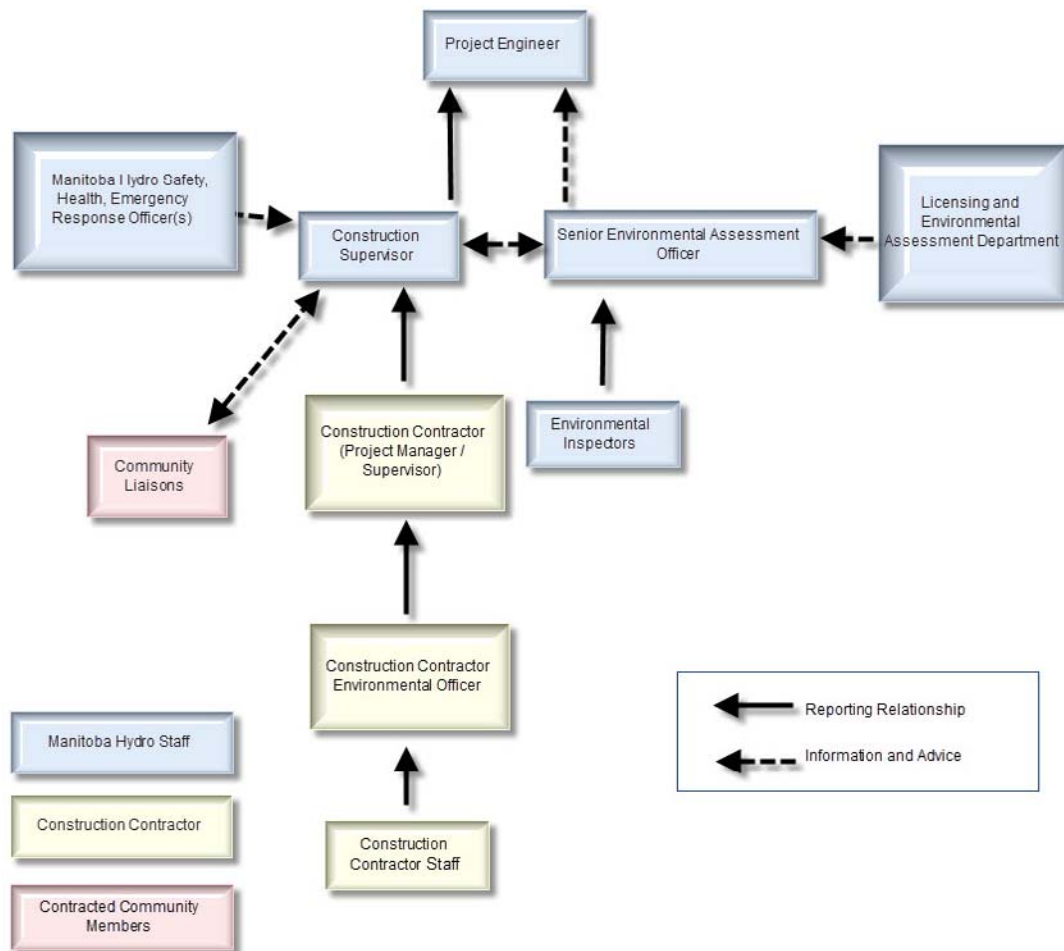


Figure 4-1. Environmental Communication Reporting Structure

**Table 4-1. Roles and Responsibilities of Personnel during the Construction Phase**

Role	Key Responsibilities
<b>Project Engineer</b>	<ul style="list-style-type: none"> <li>• Accountable for all aspects of their construction component in the Project.</li> <li>• Oversees Construction Supervisors who are responsible for construction activities.</li> </ul>
<b>Licensing and Environmental Assessment Department</b>	<ul style="list-style-type: none"> <li>• Provides advice and guidance on environmental protection matters.</li> <li>• Monitors inspection reports and monitoring information, and prepares annual report as per regulatory requirements.</li> <li>• Liaises with Manitoba Conservation Licensing Approvals Branch.</li> </ul>
<b>Senior Environmental Assessment Officer</b>	<ul style="list-style-type: none"> <li>• Responsible for the implementation of Construction Environmental Protection Plan.</li> <li>• Liaises with Licensing and Environmental Assessment Department.</li> <li>• Liaises with Regional regulatory authorities and other regulatory authorities where required or applicable.</li> <li>• Provides advice and guidance to Construction Supervisors and Environmental Inspectors for non-compliance situations, environmental incidents and emergencies.</li> <li>• Issues Environmental Improvement and Stop Work orders for environmental non-compliance situations and incidents.</li> <li>• Supervises Environmental inspectors/monitors.</li> <li>• Provide Support and guidance to contractors regarding CEnvPP.</li> <li>• Responsible for implementing and ongoing compliance monitoring to ensure consistent and accurate reporting into the Environmental Protection Information Management System.</li> </ul>
<b>Construction Supervisor(s)</b>	<ul style="list-style-type: none"> <li>• Reports to the Project Engineer.</li> <li>• Reviews environmental inspection reports with the Construction Contractor, and ensures remedial actions or responses to non-compliance situations or incidents are implemented as required.</li> <li>• Works with the Senior Environmental. Assessment Officer and Inspectors to ensure implementation of environmental protection.</li> <li>• Ensures that appropriate authorities are notified in emergency or incident situations.</li> <li>• Issues Environmental Improvement and stop work orders as required for non compliance issues.</li> </ul>

Role	Key Responsibilities
<b>Environmental Inspector / Construction Inspector</b>	<ul style="list-style-type: none"> <li>• The Environmental Inspectors reports to the Senior Environmental Assessment Officer and provides advice and guidance to the Construction Supervisor.</li> <li>• Monitor the project for compliance of the CEnvPP, Environmental License and other environmental regulatory requirements.</li> <li>• Assist the Contractors Environmental Officer in ensuring that all necessary information is covered in the Contractors pre-project employee orientation.</li> <li>• The Construction Inspector will carry out the duties of the Environmental Inspector when the Environmental Inspector is not on site.</li> <li>• Conducts site inspections regularly and ensures reports are submitted to the Environmental Protection Information Management System. Both daily and weekly reports containing information on activities carried out, effectiveness of actions and outstanding issues are also submitted to Environmental Protection Information Management System.