



**Ontario
Ministry of
Natural
Resources**

<small>Subject</small> WORK PERMITS – ROADS, TRAILS AND WATER CROSSINGS		<small>Policy</small> PL 10.04.00
<small>Compiled by - Branch</small> Lands & Waters	<small>Section</small> Land Management	<small>Date Issued</small> August, 1992
<small>Formerly Referenced As</small> Access Roads Manual: Work Permits – Roads, Trails and Water Crossings		<small>Number</small> RA 1-12

ACCESS ROADS MANUAL	Number RA 1-12
	Section ADMINISTRATION
	Subject WORK PERMITS - ROADS, TRAILS AND WATER CROSSINGS

Before any road or water crossing is constructed on Crown land, the proponent must obtain a work permit from the District Office, authorizing the work to be done. The proponent must complete a work permit application, on which they provide details regarding the undertaking, including engineering plans for any proposed water crossings.

The application is reviewed by the appropriate District staff and the Regional Engineer, as required. If the undertaking is approved, a work permit is issued by the District Manager and appropriate conditions are attached to ensure that the work is carried out according to the Ministry's terms and specifications. There are two types of conditions for roads and water crossings; mandatory conditions and additional conditions.

Mandatory conditions are generic and apply to all roads and water crossings. These are the minimum standards which are recommended to ensure the protection of water quality, fish habitat, and the general environment. Most of them are derived from the mandatory standards outlined in the "Environmental Guidelines for Access Roads and Water Crossings".

Additional conditions may be added, as required, to address site specific circumstances which require clarification or direction beyond what is contained in the mandatory conditions which follow. These are to be carefully worded so as to be both enforceable and achievable. They should be used only as required and should not be used to restate existing legislation or to outline Ministry procedures.

A Memorandum of Understanding (MOU) should accompany any work permit to construct a bridge. The purpose of the MOU is to address the Ministry's concerns and liability related to bridge management such as inspection, maintenance and removal. Three generic MOU's have been designed to apply to varying circumstances and are contained herein. It is the responsibility of the District Manager to ensure that the appropriate MOU is used and/or modifications are made, as required, to address additional site specific circumstances. The MOU must be consistent with the proposed use management strategy for the road.

For a detailed explanation of the intent and use of the mandatory conditions, additional conditions and MOU's, refer to the "Work Permit Instructions: Roads, Trails and Water Crossings" contained herein.

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**WORK PERMIT CONDITIONS
ROADS, TRAILS AND WATER CROSSINGS - MANDATORY CONDITIONS**

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1. Roads and water crossings authorized by this Work Permit must be constructed in accordance with the Ministry publication, Environmental Guidelines for Access Roads and Water Crossings, 1989.
2. The permittee must install an engineered structure having a water opening equal to, or larger than, the size proposed in the Application, unless modified in writing by the Ministry.
3. The permittee must use materials, construction practices, mitigation techniques and monitoring of operations at every water crossing in order to prevent the harmful alteration, disruption or destruction of fish habitat or the impairment of water quality. The following conditions of approval must be met, unless otherwise modified in writing by the Ministry:
 - . The permittee will not apply herbicides within 10 metres of any water body.
 - . Materials removed or stockpiled during construction (eg. grubbing, earth fills, earth cut materials) must be deposited in a manner to ensure material does not enter a water body.
 - . The permittee will not undertake any instream construction activity between the dates of () and (). If construction is in process and cannot be completed within the specified window due to unforeseen delays, the District Office must be informed as soon as possible.
 - . The permittee will not obstruct any watercourse so as to impede the free movement of water and fish. Culverts of 1,000 mm and greater will be installed with 10 % of the culvert diameter buried below the natural streambed.
 - . The permittee must preserve the low vegetative cover within 100 m (327 ft) of every water crossing unless effective mitigation techniques for erosion and sediment control are in place to protect water quality.
 - . All exposed mineral soil within 100 m (327 ft) of a water body must be graded to a stable slope capable of preventing erosion and sediment from entering the water.
 - . Upon completion of the work, the permittee will remove all construction materials, equipment and refuse from the site. The disposal of waste materials must be undertaken in accordance with applicable legislation.
 - . The permittee will ensure that the road or trail constructed on Crown land will be open to use by the public unless specifically stated otherwise by the Ministry of Natural Resources.

