

## Policy for Highway Access Management

### Purpose

This policy provides guidelines for the approval of access to provincially maintained roads by owned/occupied adjacent properties in Newfoundland and Labrador. The guidelines will provide uniformity and consistency in allowing access to the highway system. The department recognizes the need to meet access requirements for adjacent land use and the objective is to manage access approvals in a way that will minimize the inherent risk associated with highway access while, at the same time, preserve the integrity of the highway with respect to its functional requirements

### Background

A highway access is any driveway, street, turnout or other means of providing for the movement of vehicles to or from the public roadway system.

*“Access management provides a systematic means of balancing the access and mobility requirement of roads. Simply stated, access management is the process that manages access to land development while simultaneously preserving the flow of traffic on the surrounding public road system in terms of safety, capacity and speed.”* (Transportation Association of Canada 1999)

The purpose of access control is not to prevent development, but to manage the highway corridor effectively and safely. Therefore, development proposals should be accommodated where possible provided the road owner’s interests are not compromised and the safety requirements can be met.

A licence to access a provincial highway can be issued and revoked by the Minister in accordance with section 9 of the *Works Services and Transportation Act*. This license is referred to as a Highway Access Permit under this policy.

### Definitions

For the purposes of this policy, accesses will be divided into two categories:

- 1. Private Access:** An access to a private development such as a residence, cottage or a residential complex with up to four (4) dwelling units. A private access is not intended for commercial vehicles or general public use and typically have less than 25 vehicles per day.
- 2. Commercial Access:** An access other than a private access. A commercial access includes access to retail centers, service centers, office buildings, schools, subdivisions, community centers, institutions and industrial developments. A commercial access is generally intended for public use and/or commercial vehicles and typically invites the public to the development. A subdivision access is considered a commercial access as it attracts/invites trips to the development. Commercial accesses with traffic volumes less than or equal to 100 peak hour trips or less than or equal to 750 vehicles per day and multiple lanes are considered lower level commercial traffic accesses requiring 30 meters of separation. All commercial accesses

including subdivisions with traffic volumes exceeding 100 peak hour trips or 750 vehicles per day and multiple lanes are considered higher volume commercial accesses and therefore require 60 meters of separation.

3. **Traffic Impact Study:** An assessment of the effects that a particular development's traffic will have on the transportation network in the community. The main purpose of a Traffic Impact Study (TIS) is to demonstrate how the transportation impacts of a proposed development or redevelopment can be mitigated and addressed in a manner that is consistent with traffic engineering principles.

### **Highway Access Permit Approval Process**

A “Highway Access Permit” is required for any access onto a provincially maintained road under the following conditions:

1. Construction of a new access
2. Improvement of an existing access
3. Significant change in the use of an existing access (i.e. residential to multi-residential or commercial)

Effective January 2017, highway access applications will be streamlined under Service NL through existing business processes. Upon completion and submission of a Preliminary Application to Develop Land, all required materials will be forwarded to Regional Directors with the Department of Transportation and Works for review and approval. The application should specify:

1. Property owner and contact information
2. Proof of property ownership
3. General location of the proposed access (route number & name, community, distance from known landmark, etc)
4. Type of access (new, existing, permanent, temporary)
5. Proposed use (private, commercial)
6. A sketch detailing the specifics of the access (location on property, grade, angle to the road, width and surface treatment)

The applicant must clearly mark the proposed access location in the field. A Department official will inspect the site and complete a “Highway Access Inspection Report”. The access application and completed inspection report are forwarded to the Regional Office for review and approval. The Regional Office review will compare the inspection report to the minimum criteria as outlined in this policy. The Regional Office has the authority to approve driveway access to local roads only. For access to any large developments and all accesses to arterial roads and collector roads, the Regional Office will forward these documents and recommendations to Highway Design Division for final approval. In some cases, Highway Design Division may require the applicant to submit a traffic impact study.

If the application is approved, a “Highway Access Permit” will be issued to the applicant on behalf of the Minister. The permit will include any general and specific conditions that may apply.

### Cancellation of Permits

A permit may be cancelled if the development or activity it covers has not taken place within one year from the time when the permit was issued.

A permit may also be considered void if the works vary in a substantial way from those described and approved of in the application. Developers should submit a revised application if you anticipate substantial changes in the design or implementation of their proposal.

Any significant changes or improvements to the access within the road right-of-way after the initial construction will require another permit from the department. Property owners must obtain the required permit prior to commencing work within the road right-of-way.

### Fees

The cost for a residential access permit is \$50 and the cost for a commercial access permit is \$500. Fees are collected by ServiceNL once permits are issued.

### Access Location Guidelines

#### General requirements

The following guidelines shall be taken into consideration when reviewing access locations for approval:

1. If two roadways of different classifications border a development, access should be given to the lower classification roadway.
2. Minimum sight distance criteria are stipulated on Attachment No. 1: **Sight Distance at Individual Accesses to two lane roads**. Minimum sight distance requirements **must** be available at all proposed access locations for both temporary and permanent accesses and for any exiting accesses where the proposed use is being upgraded. When checking sight distance, the line of sight **shall not** extend outside the edge of the road shoulder.
3. Accesses on horizontal curves should be avoided if possible due to the adverse effect of road slope on turning vehicles. If the opportunity exists, it is desirable to locate the access at least 150 m from the end of a horizontal curve.
4. Accesses close to the end of a bridge shall be checked to ensure the bridge traffic barrier does not compromise the minimum sight distance criteria stipulated above.
5. The distance required between an access and an at-grade railway crossing shall be determined site specifically considering turning movements and storage requirements.
6. The access grade **shall** be designed to prevent surface water from flowing onto the roadway from the access. The cross-slope of the roadway shall be carried to the edge of the road shoulder. For accesses with an upward grade, a low point shall be established in the access outside the road shoulder.

7. Where possible, it is desirable to locate the access where the grade on the main road is as flat as possible to minimize operational problems for vehicles accelerating and decelerating under snow and ice conditions.
8. The angle of intersection between an access and a road should be 90 degrees or as near to right angles as practical. Under no circumstance shall the angle of the intersection be less than 70 degrees.
9. The right-turn radius and access width should be designed to accommodate the largest design vehicle expected to use the access. For a private access, the right-turn radius should be in the range of 3 m to 5 m with an access width in the range of 3 m to 7 m. For a commercial access, the right-turn radius should be in the range of 8 m to 15 m with an access width in the range of 7 m to 15 m. A variance from these dimensions may be permitted depending on the site-specific conditions.
10. Access shall not be approved at locations where there are passing or truck climbing lanes on the opposite side of the road (i.e. left turning traffic stopped in the “passing lane” waiting to turn) unless an auxiliary left turn lane is designed and constructed by the developer. The auxiliary lane shall meet the requirements for auxiliary lanes.
11. Access shall not be permitted on an interchange ramp.
12. Accesses should not be located in the intersection functional area.

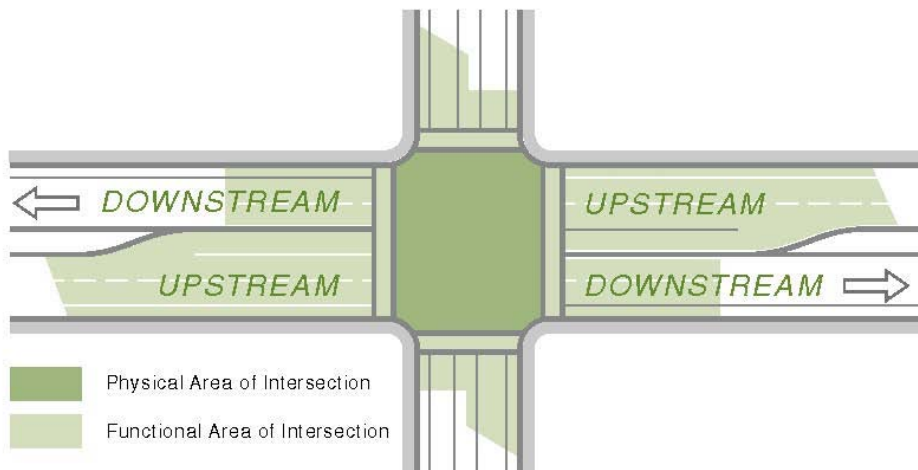


Figure 1: Functional and Physical Areas of an Intersection

13. A Traffic Access/Impact Study, as per the attached TIS policy, will be required to be carried out under one or any of the following circumstances based on a required detailed development plan for five year, 10 year and final construction outcomes:
  - When a proposed development will generate one hundred or more additional (new) peak direction (inbound or outbound) trips to or from a site during the adjacent roadway’s peak hour or the proposed development’s peak hour.
  - When there are commercial accesses exceeding 750 vehicles per day and multiple lanes that are considered high volume.