</li> <li>• Assists in developing solutions for environmental issues on-site with the Construction Supervisor and the Contractor and where applicable with input from the Senior Environmental Assessment Officer.</li> <li>• Prescribes and ensures follow up mitigation measures are implemented.</li> <li>• Ensures all ESS sites are correctly identified, delineated and flagged/ marked in the field.</li> <li>• Environmental Inspectors and Construction Inspectors work cooperatively to identify ESS site locations and ensure that prescribed mitigation is being implemented and meeting regulatory requirements.</li> </ul>
<b>Manitoba Hydro Safety, Health, Emergency Response Officers</b>	<ul style="list-style-type: none"> <li>• Responsible for ensuring implementation of Manitoba Hydro safety policies and programs at the various construction sites. The officers provide information and advice to the Construction Supervisor.</li> <li>• Conduct periodic site safety visits.</li> </ul>

Role	Key Responsibilities
<b>Construction Contractor(s)</b> <b>(Project Manager / Construction Supervisor)</b>	<ul style="list-style-type: none"> <li>• Accountable for all regulatory and environmental prescriptions (i.e., follow CEnvPP and mitigation measures prescribed).</li> <li>• Ensure all contractor project staff are adequately trained/informed of pertinent environmental requirements of the Project related to their position.</li> <li>• Report any discoveries of non-compliance, accidents or incidents to the Construction Supervisor.</li> <li>• Ensure that all remedial actions are carried out as per Manitoba Hydro instruction.</li> <li>• Ensure all discoveries of heritage resources, human remains, paleontological finds, environmentally sensitive sites, etc. are reported to the Construction Supervisor.</li> <li>• Responsible for other permits as outlined in Appendix D</li> </ul>
<b>Construction Staff</b>	<ul style="list-style-type: none"> <li>• Accountable for all regulatory and environmental prescriptions (i.e., follow CEnvPP and mitigation measures prescribed).</li> <li>• Ensure adequately trained with respect to, and informed of pertinent, environmental requirements of the Project related to their position.</li> <li>• Report any discoveries of non-compliance, accidents or incidents to the Construction Supervisor.</li> <li>• Ensures that all remedial actions are carried out as per Manitoba Hydro instruction.</li> <li>• Ensures all discoveries of heritage resources, human remains, paleontological finds, environmentally sensitive sites, etc. are reported to the Construction Supervisor.</li> </ul>
<b>Construction Contractor's Environmental Officers</b>	<ul style="list-style-type: none"> <li>• Responsible for implementation, coordination and verification of pre-project employee environmental orientation.</li> <li>• Ensures that the contractor employees adhere to all aspects of the construction Environmental Protection Plan.</li> <li>• Provides information and advice to the Construction Contractor employees on environmental protection and safety matters.</li> <li>• Responsible for implementation of the emergency response and hazardous materials plans, and other related topics.</li> <li>• Liaises with Environmental Inspector and Hydro Field Safety Officers.</li> </ul>
<b>Community Liaison</b>	<ul style="list-style-type: none"> <li>• Primary contact for disseminating information regarding this project to their community</li> <li>• Developing project communication materials for their community</li> <li>• Identifies community concerns and interests and communicates to Construction Supervisor</li> </ul>