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03/91-1

MEMORANDUM OF UNDERSTANDING FOR BRIDGES ON CROWN LAND

BRIDGE SITE:

IN CONSIDERATION OF the issuing of Work Permit No. _____ (the Permit) by the Minister of Natural Resources to _____ (the Permittee), the Minister and the Permittee hereby undertake and agree as follows:

1. (a) The Permittee will be fully responsible for and will inspect and maintain all bridges constructed under the authority of the Permit for as long as they are being used by the Permittee.
- (b) Where the Permittee proposes to discontinue use of the bridges, or any of them, the Permittee shall give the District Manager at least ___ months written notice of the date upon which use, inspection and maintenance of the bridges, or any of them, by the Permittee shall be discontinued.
2. (a) Upon receipt of a notice referred to in clause 1(b) the District Manager shall, within ___ days of such receipt, give written notice to the Permittee as to whether the Minister requires that the bridge be removed.
- (b) Where the District Manager gives notice that the bridge is to be removed, the Permittee shall as soon as practicable after the date specified in the notice under clause 1(b) remove the bridge, including the bridge support structures, and restore the bridge site to a safe and stable condition.
- (c) Where the District Manager gives notice that the bridge is not to be removed, the bridge shall upon the date specified in clause 1(b), become the property of the Crown and without payment of compensation therefore by the Crown. The Permittee shall thereupon be relieved of all further responsibility and liability in respect of the bridge.
3. The Permittee understands and acknowledges that in the event the Permittee fails to carry out the inspection and maintenance referred to in clause 1 or to effect the removal of any bridge and the restoration of any site as required under clause 2, the Minister may cause the inspection and maintenance or the removal and restoration to be carried out and the Permittee agrees to reimburse the Minister the cost or expense incurred in so doing.

Permittee

MNR Issuing Officer

Date _____

Date _____

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03/91-2

MEMORANDUM OF UNDERSTANDING FOR BRIDGES ON CROWN LAND

BRIDGE SITE:

IN CONSIDERATION OF the issuing of Work Permit No. _____ (the Permit) by the Minister of Natural Resources to _____ (the Permittee), the Minister and the Permittee hereby undertake and agree as follows:

1. (a) The Permittee will be fully responsible for and will inspect and maintain all bridges constructed under the authority of the Permit for as long as they are being used by the Permittee.
- (b) Where the Permittee proposes to discontinue use of the bridges, or any of them, the Permittee shall give the District Manager at least ___ months written notice of the date upon which use, inspection and maintenance of the bridges, or any of them, by the Permittee shall be discontinued.
2. (a) The Permittee shall have the right to remove a bridge in respect of which notice is given under clause 1(b) and the Permittee shall indicate in the notice whether or not the Permittee intends to exercise the right of removal.
- (b) Where the Permittee indicates in a notice given under clause 1(b) that the Permittee will not exercise the Permittee's right of removal under clause 2(a), the District Manager shall, with in ___ days of receipt of such notice, give written notice to the Permittee as to whether or not the Minister requires that the bridge be removed.
- (c) Where the District Manager gives notice under clause 2(b) that the bridge is not to be removed, the bridge shall, upon the date specified in clause 1(b), become the property of the Crown and without payment of compensation therefore by the Crown, and the Permittee shall thereupon be relieved of all further responsibility and liability in respect of the bridge.
- (d) Where the Permittee indicates in a notice under clause 1(b) that the Permittee intends to remove the bridge, or where the District Manager gives notice under clause 2(b) that the bridge is to be removed, the Permittee shall, as soon as practicable after the date specified in the notice under clause 1(b), remove the bridge, including the bridge support structures, and restore the bridge site to a safe and stable condition to the satisfaction of the District Manager.
3. The Permittee understands and acknowledges that in the event the Permittee fails to carry out the inspection and maintenance referred to in clause 1(a), or to effect the removal of any bridge and the restoration or any site as required under clause 2(d), the Minister may cause the inspection and maintenance or the removal and restoration to be carried out and the Permittee agrees to reimburse the Minister the cost and expense incurred in so doing.