- Where there is a localized safety or capacity deficiency including: current problems in the local area; a high accident location; a confusing intersection; or an intersection in need of a traffic signal.
- Where the adjacent road's projected or current level of service will be affected.(i.e. insufficient capacity for the development).
- Where the adjacent neighborhood or other areas may be sensitive or perceived as impacted by the proposed development from a traffic volume perspective in relation to road capacity and the potential risk of collision or historical collision frequency.
- Where the proposed access will affect existing or other proposed driveways/accesses/intersections.
- Where the development will affect the ability of adjacent/existing/planned roadway system to handle the increased traffic, or the feasibility of improving the roadway system to handle increased traffic.
- Where specific problems or deficiencies may be affected by the proposed development, or affect the ability of the development to be satisfactorily accommodated.
- When deemed necessary by the department.

### Access Density

The number of private accesses permitted shall meet the following requirements:

1. arterial roads – 1 access per 400 m
2. collector roads in rural areas – 2 accesses per 400 m separated by 150 m
3. local roads with a posted speed limit greater than 60 km/hr – 2 accesses per 400 m
4. collector roads and local roads, with a posted speed limit equal to or less than 60 km/hr, the maximum number of accesses permitted shall be based on lot frontage as follows:
  - frontage up to 15 m – 1 access
  - frontage greater than 15 m – 2 accesses

The maximum number of accesses are also subject to the “Distance from Intersections” and “Access Spacing” guidelines below.

### Distance from Intersections

Accesses shall be offset a minimum of the following distances from an intersection:

1. 400 m from the nearest interchange ramp intersection or a minimum of 150 m from the end of the adjacent interchange ramp taper, whichever distance is greater.
2. 400 m from an intersection on an arterial road.
3. 100 m from an intersection on a collector or local road where the posted speed limit is greater than 60 km/hr.
4. 60 m from an intersection to a rural collector or local road where the posted speed limit is equal to or less than 60 km/hr. (Note: this requirement applies to a provincial highway intersection. See access spacing requirements below for other access spacing requirements on provincial roadways.)

### Access Spacing

Subject to meeting the other criteria specified above, the minimum distance between adjacent accesses shall be:

1. 9 m between private accesses.( $<25$  vehicles/day)
2. 30 m between commercial accesses and other accesses on collector and local roads with a posted speed limit of 60 km/hr or less.(Note: A subdivision access may be considered a commercial access but will be subject to Traffic Access/Impact Study requirements as per threshold requirements with results acceptable to the Department prior to development.)
3. 80 m between commercial accesses on all arterial roads and on collector or local roads with a posted speed limit greater than 60 km/hr.

The area between accesses shall be constructed in a way that prevents uncontrolled access to the roadway through means of open ditches, landscaping, guide rail, high-back curbs or other means approved by the department.

### Set-back Distance

Access shall have sufficient length to permit the design vehicle to park entirely outside the highway right-of-way.

### Auxiliary Lanes

Auxiliary turning lanes shall be provided at all commercial access locations, where the access is onto:

- a) arterial roads
- b) collector and local roads where the Ontario Left Lane Warrant Analysis indicates the requirement for a left turn lane. Storage lane distance shall be provided as per the appropriate nomograph in the warrant analysis. (see attached)

The design of the auxiliary lanes shall be carried out by an engineer licensed to practice in the Province of Newfoundland and Labrador and must be compliant with the recommendations in the *Geometric Design Guide for Canadian Roads* (latest edition), published by the Transportation Association of Canada. The design must be submitted to the Highway Design Division for approval. The proponent is responsible for all costs associated with the design and construction of the auxiliary lane(s).

### Signalized Intersections

Accesses from major activity centers (i.e. shopping malls and large developments) to the road are intersections and their location and spacing in terms of the road signal system should be considered. Most traffic delays along roads result from stops at traffic signals. If a developer requests approval for the installation of a traffic control signal, the department will require a traffic study.(See attached Policy and Guideline for the Preparation of TIS) Should the traffic study confirm the need, based on projected turning movements and delays, the completed detailed design showing lane configurations, signal locations and other required information shall be submitted to

the Highway Design Division for approval. The traffic study and subsequent design shall be carried out by an engineer licensed to practice in the Province of Newfoundland and Labrador and it must be compliant with the recommendations in the *Geometric Design Guide for Canadian Roads* (latest edition), published by the Transportation Association of Canada.

All costs associated with the traffic study and design, if required, will be the responsibility of the developer. The developer must also provide, in writing, confirmation from the local municipal authority, that the municipality will assume responsibility for all future maintenance and operation of the traffic control signal. The Minister will not permit ownership of, or responsibility for, a traffic control device on a provincial roadway to rest with a private developer.

### **Unauthorized Access**

Access shall not be constructed to a highway unless a valid permit is first obtained from the Minister. Accesses that are constructed without a permit must be removed at the owners expense until a permit is obtained (unless otherwise approved by the Department).

Where there is an existing access that no permit has been issued and was established prior to the adoption of this policy, access may continue provided it does not pose a significant safety risk and the department has not already issued a notice to the owner that the access has to be removed. An access permit must be obtained should there be any changes to existing accesses under the following conditions:

- a) If there is a change of ownership.
- b) If there are any significant change to the use of access.
- c) If modifications to the access are proposed.

The Minister may impose conditions that are applicable to the new permit.

Any access deemed to be unauthorized must be removed immediately upon notification from the department. Alternatively, the department will remove the access at the owner's expense.

### **Temporary Access**

Temporary means of access should be avoided whenever possible, particularly in cases where the proposed activity upon the land will be of a permanent nature and sensitive to a future change of access location.

When applying for a temporary permit, the applicant should clearly state the temporary nature of the access and a specified time in which the applicant will discontinue the use of the access. If an extension in time is required, the applicant must apply for a new permit prior to the expiration of the existing one.

Upon expiration of the permit, the temporary entrance must be removed and the highway right-of-way restored to the satisfaction of the Minister. All costs involved are the responsibility of the owner. Failure to remove the access will result in the department removing the access at the owner's expense.

At all times while the temporary access is in use, the applicant is responsible for cleaning up any debris spilled on the highway leading from the temporary access.

### **Cost and Responsibility**

The property owner is responsible for all costs associated with construction of the access in accordance with the terms and conditions stipulated in the Access Permit.

When a culvert is required, the property owner is responsible for the supply and delivery of a new culvert of the type and diameter specified in the permit.

For a **private access**, the property owner may arrange installation of the culvert by a private contractor. The installation shall be inspected and approved by a department official. Alternatively, the property owner may arrange for installation of the culvert by the department. In this case, after the property owner confirms the culvert has been delivered to the access location, it will be installed the next time the department's equipment is working in the general vicinity. The applicant will be charged a flat rate, in effect at the time, for this service. The department will only install the culvert and place sufficient fill to hold the culvert in the required location. The department will not construct the access. If a second access or an extension to an existing access is approved, the applicant shall provide all labor, materials and equipment required to install the access in accordance with the terms and conditions stipulated in the permit.

For a **commercial access**, the property owner shall make arrangements to have the culvert installed by a private contractor. The installation shall be inspected and approved by a department official.

For access culverts installed in the road right-of-way, and in accordance with the terms and conditions of the permit, the department assumes ownership of the culvert after the initial installation. As a result, the department also assumes full responsibility for future maintenance and replacement of the culvert as it becomes necessary.

In those cases where road signage must be installed as a condition of the permit, the applicant shall be responsible for supply and installation of the signs. All signs and installation methods shall meet the standards of the department and the Transportation Association of Canada.