## 4.2 Transmission Line Construction Access Opportunities

Consistent with issues and concerns identified in Section 3.0, Manitoba Hydro and its contractors will use existing roads, trails and linear features where possible for accessing the Project construction site. To facilitate this, Manitoba Hydro has identified existing strategic access routes relative to the construction site and major roads to guide construction planners and contractors. Manitoba Hydro has used LIDAR technology to map the terrain along the ROW, with this mapping areas of steep slopes were assessed and Potential By-Pass Trail areas delineated, as this was a desktop exercise it is used for pre-construction approval by IRMT and planning purposes only and subject to field validation during construction which will determine the need and exact By-Pass Trail location if required. These By Pass Trail Areas only take into account modeled steep terrain, actual field conditions may vary and does not include other factors that may require By-Pass Trails such as unfrozen land or water, these by-passes can only be determined in the field during construction.

The Construction Access Opportunities Mapbook illustrates the existing access opportunities (i.e., intersections between the proposed ROW and existing highways, roads, trails and linear features) that minimize the need for new access development to access the ROWs. The AMP will restrict Manitoba Hydro and its contractors to use the identified access options where possible, thereby minimizing Project effects as they relate to access.

## 4.3 Access Mitigation Measures

To address the identified issues and concerns in Section 3.0, Manitoba Hydro, its personnel, contractors and consultants will adhere to the access management measures (AMMs) outlined in Section 6.0 (Table Access Roads and Trails PC-1) in the LWESI Construction Environmental Protection Plan (CEnvPP).

### 4.3.1 Environmentally Sensitive Sites

A number of environmentally sensitive sites (ESS) have been identified on and adjacent to the Project construction site through the public engagement process and biophysical and socio-economic studies conducted leading. Additional ESS may be identified prior to and during the construction program, including potential heritage resources sites. A full list of specific environmental protection measures is included in the Project CEnvPP.