Permittee

Date _____

MNR Issuing Officer

Date _____

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03/91-3

MEMORANDUM OF UNDERSTANDING FOR BRIDGES ON PRIVATE LAND

BRIDGE SITE:

IN CONSIDERATION OF the issuing of Work Permit No. _____ (the Permit) by the Minister of Natural Resources to _____ (the Permittee), the Minister and the Permittee hereby undertake and agree as follows:

1. (a) The Permittee will be fully responsible for and will inspect and maintain all bridges constructed under the authority of the Permit for as long as they are being used by the Permittee.
- (b) Where the Permittee proposes to discontinue use of the bridges, or any of them, the Permittee shall give the District Manager at least ____ months written notice of the date upon which use, inspection and maintenance of the bridges, or any of them, by the Permittee shall be discontinued.
- (c) The Permittee shall, as soon as practicable after the date specified in the notice under clause 1(b), remove the bridge, including the bridge support structures, and restore the bridge site to a safe and stable condition.
2. The Permittee understands and acknowledges that in the event the Permittee fails to carry out the inspection and maintenance referred to in clause 1(a) or to effect the removal of any bridge and the restoration of any site under clause 1(c), the Minister may cause the inspection and maintenance or the removal and restoration to be carried out and the Permittee agrees to reimburse the Minister the cost or expense incurred in so doing.

Permittee

Date _____

MNR Issuing Officer

Date _____

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**WORK PERMIT INSTRUCTIONS
ROADS TRAILS AND WATER CROSSINGS**

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MANDATORY CONDITIONS

These conditions are the minimum standards which are recommended to ensure the protection of water quality, fish habitat, and the general environment. Many of these conditions have been derived from the Mandatory Standards contained in the Environmental Guidelines for Access Roads and Water Crossings and have been carefully worded with the assistance of lawyers and field engineers to apply to most road projects and be legally enforceable.

For those roads which are short in length and do not cross any water (eg. roads to private cottages etc.) modification may be made to the list of mandatory conditions, eliminating those which deal specifically with water crossings, leaving conditions 1, 3 (delete last sentence), and the last 2 bullet points. In no way do these remaining conditions require or imply the raising of the geometric standard of a road above that which is determined by its anticipated use.

Condition 1.

ROADS AND WATER CROSSINGS AUTHORIZED BY THIS WORK PERMIT MUST BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY PUBLICATION, ENVIRONMENTAL GUIDELINES FOR ACCESS ROADS AND WATER CROSSINGS, 1988.

This condition makes the permittee aware of and responsible for using the contents of the guidelines.

The Environmental Guidelines outline mandatory standards and good practices. Since not all mandatory standards will pertain to a given undertaking, those mandatory standards that have been deemed to apply generically to all roads and water crossings have been worded appropriately and are provided as bullet points under condition #3.

The Environmental Guidelines state in section 2.3 that...

"Adherence to the mandatory standards does not guarantee automatic compliance with applicable legislation. In situations where mandatory standards are inadequate to protect fisheries habitat, water quality or other values, appropriate good practice mitigation techniques must be selected and used to ensure legislative standards and requirements are met."

The good practices serve as useful information to the permittee, should site specific circumstances require the use of some of these measures. Adherence to this document does not necessitate increased road standards.

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Condition 2.

THE PERMITTEE MUST INSTALL AN ENGINEERED STRUCTURE HAVING A WATER OPENING EQUAL TO, OR LARGER THAN THE SIZE PROPOSED IN THE APPLICATION, UNLESS MODIFIED IN WRITING BY THE MINISTRY.

The purpose of this condition is to ensure that water crossings are built properly. "Engineered structure" refers to not only using the dimensions and materials stated on the application, but assembling them in the proper manner so as to provide structural integrity (ie. using appropriate methods and materials to install culverts according to manufacturer's specifications, etc.) Specifics such as culvert diameter and length may be added as an additional condition.

Condition 3.