Property owners are permitted to pave an approved access within the highway right-of-way and tie it into a paved roadway. However, any pavement placed on the road shoulder must be a minimum of 50 mm thick with the top surface set at the same elevation as the road shoulder on either side to avoid damage during snow-clearing operations.

Property owners are permitted to upgrade the end treatment on access culverts. However, the type of end treatment must be approved by the department. The department will not be responsible for reinstating the same type of end treatment if the culvert is later replaced.



During the normal course of highway maintenance and upgrading activities, the department will not accept liability for damages to pavement, culvert end treatments or similar improvements made by the property owner within the highway right-of-way.

### **Closing or Changing an Existing Access**

When it is necessary to close an existing access in order to accommodate a highway upgrading or rehabilitation project, the department will provide an alternate access, compensate the owner, or purchase the affected property.

When the Minister requests an owner to change an existing access in order to improve traffic movement or safety, or for other reasons, the department will incur the construction modification costs, however the department will not be responsible for any injurious affection.

Recommended by:

Approved by:

  
 Joe Dunford  
 Assistant Deputy Minister  
 Transportation

  
 Tracy King  
 Deputy Minister

Nov 28 17  
 Date

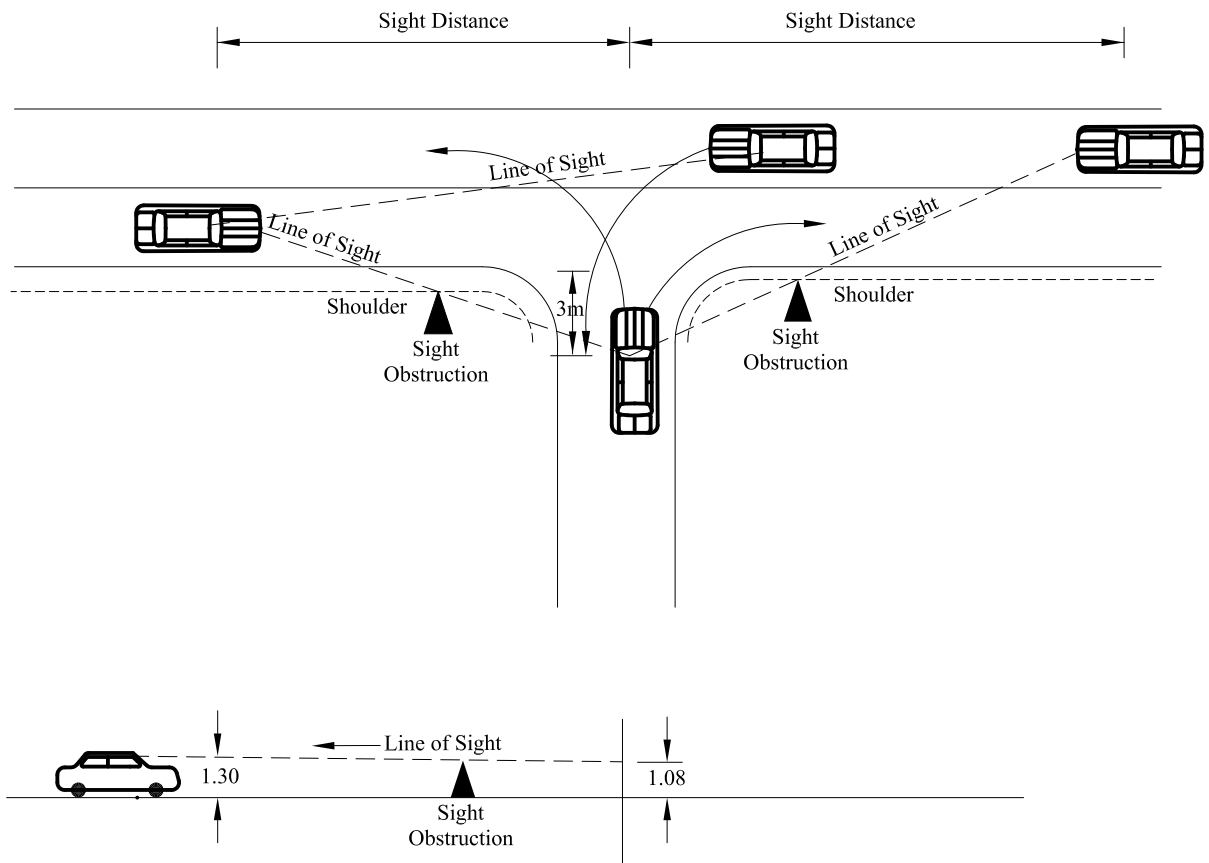
### **List of Attachments**

1. HIGHWAY ACCESS APPROVAL CRITERIA
2. SIGHT DISTANCE AT INDIVIDUAL ACCESS
3. Form 1171-1 of Specifications Book: ENTRANCE TO COMMERCIAL DEVELOPMENT
4. Form 1175-1 of Specifications Book: PRIVATE ENTRANCE IN CUT
5. Form 1176-1 of Specifications Book: PRIVATE ENTRANCE IN FILL
6. COMMERCIAL ACCESS
7. HIGHWAY ACCESS APPLICATION
8. HIGHWAY ACCESS INSPECTION REPORT
9. "Approval in Principle" for HIGHWAY ACCESS
10. HIGHWAY ACCESS PERMIT
11. POLICY AND GUIDELINES FOR THE PREPARATION OF TRAFFIC IMPACT STUDIES

**HIGHWAY ACCESS APPROVAL CRITERIA**

	<b>Arterial</b>	<b>Collector or Local (Posted Speed &gt; 60 km/hr)</b>	<b>Collector or Local (Posted Speed 60 km/hr or less)</b>
<b>Location Criteria</b>			
Maximum number of private accesses	1 per 400 m	2 per 400 m separated by a minimum distance of 150 m	n/a
Minimum distance from an intersection	400 m	100 m	60 m
Minimum distance from an interchange ramp intersection	400 m	400 m	400 m
Minimum distance from an interchange ramp taper or climbing lane taper	150 m	150 m	150 m
Minimum spacing of commercial accesses	80 m	80 m	30 m*
Minimum spacing of private accesses	n/a	n/a	9 m
Minimum Sight Distance	As per attachment: SIGHT DISTANCE AT INDIVIDUAL ACCESS		
<b>Design Criteria</b>			
Intersection angle to road	70° - 90°	70° - 90°	70° - 90°
Access width - private access	3 m - 7 m	3 m - 7 m	3 m - 7 m
Access width - commercial access	7 m - 15 m	7 m - 15 m	7 m - 15 m
Right-turn radius - private access	3 m to 5 m	3 m to 5 m	3 m to 5 m
Right-turn radius - commercial access	8 m - 15 m	8 m - 15 m	8 m - 15 m
Access grade within road right-of-way	±1 % to ± 3%	±1% to ± 4 %	±1% to ±6%
Maximum grade change within road right-of-way	5%	6%	8%

\* Applies to lower level commercial traffic accesses located on collector or local roads with speeds less than 60 km per hour (inclusive of subdivisions which have traffic volumes less than or equal to 100 peak hour trip or less than 750 vehicles per day). A commercial access with greater volumes is considered a full intersection.