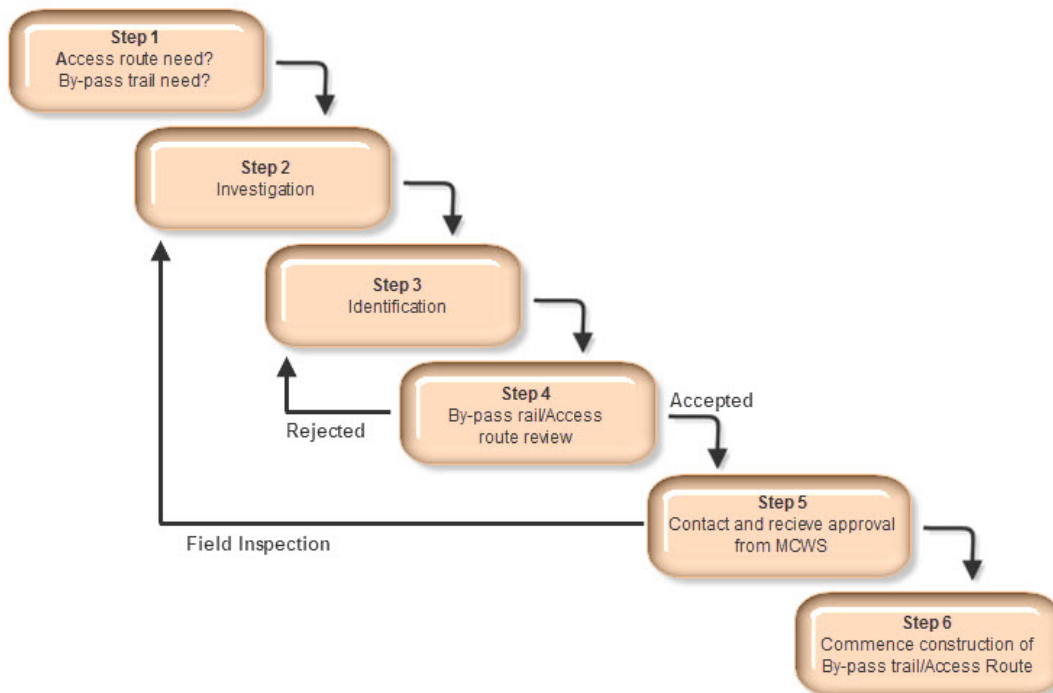
### 4.3.2 Visual Barriers

Manitoba Hydro will maintain or enhance existing visual barriers using vegetation composition and/or terrain features at all points where the transmission line right-of-way intersects Provincial Road 304, to limit the line of sight of humans and predators along the right-of-way, unless otherwise approved by the Integrated Resource Management Team (IRMT) of Manitoba Conservation and Water Stewardship. The length of the visual barriers is dictated on the associated map sheet.

## 4.4 By-pass Routes and Trails

Manitoba Hydro will be accessing the ROW through existing trails and access points to the extent feasible. However, in some instances there may be a requirement for a by-pass trail located outside, but along the ROW, or the creation of a new access route to the ROW. In those situations where a new by-pass trail/access route would be required, Manitoba Hydro would undertake the following process to: 1) site the by-pass trail/access route, 2) evaluate location for environmental and cultural sensitivities, and 3) ensure any new by-pass trails/access routes follow the applicable mitigation measures as outlined in the Construction Environmental Protection Plan (CEnvPP). All new access routes to the ROW shall be designed and maintained with a maximum line-of-site of 50 meters from the centerline of Provincial Road 304 where

possible, unless approved by the IRMT. Figure 4-2 illustrates the process and details of the steps are provided to operationalize the process.



**Figure 4-2. By-pass Trail/Access Route Siting and Approval Process**

**Step 1: Determine by-pass trail/access route need:** Manitoba Hydro in conjunction with the Contractor identifies the need for a by-pass trail or new access route (i.e., rock outcrops, impassable terrain) outside of the approved access routes and the Potential By-pass Areas identified in this plan. If a new access route is needed, approval will be sought from the local Manitoba Conservation and Water Stewardship Office. If the new by-pass trail is required, approval will be sought from the local Manitoba Conservation and Water Stewardship Supervising Conservation Officer.

**Step 2: Investigation:** Manitoba Hydro and Contractor will assess new potential by-pass area/access route area on foot for a viable location. In some instances an overflight may be required.

**Step 3: Identification:** MH Construction Supervisor/Inspector to identify and verify the location of the by-pass trail/access route by recording GPS coordinates and flagging the centerline and/or boundaries. Furthermore, the MH Environmental Inspector is to identify and verify any sensitive sites associated with the area. The above information is then submitted to Environmental Protection Information Management System (EPIMS) as “Unplanned Infrastructure” for review.

**Step 4: By-pass trail/access route review:** MH Transmission Line and Civil Construction Senior Environmental Assessment Officer and MH Licensing and Environmental Assessment Environmental Protection Officer will review by-pass trail/access route and evaluate against known Environmentally Sensitive Sites (ESS) as well as sensitive sites identified by the Environmental Inspector’s site investigation. **If**

**Rejected**, by-pass trail/access route alternatives will be suggested for field assessment (Return to Step 3) and the process of submitting “Unplanned Infrastructure” through EPIMS will be restarted. **If Accepted** proceeds to Step 5 for approval.