THE PERMITTEE MUST USE MATERIALS, CONSTRUCTION PRACTICES, MITIGATION TECHNIQUES AND MONITORING OF OPERATIONS AT EVERY WATER CROSSING IN ORDER TO PREVENT THE HARMFUL ALTERATION, DISRUPTION OR DESTRUCTION OF FISH HABITAT OR THE IMPAIRMENT OF WATER QUALITY. THE FOLLOWING CONDITIONS OF APPROVAL MUST BE MET, UNLESS OTHERWISE MODIFIED IN WRITING BY THE MINISTRY:

This condition outlines the intended end-result which the following conditions are to achieve.

First Bullet Point.

THE PERMITTEE WILL NOT APPLY HERBICIDES WITHIN 10 METRES OF ANY WATER BODY.

If site specific requirements dictate, the stated "10 metres" may be altered as required. Given the intent of #3, the permittee must monitor their activity to ensure that the given setback requirements achieve the end-result, or take appropriate action to guard against impacts.

Second Bullet Point.

MATERIALS REMOVED OR STOCKPILED DURING CONSTRUCTION (eg. GRUBBING, EARTH FILLS, EARTH CUT MATERIALS), MUST BE DEPOSITED IN A MANNER TO ENSURE MATERIAL DOES NOT ENTER A WATER BODY.

Materials "removed or stockpiled" includes any native material moved on the site or foreign material imported onto the site. Erosion resistant backfill material entering the water would not likely affect the achievement of the end-result outlined in #3 and, therefore, would be permitted provided it did not damage fish habitat or impair water quality.

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Third Bullet Point.

THE PERMITTEE WILL NOT UNDERTAKE ANY INSTREAM CONSTRUCTION ACTIVITY BETWEEN THE DATES OF () AND (). IF CONSTRUCTION IS IN PROCESS AND CANNOT BE COMPLETED WITHIN THE SPECIFIED WINDOW DUE TO UNFORESEEN DELAYS, THE DISTRICT OFFICE MUST BE INFORMED AS SOON AS POSSIBLE.

Depending on the site specific circumstances, this condition may be repeated and altered to define time constraints for more than one watercourse and more than one season (ie. spring, fall). For instance, a given work permit may contain both the following:

The permittee will not undertake any instream construction on River X between May 1 and June 15 and between September 1 and October 15.

The permittee will not undertake any instream construction on River Y between April 1 and May 1.

Fourth Bullet Point.

THE PERMITTEE WILL NOT OBSTRUCT ANY WATERCOURSE TO AS TO IMPEDE THE FREE MOVEMENT OF WATER AND FISH. CULVERTS OF 1,000 mm AND GREATER WILL INSTALLED WITH 10% OF THE CULVERT DIAMETER BURIED BELOW THE NATURAL STREAMBED.

This condition implies that the water opening size be sufficient to pass flood flows and support the fill material.

Fifth Bullet Point.

THE PERMITTEE MUST PRESERVE THE LOW VEGETATIVE COVER WITHIN 100M (327 FT) OF EVERY WATER CROSSING UNLESS EFFECTIVE MITIGATION TECHNIQUES FOR EROSION AND SEDIMENT CONTROL ARE IN PLACE TO PROTECT WATER QUALITY.

The permittee is to acheive the end-result stated in #3 by using effective mitigation if low vegetative cover is removed within 100m of a water crossing. The "100m" is used as a guide and is taken from the Environmental Guidelines. Mitigation techniques may be specified in the form of additional conditions to address site specific circumstances.

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Sixth Bullet Point.

ALL EXPOSED MINERAL SOIL WITHIN 100M (327 FT) OF A WATER BODY MUST BE GRADED TO A STABLE SLOPE CAPABLE OF PREVENTING EROSION AND SEDIMENT FROM ENTERING THE WATER.

Stable slope "capable of preventing erosion and sediment from entering the water" avoids having to define a slope (X:Y) since this would depend on the site and on the type of material used. A stable slope is required to ensure vegetative cover will be established rapidly.

Surface treatment such as seeding, sodding, rip rap, etc. may be included as additional conditions to address site specific circumstances as required.

Seventh Bullet Point.