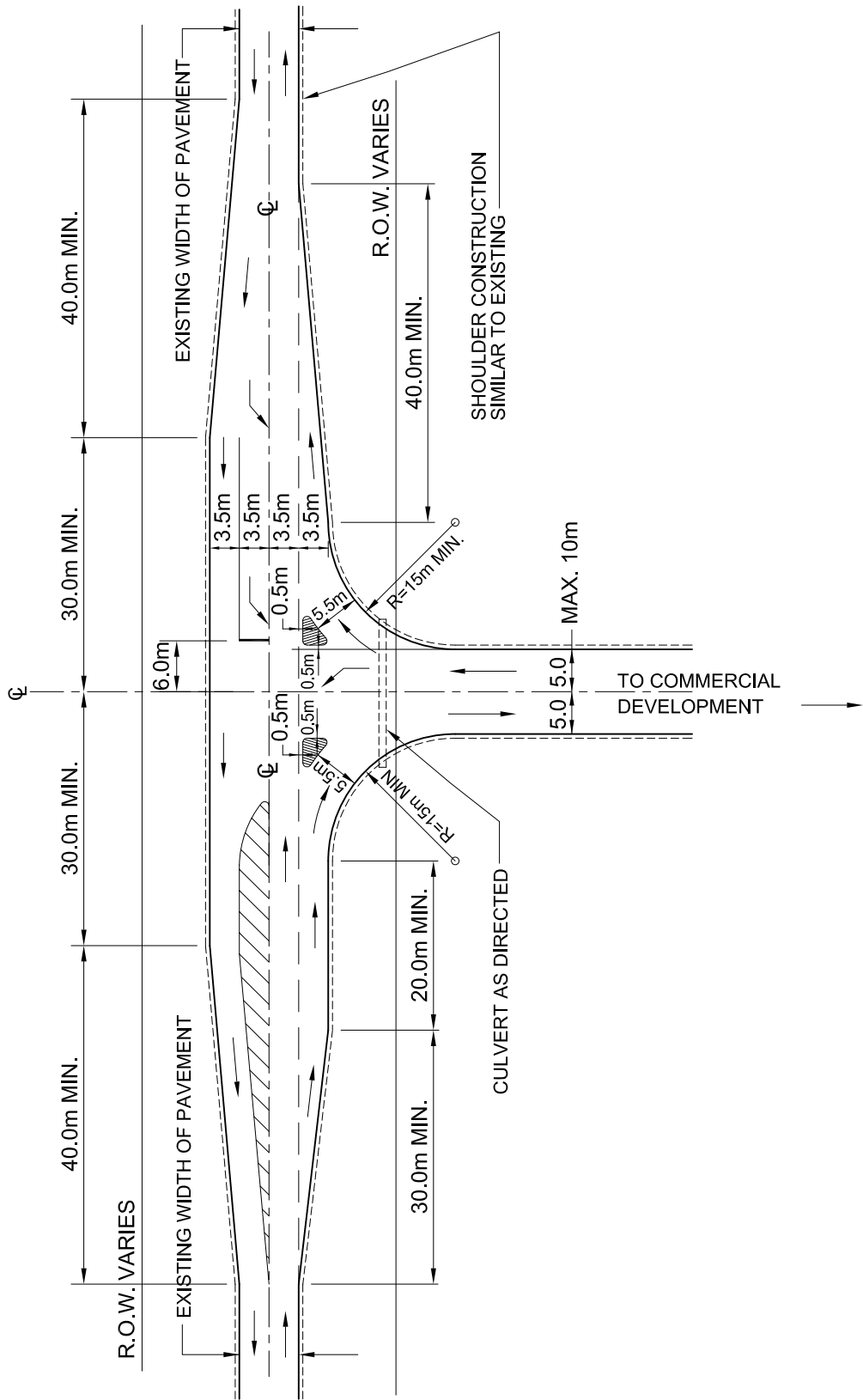
Highway Posted Speed kph	Sight Distance for Turning Movements m
100	225
90	205
80	180
70	160
60	135
50	115
<50	80

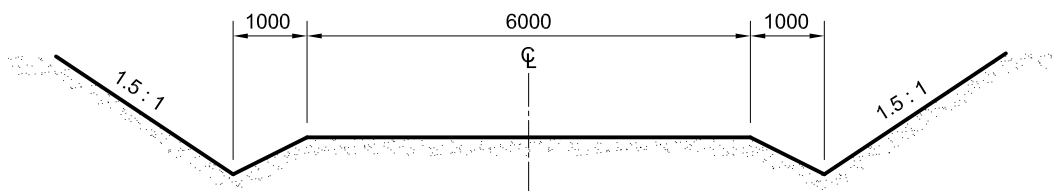
**NOTES:**

1. Sight distance for turning movements derived from Table 9.9.10 of TAC Manual, 2017 Edition.
2. Distance from edge of travel lane to drivers eye is 3 metres.
3. Height of drivers eye is 1.05metres.
4. Height of approaching vehicle is 1.15metres from Table 2.5.1, TAC Manual, 2017 Edition.
5. Intersections with roadways to be designed according to TAC Standards.



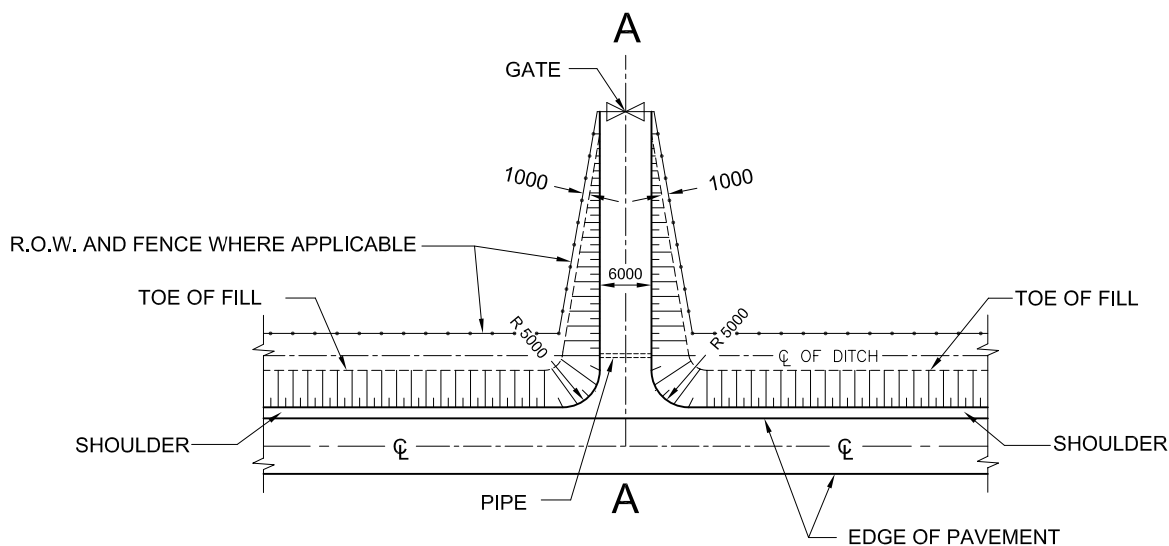
**SIGHT DISTANCE AT INDIVIDUAL  
ACCESSES TO 2 LANE ROADS**





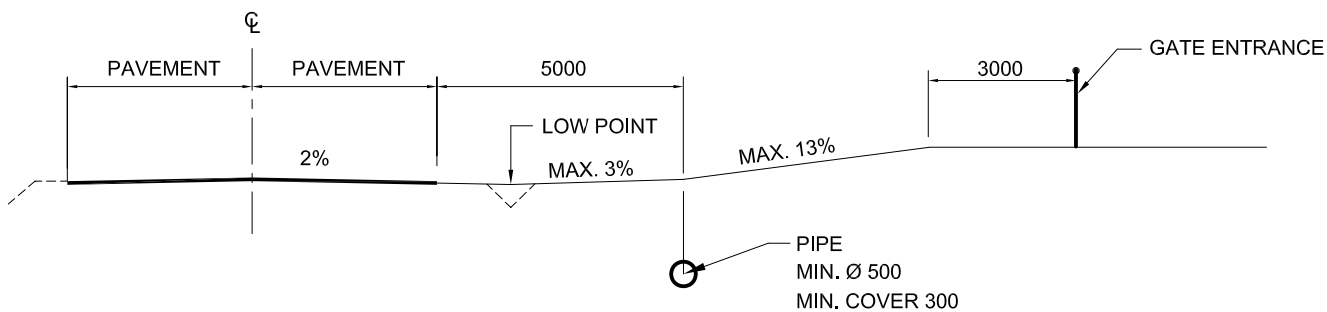
**CROSS SECTION OF PRIVATE ENTRANCE**

N.T.S.



**PLAN**

N.T.S.