**Step 5: By-pass trail/access route approval:** If by-pass trail/access route is approved in Step 4, the proposed amendment will be submitted to Manitoba Conservation and Water Stewardship office which issued the Work Permit for approval. **If approved**, it will be: a) added to the AMP and appropriate CEnvPP including any ESS sites; and move to Step 6.

**Step 6: Commence construction of by-pass trail/access route:** Implement mitigation and commence construction. Manitoba Hydro will identify and document any by-pass trails/access routes that may be required post construction for line maintenance activities and incorporate into the Operations and Maintenance Environmental Protection Plan. As built bypass trails/access routes will be mapped and information provided to MCWS for timber damage appraisal. Any by-pass trails required for operations will be added to the applicable General Permit area, for those no longer required MH will develop a decommissioning plan for approval by MCWS.

#### 4.5 Traffic Safety and Access Management Mechanisms Overview

Manitoba Hydro will rely extensively on the provincial and municipal existing road infrastructure to transport vehicles, personnel, equipment and materials to the Project construction site. In the interests of safety, Manitoba Hydro expects that all of its personnel and those of its contractors and consultants will adhere to all traffic laws while engaged in Project related activities and while commuting back and forth between their residences/camps/offices and the construction site.

Safety is of primary concern during the construction phase for construction workers, stakeholders and the public. During the clearing and construction process, a seasonal access trail will be constructed on the rights-of-way to facilitate the transportation of construction materials, equipment and workers. Manitoba Hydro and its' contractors will restrict non-Project traffic on and along the active construction site during this period.

For reasons of safety, options may be examined to relocate sections of off-road vehicle (ORV) trails (e.g. ATV and snowmobile trails) to create separation between Project construction activities and ORV riders. Where and as applicable, Manitoba Hydro will discuss this with Manitoba Conservation and Water Stewardship, local municipal officials and local off-road recreational riding clubs to examine alternatives. Where the construction site intersects with ORV trails, Manitoba Hydro and/or its contractors will advise the local clubs of such intersections, the schedule of clearing and construction activities, and work with the clubs to ensure safe conditions are maintained at such intersections. This will include but not be limited to warning signage on trails and the active construction site and ensuring, to the extent feasible, that the trails are kept clear of all debris and other impediments.

All Project related personnel and their vehicles will be allowed to access the construction site as required for work purposes. Province of Manitoba and Government of Canada representatives that are engaged in project related inspections, research and monitoring personnel and resource harvesters (e.g. registered trappers and licensed outfitters) whose areas are being crossed by the transmission line will be allowed to traverse the active construction site. No other individuals will be granted access to traverse the active construction site for reasons of safety. Resource Users wishing to traverse the active construction site will be required to check in with the Construction Supervisor to identify themselves (sign in), indicate their business, indicate the location of their business and avail themselves of orientation and safety information. All personnel will have

to comply with safety protocols and be required to check out (sign out) with the Construction Supervisor when leaving the active construction site. The number of access points/routes to the construction site will be minimized to facilitate access management issues. Where Manitoba Hydro and its contractor staff encounter non-project related traffic on the active construction site, safety advisory information will be provided and individuals will be asked to vacate the area for reasons of safety.

Various types of signage may be used to convey safety or educational information, including:

- No hunting/shooting;
- Guy wire shields/sleeves (brightly colored and/or reflective), where appropriate;
- Reflective tape on tower legs and other obstructions;
- Access restrictions to specific infrastructure sites (e.g. transformer, converter, repeater stations);
- Access restrictions to hazardous materials and petroleum storage sites;
- Warning signs on vehicles transporting hazardous materials and petroleum products;
- Private land;
- Directional guidance signs;
- High risk wildlife collision areas;
- Speed limit postings;
- Road/trail hazard warning signs;
- Bollards, signage at water wells, petroleum storage areas, etc.; and
- Other.

Manitoba Hydro will determine the type and quantity of signage required, consult with MCWS on wildlife signage when required, produce them, and erect them when required.

The majority of access along the ROW is limited to the winter months under frozen ground conditions. During the non-frozen period, the rights-of-way are access constrained due to the natural terrain, the route selected for the transmission line and private property limitations.