UPON COMPLETION OF THE WORK, THE PERMITTEE WILL REMOVE ALL CONSTRUCTION MATERIALS, EQUIPMENT AND REFUSE FROM THE SITE. THE DISPOSAL OF WASTE MATERIAL MUST BE UNDERTAKEN IN ACCORDANCE WITH APPLICABLE LEGISLATION.

The permittee must obey the laws of the land and dispose of material in an appropriate manner. MNR is not to specify where and how this material is to be disposed, since this will depend on the nature of the waste and particular type of certified disposal site required to receive that classification of waste. MNR should stay clear of assuming MOE's mandate in this respect.

Eighth Bullet Point.

THE PERMITTEE WILL ENSURE THAT THE ROAD OR TRAIL CONSTRUCTED ON CROWN LAND WILL BE OPEN TO USE BY THE PUBLIC UNLESS SPECIFICALLY STATED OTHERWISE BY THE MINISTRY OF NATURAL RESOURCES.

Restrictions on public access should be in accordance with the approved Use Management Strategy for the road. The reasons for road closures could include the protection of designated tourism lakes, public safety, seasonal weather factors, or to limit the harvesting of an over-utilized resource.

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ENFORCEMENT

The permittee should be cautioned to read and understand the conditions against which their performance will be measured and should be forewarned that failure to comply with any condition could result in a stop-work order and charges under the Public Lands Act or other legislation. For improperly constructed crossings, appropriate legislation such as the Fisheries Act and the Lakes and Rivers Improvement Act may be used for enforcement in addition to the Public Lands Act.

Stop-work orders should not be issued without the approval of the District Manager. This will ensure appropriate consideration by senior management of the specific circumstances, the values at risk and the consequences of the order.

APPLICATION - PART "E"

The work permit application - Part E, is the primary review and approval mechanism for water crossings.

Northwestern Region has designed a modified application form to accommodate information on more than one water crossing in order to simplify paperwork. In addition, they have also prepared a form to attach to the mandatory conditions, to address multiple water crossings.

MEMORANDUM OF UNDERSTANDING FOR BRIDGES

The MOU is designed to accompany a work permit involving bridge construction in order to cover concerns related to bridge management, such as inspection, maintenance and removal. This document must be signed by both the permittee and the issuing officer.

These responsibilities cannot be included as work permit conditions, as they are to be undertaken outside the enforceable timeframe of the work permit. The authority for issuing the MOU is the Public Lands Act. The MOU serves two main objectives:

- to assign to the permittee the responsibility to inspect and maintain the structure for the safety of all users. This responsibility is not covered by requirements of the Occupational Health and Safety Act, since the definition of a haul road in this act does not include a road open to public travel and, therefore, does not require the company to maintain roads and bridges which are open to travel by the general public.

Occupational Health and Safety Act, 107(e)... "haul road" means a road, other than a highway as defined in the Highway Traffic Act, on which vehicles used to haul logs are operated.

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Highway Traffic Act, 1 s.14... "highway" includes a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, designed and intended for, or used by, the general public for the passage of vehicles.

to protect the MNR against inheritance of bridges which the permittee is through using (and maintaining) and that we are not prepared to maintain and accept liability for. Three versions of the MOU are attached:

- 03/91-1 Standard wording: allows MNR the right to order the removal of the bridge upon the permittee's termination of use, with no compensation.
- 03/91-2 Allows permittee first right of refusal: allows the permittee the first right of removal in order to allow them to salvage reusable parts (such as in the case of a temporary bridge). The use of this version must be consistent with the applicable Use Management Strategy.
- 03/91-3 Bridge on private land: where the bed and banks are private but the water and fish remain under the authority of the Crown. This version is intended to prevent harm to the water and fish (such as would occur if the bridge were to collapse due to lack of maintenance).

Should site specific circumstances require modification to the MOU (beyond the three versions provided) it is the responsibility of the District Manager to make the necessary changes and discuss the situation with the permittee as required. Such modifications should be reviewed by an MNR lawyer prior to signing. The flexibility is provided for district to work out with the permittee whatever understanding is appropriate for a particular bridge.