**SECTION A-A**

SCALE 1 : 150



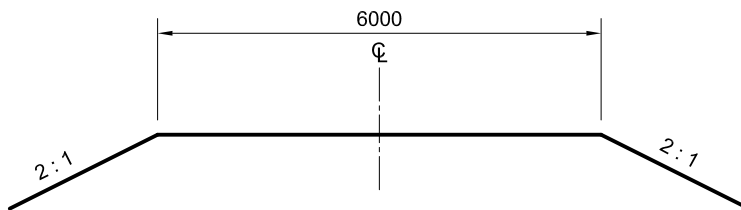
TRANSPORTATION AND WORKS  
HIGHWAY DESIGN DIVISION

**PRIVATE ENTRANCE IN CUT**

DRAWN BY: DEB KIRBY

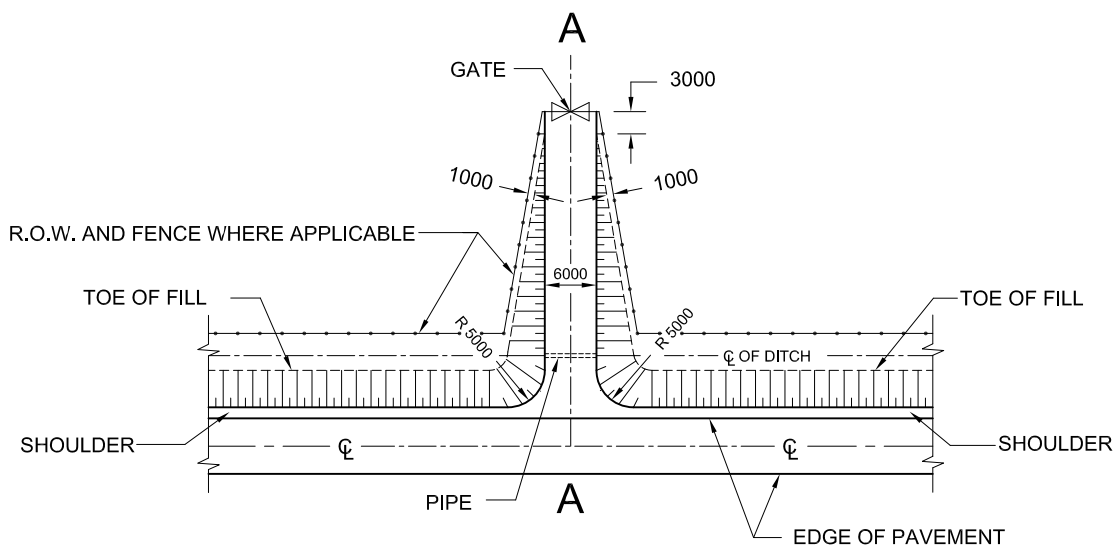
DATE: 02-01-10

SCALE N.T.S.



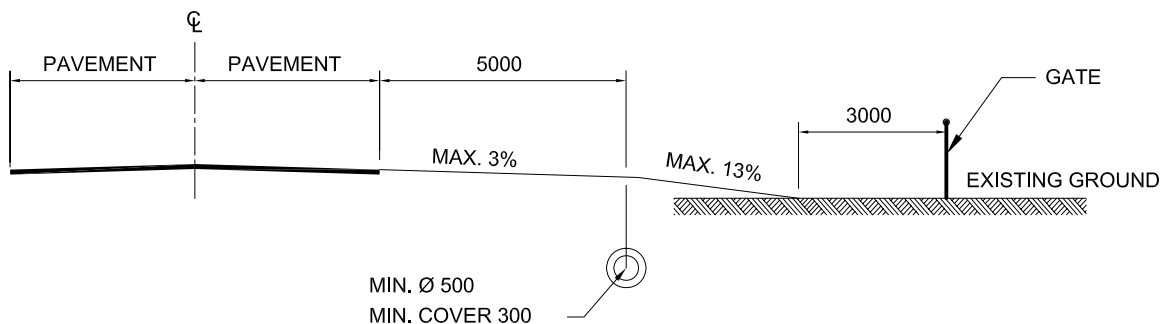
**CROSS SECTION OF PRIVATE ENTRANCE**

N.T.S.



**PLAN**

N.T.S.

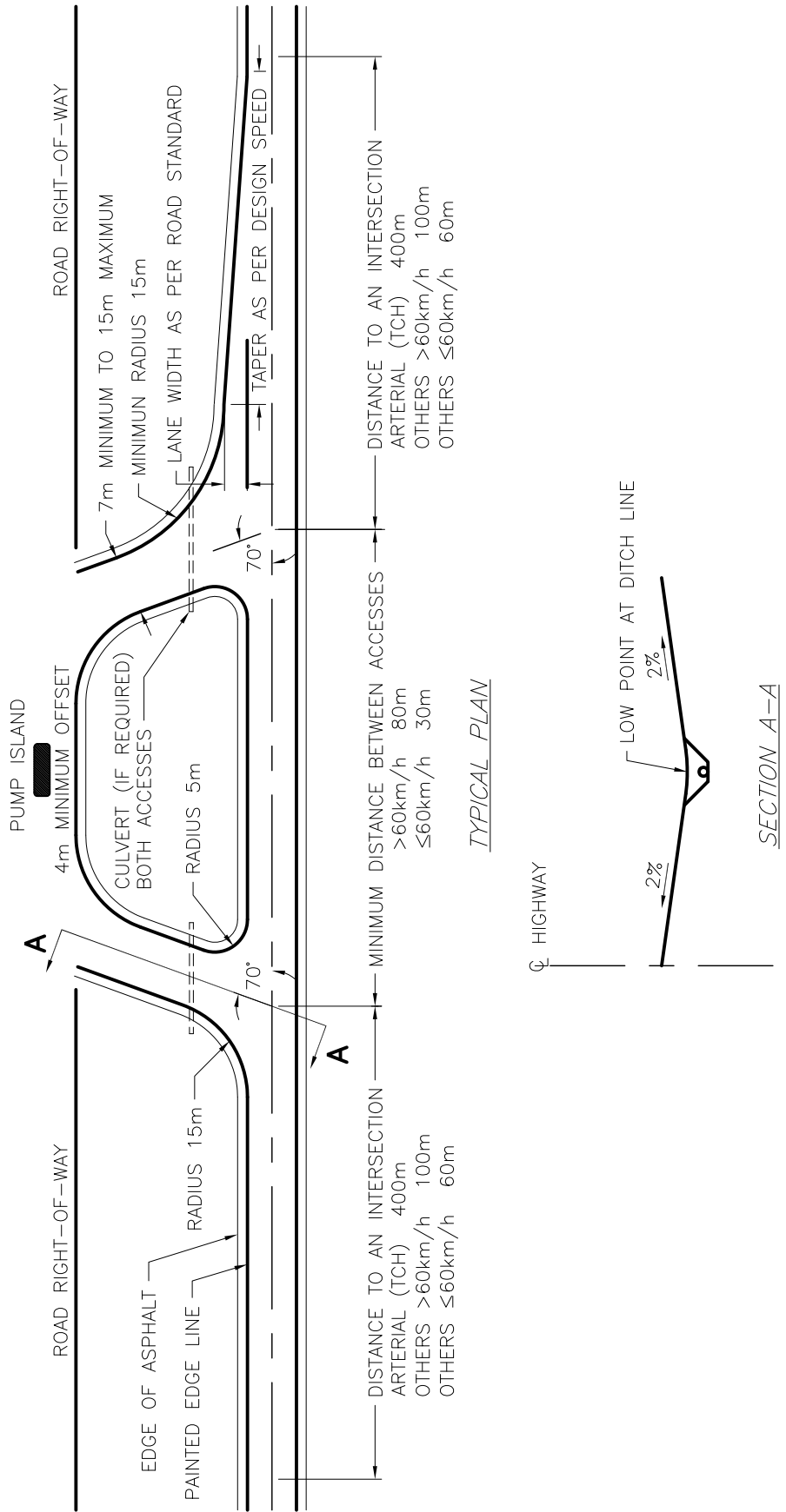


**SECTION A-A**

N.T.S.