#### **4.5.1 Access Allowance**

During the construction phase of the Project, one of Manitoba Hydro's concerns is safety for workers and others who may access the active construction site. While non-construction traffic will be limited/restricted in the active construction site, the comings and goings of registered trappers and licensed outfitters will be maintained within the limits of safety as indicated in the previous section. Access and safety issues will be monitored by the Construction Contractor, the Manitoba Hydro Construction Supervisor and the Environmental Inspector.

Manitoba Hydro recognizes that those who access Crown land adjacent to the active construction site via means other than the Project ROWs (e.g., existing trails in the area) have the right to be there. All intersecting trails/roads will be kept clear of debris so as not to impede existing travel routes. Manitoba Hydro will limit/restrict access to the active construction site as safety is a primary consideration.

Those authorized to access the active construction site (including work camps) are noted in Table 4-2. Manitoba Hydro and its contractors will carefully monitor for safety and security issues and, if problems warrant, are prepared to limit access to only those directly associated with the Project.

**Table 4-2 Access Allowance and Authorization in Active Construction Areas**

User	Type of User	Authority
Project Traffic	Manitoba Hydro staff	No conditions
	Contractor personnel	
	Government (provincial & federal) personnel	Construction Supervisor or delegate
	Research & monitoring personnel	
	Emergency vehicles/personnel	
Resource Harvesters	Registered trappers/licensed outfitters/Rights based hunters	Construction Supervisor or delegate
Non-Project Traffic	Public	Restricted
Others	Community officials, Manitoba Hydro staff/officials/contractors/consultants, employee family members	Construction Supervisor or delegate
	School and public tours, media, etc.	

#### 4.5.2 Recreational Vehicles

Project personnel will not be permitted to transport, use or store their personal off-road vehicles (ORV) (e.g., snowmobiles, all-terrain vehicles, boats, etc.) on the construction site where the intent of use is not Project work related. This condition will form part of the condition of employment and will be conveyed to all personnel at the time of hire. Breach of the condition will be grounds for disciplinary action, including dismissal. Manitoba Hydro and contractor ORV equipment shall be used exclusively for Project work related purposes.

#### 4.5.3 Weapons Restrictions

Restrictions will be in place regarding firearms (e.g., rifles, hand guns, shotguns) and other weapons (bows, crossbows) on the active construction site for reasons of safety. All Manitoba Hydro and contractor personnel will not be permitted to transport, store or use weapons on the construction site (including camps) or utilize construction access for hunting. This will be a condition of employment and all workers will be informed of this at the time of hire. Breach of this condition by any worker will constitute grounds for dismissal from employment.

An exception to the above may be made where the need arises to have firearms on the active construction site for protection purposes (e.g., bears). In such instances the Construction Supervisor will assign such responsibilities to trained individuals who will be the only ones with the responsibility to possess and handle firearms on the construction site.

#### 4.5.4 Rights-Based Hunters, RTL Holders, Helpers and Outfitters

Rights-Based hunters, Holders (and their helpers) of registered trap lines and licensed outfitters and their clients who are directly affected by Project construction activities may require firearms or other weapons to carry out their normal harvesting activities. Manitoba Hydro will work with registered trap line holders and outfitters to promote safe access practices and provide updated safety information and the location(s) of construction activities during their active harvesting periods. All registered trapline holders and licensed outfitters wishing to traverse the active construction site must meet with the Manitoba Hydro Construction Supervisor to inform the supervisor of their intentions, their destination(s) and avail themselves of safety information.

With respect to Rights-Based hunters, outfitters (their clients) and holders (and helpers) of registered trap lines, weapons (including long bows or cross bows) are permitted while traversing the active construction site under the following conditions:

- Firearms (including long bows and cross bows) must be unloaded, locked and cased while on the active construction site.

Resource harvesters will be updated regularly on the location and timing of construction activities within the construction site.

#### **4.5.5 Temporary Work Camp Sites, Marshalling Yards and Borrow Pits**

Temporary work camp sites, marshalling yards and borrow pits used for Project purposes form part of the construction site. All Project related access management measures shall apply to these sites. When any of the new sites are no longer required for Project purposes, and if not required by other non-project parties (e.g. Manitoba Conservation and Water Stewardship, Manitoba Infrastructure and Transportation, etc.), access into such sites may be decommissioned and all Project personnel will be restricted from entering such sites. Access decommissioning could include the placement of impediments (e.g., berms, boulders, debris, etc.) to restrict public access.

#### **4.5.6 Compliance**

Manitoba Hydro Environmental/Construction Inspectors will regularly inspect all aspects of the clearing and construction work to ensure compliance with the Project license, work permits, regulations, applicable guidelines and the applicable CEnvPP. Manitoba Hydro and its' contractor personnel will limit/restrict non-project related vehicles and personnel on the construction site with particular emphasis on the active construction site. Information about safety, firearms/weapons rules may be distributed, as required, through:

- Signage at access points and on the construction site;
- Orientation of all workers;
- Information sessions with resource harvesters, outfitters and Aboriginal communities; and
- General information dissemination to the public and recreational organizations.

Breach of stated employment conditions (e.g., ORV, weapons, fishing) by Manitoba Hydro employees or contractor staff will result in disciplinary action, including potential dismissal from employment.

Clear communication of restrictions and safety measures, included in the construction access management plan, to workers, resource harvesters, stakeholders and local Aboriginal communities will contribute to safe work practices and the prevention of conflicts.

### **4.6 Education and Communication Strategy**

An education and communication strategy for the AMP is vital to ensure successful implementation of the Plan. Manitoba Hydro Transmission Line and Civil Construction will be meeting with affected communities prior to construction. Furthermore, community liaison positions will be the primary contact for disseminating information regarding the project to communities, including access restrictions and protocols. Early, effective and frequent communication with project personnel and non-project parties is critical:

- To ensure the safety of workers and the public at large;

- To protect the environment from access related effects;
- To create an understanding among specific relevant groups and the public at large regarding what access management measures are being used and why;
- To gain the cooperation and support of parties (including leaders in neighbouring communities and Aboriginal communities and government agencies) in encouraging citizens to respect the intent of the Plan and abide by its measures;
- To provide clear information about the mechanisms by which access management will be implemented; and
- To foster a sense of trust between stakeholders, Aboriginal communities, municipalities, landowners, the public and Manitoba Hydro.

#### **4.7 Monitoring and Follow-up**

Access related monitoring shall occur for the following purposes:

- To determine whether the measures set out in this AMP are effective; and
- To adapt and improve measures in this AMP in response to actual experience (adaptive management).

Sources of monitoring information may include the following:

- Construction supervisor, senior environmental assessment officer, environmental inspector and contractor personnel, documentation and reports;
- Manitoba Conservation and Water Stewardship Conservation Officers and Wildlife Biologists and Manitoba Workplace Safety and Health inspectors and RCMP (as applicable);
- Input from resource harvesters, outfitters, Aboriginals, stakeholders, municipal leaders, landowners and the general public.

The following factors are intended for monitoring during construction:

- Issues and concerns raised by resource harvesters/outfitters;
- Issues and concerns raised by MCWS staff;
- Non-construction related traffic on the construction site (type, volume, purpose, date, location, safety issues);
- Incidents or problems with access on the construction site (all traffic);
- Incidents or problems with non-construction traffic on the construction site (circumstances, timing, and location); and
- Incidents of ungulate mortalities on or immediately adjacent to the ROW and associated access routes.

Access management monitoring will be undertaken and compliment other biophysical and socio-economic monitoring conducted during the construction phase of the Project. Further details on access monitoring can be found in the Environmental Effects Monitoring Plan. Access related issues and incidents will be summarized by Environmental Inspectors and the Construction Supervisor in their respective monthly reports. Details of these issues and incidents will be shared with the supervising Conservation Officer.

Incidents involving ungulate mortalities will be reported to the CO as they occur. Monitoring information will be acted upon, as necessary, by the Construction Supervisor, in consultation with the CO, as applicable.