NOTES:

1. ACCESSES SHALL BE GRADED TO PREVENT SURFACE DRAINAGE ON THE SITE FROM ENTERING THE ROADWAY. GRADES MAY VARY FROM SHOWN SECTION TO SUIT SITE CONDITIONS.
2. AUXILIARY LANES SHALL BE INSTALLED IF REQUIRED BY THE DEPARTMENT OF TRANSPORTATION AND WORKS. ALL LANES SHALL BE DESIGNED ACCORDING TO THE 'GEOMETRIC DESIGN GUIDE FOR CANADIAN ROAD', LATEST EDITION.
3. ACCESS CULVERTS SHALL BE A MINIMUM OF 600mm, OR AS SPECIFIED BY THE DEPARTMENT OF TRANSPORTATION AND WORKS.
4. AREA BETWEEN ACCESSES SHALL BE BLOCKED FROM VEHICULAR TRAFFIC BY MEANS OF OPEN DITCH, HIGH BACK CURB, GUIDE RAIL OR OTHER APPROVED MEANS.
5. EXIT AND ENTRANCE ACCESS RADIUS MAY VARY TO SUIT DESIGN VEHICLE.
6. EXIT TAPER LENGTH AND DECELERATION LANE TO SUIT DESIGN SPEED.
7. GRADES MAY VARY TO SUIT SPECIFIC SITE CONDITIONS.



TYPICAL PLAN

SECTION A-A



## Preliminary Application to Develop Land

**For Office Use Only**

File No. _____
People RSN _____
Property RSN _____

**Please place a check in the box to indicate the area for which you are making application**

1 <input type="checkbox"/> Protected Road Zoning Regulations <input type="checkbox"/> Butterpot - Witless Bay Line Environs Development Control Regulations <input type="checkbox"/> Access to Provincial Road	<input type="checkbox"/> Gander River Protected Area Regulations <input type="checkbox"/> Marble Mountain Protected Area Land Use Zoning Regulations
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**Location**

2 Location
Give distance from prominent landmark to nearest tenth of kilometre _____ GPS Latitude _____ GPS Longitude _____
Marking of Site (Describe) _____

**Applicant Information**

3 Name
Address _____ City/Town _____ Postal Code _____
Telephone _____ Fax _____ Email _____

**If submitted by an agent or person other than applicant**

Name of Agent _____
Address of Agent _____ Telephone _____

**Type of Development**

4 Residential <input type="checkbox"/>	Commercial <input type="checkbox"/>	Accessory Building <input type="checkbox"/>	Access <input type="checkbox"/>
Cottage <input type="checkbox"/>	Extension <input type="checkbox"/>	(If Accessory Building, number of stories) _____	Other <input type="checkbox"/> specify _____

**Describe proposed development**

5 Describe proposed development
Approximate Cost _____
If extension, size of existing building Width _____ Length _____ Height _____ Set back from road centre _____
<b>Use of Proposed Buildings</b>
(a) Use _____ Size _____ X _____ Set back from road centre _____
(b) Use _____ Size _____ X _____ Set back from road centre _____
(c) Use _____ Size _____ X _____ Set back from road centre _____
List any Buildings to be Demolished _____

**Size of Land Development**

6 Area _____ m <sup>2</sup> /ft <sup>2</sup>	Frontage _____ m/ft	Side _____ m/ft
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**Land Ownership**

7 Crown Land <input type="checkbox"/> Private <input type="checkbox"/>	Applicant's Interest in Land Lessee <input type="checkbox"/> Owner <input type="checkbox"/> Prospective Lessee or Owner <input type="checkbox"/>	Area of Adjacent Land in Same Ownership, if any _____ m <sup>2</sup> /ft <sup>2</sup>
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**Continued on Reverse**



**Present Uses of Adjacent Land (Residential, Commercial, Unused, etc.)**

8 Side \_\_\_\_\_ Side \_\_\_\_\_ Rear \_\_\_\_\_ Opp. Side of Road \_\_\_\_\_

**Services**

9 **Existing Services**  
Water Supply \_\_\_\_\_ Sewage Disposal \_\_\_\_\_

**Proposed Services**

Water Supply \_\_\_\_\_ Sewage Disposal \_\_\_\_\_

**Type of Vegetation**

10 Type of Vegetation (Forest, Scrub, Barren, Cleared, etc.)

**Describe Proposed Means of Access to Site**

**Include Route #, proposed use (private or commercial) and whether a permanent or temporary access**

11  Residential  Commercial  New/Change of Use  Road Route # \_\_\_\_\_ Route Name \_\_\_\_\_

**Applicant's Signature**

12 Applicant's Signature \_\_\_\_\_ Date (YYYY-MM-DD) \_\_\_\_\_

**Notes and Fee Information**

13 **Fees for Residential Access \$50.00; or Commercial Access \$500**  
**All cheques/money orders are to be made payable to the Newfoundland Exchequer Account.**  
**"WHERE THE FEE PAID IS INSUFFICIENT, THE BALANCE SHALL BE PAID UPON REQUEST."**  
1. This form is not valid unless all questions are answered correctly, signed and dated.  
2. This form must be accompanied by two copies of a location plan, sufficiently detailed, to identify site location.  
3. It is essential that the proposed site be marked with corner posts or stakes with the applicant's name as a means of identification. Type of markings must be stated in Section 2 of this form.  
4. Where appropriate, applicant should specify whether measurements are imperial or metric.  
This is **NOT** an application for lease or grant of Crown Land. A separate application must be made.

**Routing Information**

14 **Send ALL completed copies to Government Service Centre, Service NL at the office location nearest you:**

<b>MOUNT PEARL</b> Motor Registration Building 149 Smallwood Drive P. O. Box 8700 Mount Pearl, NL A1B 4J6	<b>CLARENVILLE</b> 8 Myers Avenue, Suite 201 Clareville, NL A5A 1N2	<b>GANDER</b> Fraser Mall 230 Airport Blvd. P. O. Box 2222 Gander, NL A1V 2N9
<b>GRAND FALLS-WINDSOR</b> 3 Cromer Avenue Grand Falls-Windsor, NL A2A 1W9	<b>CORNER BROOK</b> Sir Richard Squires Building Mount Bernard Avenue P. O. Box 2006 Corner Brook, NL A2H 6J8	<b>HAPPY VALLEY-GOOSE BAY</b> 2 Tenth Street P. O. Box 3014, Stn. B Happy Valley-Goose Bay, NL A0P 1E0

**PRIVACY NOTICE**

The Government Service Centre collects personal information relating to land development under the authority of the *Health and Community Services Act* and the *Water Resources Act*. Personal information collected by the Government of Newfoundland and Labrador is protected under the *Access to Information and Protection of Privacy (ATIPP) Act*. If you have any questions about the collection or use of this information, please contact a Government Service Centre representative at your nearest Service NL office.

**HIGHWAY ACCESS INSPECTION REPORT**

Date: \_\_\_\_\_

Referral Type: \_\_\_\_\_  
(Crown Land, Development Control, Quarry, Private , etc.)

Referral Application No.: \_\_\_\_\_

Name of Applicant: \_\_\_\_\_

Applicant's Address: \_\_\_\_\_

Development Location: \_\_\_\_\_

Type of Development: \_\_\_\_\_

**INFORMATION VERIFIED AT THE PROPOSED SITE**

Route being accessed	
Community	
Location of property referenced to known land mark	
Coordinates	
Road Classification ( <i>Arterial, Collector or Local</i> )	
Number of accesses within 400 m ( <i>Arterials &amp; Collectors only</i> )	
Distance to horizontal curve	
Distance to nearest intersection	
Distance to interchange intersection	
Distance to interchange ramp taper or climbing lane taper	
Distance to nearest commercial access	
Distance to nearest private access	
Posted speed limit	
Measured sight distance left	
Measured sight distance right	
Access culvert size recommended	
Potential access grade concerns	
Road culverts discharging onto property	
Potential for property flooding	

**Other observations and/or recommendations:**  
\_\_\_\_\_  
\_\_\_\_\_

Inspected by: \_\_\_\_\_  
(print name and title)

\_\_\_\_\_  
(signature)

Date: \_\_\_\_\_

**"Approval in Principle" FOR HIGHWAY ACCESS**

Date: \_\_\_\_\_

Referral Type: \_\_\_\_\_  
(Crown Land, Protected Roads, Quarry, Other)

Referral Application No.: \_\_\_\_\_

Transportation & Works File No.: \_\_\_\_\_

Name of Applicant: \_\_\_\_\_

Applicant's Address: \_\_\_\_\_

Development Location: \_\_\_\_\_

Type of Development: \_\_\_\_\_

This **Approval in Principle for Access** refers to the application referenced above and is being issued subject to the applicable conditions that are checked (✓) below:

- |     |                                     |  |
|-----|-------------------------------------|--|
| 1)  | <input checked="" type="checkbox"/> | Applicant will be required to obtain an Highway Access Permit prior to constructing a new access, using an existing access or improving an existing access.  |
| 2)  | <input checked="" type="checkbox"/> | Prior to issuing a permit, applicant will be required to provide proof of property ownership.  |
| 3)  | <input checked="" type="checkbox"/> | Access will be permitted onto Route _____  |
| 4)  | <input checked="" type="checkbox"/> | Maximum number of accesses permitted: _____  |
| 5)  | <input checked="" type="checkbox"/> | Applicant will be required to supply and install a new culvert for this access. The exact size of the culvert will be confirmed on the permit.   |
| 6)  | <input type="checkbox"/>            | Access may be placed anywhere along the road frontage.   |
| 7)  | <input checked="" type="checkbox"/> | Access must be located at the following location: _____  |
| 8)  | <input type="checkbox"/>            | Applicant is responsible for the design and construction of auxiliary turning lanes on the highway at the access to the site. The design must be completed by a professional engineer licensed to practice in this province and the design must comply with the <i>Geometric Design Guide for Canadian Roads</i> (latest edition) published by the Transportation Association of Canada. The design must be submitted to the Highway Design division for approval. All associated costs are the responsibility of the applicant. |
| 8)  | <input checked="" type="checkbox"/> | Under the " <b>Building Near Highways Regulations</b> ", a person shall not erect, repair, alter or structurally improve a fence, building or other structure, nor shall he or she plant trees, shrubs or hedges without the prior permission of the Minister within _____ m of Route _____  |
| 9)  | <input type="checkbox"/>            |  |
| 10) | <input type="checkbox"/>            |  |

Subject to approval of the application and applicable conditions referenced above, a Highway Access Permit for this development can be obtained by contacting the following Department of Transportation and Works Unit Office:

Unit Name: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Recommended  
for Approval:

\_\_\_\_\_  
(print name and title)

\_\_\_\_\_  
(signature)

\_\_\_\_\_  
(date)

Approved by:

\_\_\_\_\_  
(print name and title)

\_\_\_\_\_  
(signature)

\_\_\_\_\_  
(date)

**HIGHWAY ACCESS PERMIT**

Permit No. \_\_\_\_\_ Receipt No. \_\_\_\_\_ Issue Date: \_\_\_\_\_

This permit authorizes \_\_\_\_\_  
*(name and address of property owner/applicant)*

to \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_  
*(construct new , use existing, or improve existing) (permanent or temporary) (residential or commercial)*

access to Route \_\_\_\_\_ in or between the community(ies) of \_\_\_\_\_

approximately \_\_\_\_\_ of \_\_\_\_\_  
*(distance) (direction) (nearest intersection or other landmark)*

at the following coordinates \_\_\_\_\_  
*(northing) (easting)*

for the purpose of \_\_\_\_\_  
*(describe proposed development , intended use or proposed improvements)*

**General conditions below are applicable to this permit.**

- 1) This permit is valid for the property owner and intended use referenced above. Any changes in ownership, intended use or dimensions requires a new permit.
- 2) The access shall be graded to prevent surface water from flowing directly onto the roadway from the access.
- 3) If the property owner decides to pave the access, any asphalt placed on the road shoulder must be a minimum of 50 mm thick and the top of the asphalt must be set at the same grade as the road shoulder on either side. The Department will not accept any liability for damages to the paved surface of the access caused by routine highway maintenance and upgrading.
- 4) The property owner may be permitted to improve the type of end treatments on access culverts. However, any such improvements requires the prior approval of the Department. The Department will not be responsible for reinstating such improvements during future maintenance or replacement of the culvert.
- 5) The Department reserves the right to change the alignment and grade of the roadway and adjust the access accordingly to tie into the new roadway alignment and gradeline.

**Specific conditions checked (✓) below are applicable to this permit.**

- |     |                          |  |
|-----|--------------------------|--|
| 1)  | <input type="checkbox"/> | Number of accesses that will be constructed to the property under this permit: _____ .   |
| 2)  | <input type="checkbox"/> | New access(es) will be located _____<br><i>(describe any specific location requirements)</i>   |
| 3)  | <input type="checkbox"/> | Applicant is responsible for supplying the following new culverts to accommodate drainage through the access:<br>Number of culverts: _____ Diameter: _____ Length: _____ Type: _____   |
| 4)  | <input type="checkbox"/> | Upon notification from the applicant that the culvert has been delivered to the access site, the Department of Transportation and Works will arrange for installation at the next available opportunity. Applicant will charged a flat rate of \$_____ plus HST for each culvert installed by the Department.  |
| 5)  | <input type="checkbox"/> | Applicant will arrange to have the culvert installed by: _____<br><i>(name of contractor)</i>  |
| 6)  | <input type="checkbox"/> | After installation of a culvert within the highway right-of-way, the culvert becomes the property of the Department and Transportation and Works and the department assumes all future responsibility for maintenance and/or replacement. Culverts installed outside the highway right-of-way remain the property and responsibility of the applicant. |
| 7)  | <input type="checkbox"/> | Level of road maintenance provided by the Department: _____<br><i>(description of level of summer and winter maintenance)</i>  |
| 8)  | <input type="checkbox"/> | Under the " <b>Building Near Highways Regulations</b> ", a person shall not erect, repair, alter or structurally improve a fence, building or other structure, nor shall he or she plant trees, shrubs or hedges without the prior permission of the minister within _____ m of Route _____ .  |
| 9)  | <input type="checkbox"/> | Access shall conform to the following attached plan: _____<br><i>(description of standard access drawing or developer's plan previously approved)</i>  |
| 10) | <input type="checkbox"/> | This temporary access permit expires on _____ .  |
| 11) | <input type="checkbox"/> | Applicant shall remove vegetation fronting the property within the highway right-of-way.   |
| 12) | <input type="checkbox"/> | Local contact for driveway location approval is the _____ Depot Phone #: _____   |
| 13) | <input type="checkbox"/> |  |

*This permit is issued on behalf of the Minister of the Department of Transportation and Works.*

Issued by:

\_\_\_\_\_

*(print name and title)*

\_\_\_\_\_

*(signature)*

Date:

\_\_\_\_\_

## **Guidelines for the Preparation of Traffic Impact Studies**

### **1.0 Introduction**

The main purpose of a Traffic Impact Study (TIS) is to demonstrate how the transportation impacts of a proposed development or redevelopment can be mitigated and addressed in a manner that is consistent with the objectives of the Department of Transportation and Works. The TIS also serves as the basis for the identification and evaluation of transportation related improvements or measures to be included as a condition of access approval for the development or redevelopment.

Evaluation of traffic impacts of proposed development depends upon a number of assumptions about the type, amount and patterns of traffic expected to be produced from and attracted to the site. Highway Design staff are available for pre-submission communication to confirm key assumptions and parameters through the Regional and Design Section. Depending upon the complexity of the proposed development, this may reduce or negate the need for study revisions following submissions of the completed study. A list of possible discussion items is attached for reference.

For clarification on any matters related to the submission, contact the appropriate Regional and Design Section.

It is the proponent's responsibility to retain a qualified transportation consultant experienced in the preparation of TISs. Also, TISs shall be signed and stamped by a Professional Engineer registered in the Province of Newfoundland and Labrador taking responsibility for the TIS contents.

The department will accept the use of Highway Capacity Software (HCS) and Synchro/Sim Traffic Simulation Software Version 5 (or higher) for intersection capacity/operational analysis. The consultant will require prior approval from DTW to use any software other than those listed above and may be requested to submit an electronic copy of the files. If the proposed development directly impacts freeway operations there may be a need to undertake micro-simulation to assess these impacts. The Department's regional or design offices should be contacted if there are any questions as to these requirements.

A minimum of three copies of the TIS shall be submitted to DTW for review.

### **1.1 References**

The following references are recommended but not limited to:

- ITE Trip Generation Manual and Handbook (most recent edition)
- Geometric Design Standards for Canadian Roads (Transportation Association of Canada)
- Highway Capacity Manual (most recent edition)
- ITE Traffic Access and Impact Studies for Site Development. A Recommended Practice

Note: these technical documents are available in English only.