#### 4.8 Access Rehabilitation

Transmission development on the landscape often requires the creation of or improving of existing access roads and trails to facilitate construction and operation of the development. Manitoba Hydro's preference is to utilize existing roads and trails to the extent possible prior to development of any new access routes. The use of existing access routes may result in vegetation removal and road base improvements. Where access is not required for operations those access routes may require decommissioning activities such as trenching and mounding and/or vegetation rehabilitation to ensure that areas previously inaccessible are returned back to that state. Prior to access route development the route will be assessed for existing access restrictions, including details such as trail width, vegetation, presence of previous decommissioning activity. This information in consultation with the local MCWS Region's Integrated Resource Management Team (IRMT) will be considered for each access road or trail requiring decommissioning and/or rehabilitation. The consultations will result in the development of a route specific decommissioning and rehabilitation prescription for each access route.

As the characteristics of each access route are unique, there are numerous factors that need to be considered in the development of an access route decommissioning and rehabilitation prescription. Those factors include but are not limited to:

- Access route type (ie road, trail, Transmission ROW),
- Previous use(ie forestry, resource use, trapping, recreation),
- Surrounding vegetation (ie forested vs shrubs vs grass),
- Length,
- Next closest access route ,
- Existing terrain and soils (ie. Is it a wetland, rock walls, suitability for revegetation),
- Duration of use ( ie.how many construction seasons is access route required for),
- Level of access restriction (ie. Complete closure, seasonal closure, truck closure),
- Existing resource extraction concerns ( ie moose, caribou, medicinal plants), and
- Proximity to communities

Below is a list of possible techniques Manitoba Hydro would consider in the development of its access route decommissioning and rehabilitation prescriptions:

- V-plow – plow a 4 foot deep trench over on existing roadbeds. It is done with a large bulldozer and a special piece of equipment called a v-plow. Usually done for the first kilometer from the main access point.
- Trench and berm –The access route is dug out and usually a culvert removed, the cut is then extended for up to 100 meters on each side of the route to discourage travel. The berm is on the main access side of the cut usually piled 10 feet high. This is usually done at 2 or more sites along the route in the first 3-5 kilometers from the main point of access.
- Rock placement – Large rocks placed on access route in places where a vehicle could not get around them. Option typically used in areas where trench and berm or v-plowing would not work. Usually



placed between 2 walls of rock where the route went through or in a wet area as a temporary route closure.

- Culvert removal – Remove most of the culverts from the access route and pile debris on main access side of the cut. Usually done for entire length of the route.
- Gates – Install lockable gate at the beginning of the access route.
- Debris spreading – Typically done on less travelled access routes such as winter roads or spur roads. Debris piles are left at the beginning of the road and are spread over the roadway for the first 200 meters. The spreading is typically not to exceed 2 feet in height. The debris could be deadfall, tops of trees, limbs of trees etc.
- Replant the entrance of the access route– Willow or other native tree species can be replanted at the entrance of the road for about 20 meters to encourage quicker growth. Vegetation can be sources from the general area and moved from the ditch to the roadbed or ROW or from nurseries. Typically used in conjunction with V-plow or Trench and berm.
- ATV access route decommissioning – Holes are dug and piled on the route to allow access for ATV down the center of route. The width between holes and piles did not exceed 6 feet and was to deter truck traffic but allow for ATV's through for specified reasons.

Manitoba Hydro will develop access route decommissioning and rehabilitation prescriptions for each of its access routes utilized on a seasonal basis Spring 2016 and at the end of construction Spring 2017 for access routes not required for operations and maintenance. Those access routes required for operations and maintenance will be reviewed with the local MCWS IRMT and incorporated into an Operations and Maintenance Access Management Plan.

## **5.0 Operations and Maintenance Access Management Plan Development**

The Operations and Maintenance Access Management Plan (O&MAMP) will be a component of the Operations and Maintenance Environmental Protection Plan. Manitoba Hydro's general approach to managing access during operations is to allow the access route to naturally re-vegetate as access requirements are limited to ATV or snowmobile for annual inspections. As the ROW ages the planned vegetation management activities and maintenance activities with larger equipment may require re-clearing of the access route. Emergency response activities in the event of an outage may also require re-clearing of access routes. Experience gained during the construction phase of the Project will contribute to a more effective O&MAMP through the process of adaptive management. The Operations and Maintenance Access Management plan will consist of an access route mapbook identifying and any specific access restrictions and/or access management mitigation measures.

**MAPs**  
**(See Associated Map Book)**