## **2.0 Submission Requirement**

- 2.1 Executive Summary
- 2.2 Introduction
- 2.3 Existing Conditions
- 2.4 Study Area
- 2.5 Development Land Use Type and Site Plan
- 2.6 Development Size
- 2.7 Development Stages
- 2.8 Other Development and Planned Road Improvements
- 2.9 Study Horizons
- 2.10 Traffic Analysis
- 2.11 Turning Movement Counts
- 2.12 Background Traffic Forecast (non-site traffic)
- 2.13 Trip Generation
- 2.14 Trip Distribution/Assignment
- 2.15 Trip Pass-by/ Interaction Rates (on-site Synergy)
- 2.16 Evaluation of Impacts
- 2.17 Signal Justification
- 2.18 Geometric Improvements
- 2.19 Conclusions and Recommendations
- 3.0 Disclaimer

### **2.1 Executive Summary**

- Contains key findings, conclusions and recommendations of the TIS and should be located at the front of the TIS.

### **2.2 Introduction**

- Includes the purpose for submitting the TIS;
- Contains a brief description for the project;
- Contains a description of the components of the TIS.

### **2.3 Existing Conditions**

- Describes the road jurisdictions, road classifications, existing land use type, speed limits, lane configurations, street names, signalized and/or un-signalized interactions and their locations. This information should be provided on detailed maps and diagrams.

### **2.4 Study Area**

- Contains a description and a map of the study area including but not limited to the site location, land use type of the surrounding subject development lands;

- The study area should extend far enough to contain all highways, interchanges and intersections that will be affected by the traffic generated by the proposed development.

### **2.5 Development Land Use Type and Site Plan**

- Contains a description type of land uses proposed and a detailed site plan showing structures, parking, access and site circulation;
- Identifies existing road edges, entrances, pavement markings and traffic control for roads adjacent to the proposed development, shown to scale.

### **2.6 Development Size**

- Describes the size of the proposed development, such as property size (area), number of residential units, industrial gross floor area, number of employees, number of hotel rooms, commercial gross leasable floor area, etc.

### **2.7 Development Stages**

- Identifies the phasing Schemes of the development;
- Identifies the expected dates of full and partial completion/occupancy, estimated length of construction and opening dates if available, for each phase.

### **2.8 Other Development and Planned Road Improvements**

- Identifies other developments in the study area that are under construction, approved or in the approval process that will impact the provincial facility of proposed access;
- Identifies any road improvements that are planned or currently under construction within the defined study area.

### **2.9 Study Horizons**

- Identifies other developments in the study area that are under construction, approved or in the approval process that will impact the provincial facility of proposed access;
- Identifies any road improvements that are planned or currently under construction within the defined study area.

### **2.10 Traffic Analysis**

- Impacts on the road network should be evaluated for A.M. and P.M. peak hours and the site peak generation hour;
- Depending upon the study area and proposed land or building uses, there may be a need to consider specific seasons, days of the week, or non-typical peak periods;
- The peak hour analysis should be undertaken for full development and for interim stages if applicable (with and without the relevant transportation improvements) as well as:
  - Existing traffic conditions
  - Existing traffic conditions plus background growth

- Existing traffic conditions plus background growth plus site generated traffic
- Heavy/Commercial vehicles should be accounted for in the traffic analysis.

### **2.11 Turning Movement Counts**

- DTW data are preferred; however, counts from the local municipality or consultant counts may be acceptable, once approved by the DTW;
- Only data collected within three years of the study shall be used. Historical and recent AADT volume information for provincial highways can be obtained from the DTW Highway Design Office.
- See section 2.10 regarding the need for data for specific seasons, days of the week, or non-typical peak periods.

### **2.14 Trip Distribution Assignment**

- Describes methods and assumptions for distribution and route assignment of traffic;
- Assumptions for trip distribution should be supported by one or more of the following:
  - Transportation Tomorrow Survey (TTS) data
  - Origin-destination Surveys
  - Planning models
  - Market studies
- Assumptions for route assignment should be supported by:
  - Existing Travel patterns
  - Expected future travel patterns

### **2.15 Trip Pass-by/Interaction Rates (on-site Synergy)**

- Describes source, method and assumptions for adjusting gross trip generation for pass-by trips or site interaction rates

### **2.16 Evaluation of Impacts**

- Describes methodologies and parameters used in evaluation;
- All signalized and relevant un-signalized intersections in the study network shall be evaluated. At signalized intersections, movements with a v/c ratio of greater than 0.85 are deemed to be “critical” in terms of operations. Movements that experience a v/c Ratio of 0.85 or greater would be considered for geometric improvement. For ramp terminals a v/c ratio for ramp approaches with a values greater than 0.75 would be deemed critical and considered for geometric improvements;
- All proposed new traffic signals should be evaluated for conformance to DTW best practices, proximity to other adjacent traffic signals, traffic signal progression and any impacts on the corridor;
- All exclusive turn lanes should be designed as per the TAC GDG manual;
- Any traffic improvements or operational concerns that cannot be adequately mitigated to DTW standards should be identified;



- Forecast and analyze traffic for the opening day of the development, 5 and 10 years beyond the opening date;
- In case of a Multi-phased development, volume projections are required for the opening year of each phase including full build-out, 5 and 10 years beyond full build-out. Include other approved developments within the study area as background traffic;
- All volumes should be shown in exhibits.

### **2.17 Signal Justification**

- The need for traffic signals and/or underground provisions should be reviewed at all locations affected by the proposed development and for each proposed development stage(s). Refer to TAC Traffic Signal Warrant Handbook to determine when traffic signals or provisions for signals are warranted.

### **2.18 Geometric Improvements**

- The need for geometric improvements should be reviewed at all locations in the study area and for each proposed development stage(s). The TIS should clearly identify transportation impacts by movement, the transportation system improvements that are needed to mitigate these impacts and the timing of these improvements;
- All geometric improvements should be shown on a functional plan identifying lane arrangements and intersection improvements for each horizon year;
- The illumination needs required as result of proposed geometric improvements to accommodate the proposed development shall be assessed in accordance with TAC Guide for Illumination of Isolated Rural Intersections and TAC Guide for the Design of Roadway Lighting.

### **2.19 Conclusions and Recommendations**

- Summary of key finding of the impacts of the proposed development on the highway corridor;
- Summary of recommended improvements. This should include but is not limited to type of access, entrance design, highway improvement including right/left turn lanes, tapers, visibility triangles, signalization and signage, etc.;
- If one TIS is prepared for both provincial and municipal consideration, break down the summary of impacts and improvements by road authority.

All diagrams, drawings and figures contained in the TIS must be of sufficient scale to be legible. All drawings, tables, and exhibits/figures included in the TIS must be appropriately labelled and listed at the front of the TIS (after the Table of Contents) under the appropriate headings.

### **3.0 Disclaimer**

Notwithstanding the above, each Regional and Design Section and/or Traffic Section may require additional information and analysis, depending on the complexity of the proposal and the anticipated traffic impacts.

### **List of Possible Items for Discussion during Pre-submission Communications**

- Road jurisdictions and responsibilities where more than one road authority is involved
- Extent of study area, including specific interchanges and intersections to include in analysis
- Appropriate study horizon years to consider for multi-staged development
- Appropriate analysis periods for proposed development (for example: A.M. peak, P.M. peak, Saturday Peak, summer weekday, etc.)
- Suitability of non-DTW data sources
- Suitability of rates for forecasting background traffic growth
- Developments that need to be included in background traffic forecasts
- Site plan considerations such as access locations
- Trip generation data source and estimation method (for example ITE Trip Generation rate vs. ITE Trip Generation equation vs. locally observed rate) for less typical uses
- Trip distribution and route assignment prediction methods and assumptions for more complex development or road networks
- Sources and assumptions for trip pass-by or interaction rates where the complexity of the development requires these
- Methodology for predicting signal justification for forecast traffic volumes
- Software to use for capacity analysis, and assumptions and parameters to apply for the agreed upon software tool
- Methodology and/or software to use for evaluating storage lane length requirements
- Potential DTW work projects, preliminary design studies, planning studies, in the study area
- Access management best practices