Access Management Strategy
Highway 104 Antigonish - Phase 1
(Addington Forks Road to Trunk 4)

1.0 Introduction

This document contains an Access Management Strategy (AMS) for the controlled access section of the existing Highway 104 (future Trunk 4) from James Street to Trunk 4 east of Antigonish. The AMS also includes connector roadways in the vicinity of proposed interchanges at Addington Forks Rd, Trunk 7 and Beech Hill Road. The AMS is displayed on the attached plans.

The AMS shall become effective after Highway 104 Phase 1 from Addington Forks Road to Trunk 4 east of Antigonish is constructed and opened to traffic. Access to the existing Highway 104 just west of Trunk 4 will not be permitted until Highway 104 Phase 2 is completed. Access decisions along connector roadways prior to the opening of Highway 104 Phase 1 shall adhere to the general intent of this AMS.

2.0 Strategy Objectives

An AMS is necessary to ensure proposed interchanges, connector roadways, and the existing Highway 104 operate at a high level of service and safety in the long term. The AMS achieves this objective by eliminating new accesses near interchanges and major intersections and preventing the proliferation of accesses along the existing Highway 104 which is a common problem on many urban corridors in Nova Scotia.

The goal of the AMS is to facilitate sustainable development and access patterns and to provide a safe and efficient secondary road system through the Town of Antigonish. Increased mobility and a high level of accessibility to the 100 series highway system benefits all local residents and businesses. A higher level of service on the secondary road system also has the potential to reduce local trip travel on the 100 series highway system which is a significant benefit to the Department in terms of improved road safety and capacity.

3.0 Access Spacing Standards

For the purpose of developing this strategy it is assumed that the existing Highway 104 between James Street and Trunk 4 east of Antigonish will become a collector roadway with a posted speed limit of 70km/hr. The following standards were used in developing the AMS and shall be applied when approving accesses.

- minimum driveway spacing	100m
- minimum corner clearance (major intersection)	100m
- minimum public roadway spacing	200m

- minimum signalized intersection spacing 600m
- Interchange ramp clearance 100m
- major bridge clearance 100m

Access within the limits of an auxiliary lane, ramp or taper shall not be permitted. If an access is proposed within theses limits the access shall be relocated or the turning lane or ramp eliminated or shortened if feasible and approved by TIR. The cost of altering auxiliary lanes and ramps, if permitted, shall be the responsibility of the developer.

4.0 Control of Access Designation

The existing section of Highway 104 between James Street and Trunk 4 east of Antigonish is controlled access. Control of access designation shall be retained after the new Highway 104 Alignment is constructed in order to facilitate effective and orderly implementation of the AMS. In addition, control of access designation shall be applied to the following primary highway connections in the vicinity of the new Highway 104 alignment.

1. Trunk 7 - 100m south of the EB ramp terminal to the existing Highway 104
2. Beech Hill Road - 100m south of the EB ramp terminal to the existing Highway 104

Access to public roadways is not permitted within 60m of an intersection with a controlled access highway.

5.0 Connector Roadway Access

No access shall be permitted to sections of connector roadways identified as having access control designation applied with the exception of Beech Hill Road. One full movement access to Beech Hill Road, near the midpoint between the proposed WB ramp terminal and the existing Highway 104, may be permitted.

6.0 Existing Highway 104 Access

Access to the existing Highway 104 between James Street and Trunk 4 east of Antigonish shall be restricted to locations identified on the attached plan. Where access is permitted along a section of the roadway the spacing standards contained in Section 3.0 shall apply. The area along the existing Highway 104 east of Beech Hill Road where grades are at or near 6% is shown in yellow on the plan. Due to the steep grades and potential safety concerns accesses along this section are limited to low volume entrances with expected 2-way traffic volumes of 25 or less per day.

7.0 Traffic Signals

Based on industry accepted standards the minimum traffic signal spacing for a collector roadway with a 70km/hr posted speed limit is 600m. Using this spacing criteria, and considering the location of existing traffic signals and major intersections, new traffic signals shall only be permitted at the following locations within the study area;

1. Existing Highway 104 at Trunk 4 east of Antigonish
2. Existing Highway 104 at Beech Hill Road
3. Existing Highway 104 near the midpoint between Trunk 4 and Beech Hill Road.

Except for location 3 above, traffic signals shall not be permitted at entrances to proposed developments. If access to a proposed development warrants traffic signals one or both of the following actions must be taken such that signals are no longer warranted.

1. The development proposal revised to reduce the number of trips generated.
2. Turning movement restrictions applied.

In lieu of traffic signals a roundabout may be considered.

8.0 Roundabouts

Roundabouts are planned for all interchange ramp terminals along the section of new Highway 104 from Addington Forks Road to Trunk 4 east of Antigonish. Roundabouts may be considered to replace exiting traffic signals within the plan area and at potential future traffic signal locations previously identified. A roundabout may also be considered at entrances for proposed developments provided they are located a minimum of 200m from traffic signals or other roundabouts.

9.0 Permitting

The Department's standard process for access permitting, and all Departmental policies and procedures related to access management, development approvals and driveway construction shall apply. If there is a conflict between this AMS and other Departmental standards, policies or procedures, the AMS shall take precedence. All building and access permits along controlled access highways require the approval of the Minister as per Section 22(1) of the Public Highways Act.

10.0 Traffic Impacts Studies

The Department of Transportation and Infrastructure Renewal's policy and procedures related to traffic impact studies apply to all proposed developments accessing roadways

included in this AMS. Compliance with the requirements of the AMS does not exempt developers from the need to conduct a traffic impact study or the need to undertake required off site road infrastructure improvements as may be determined by the traffic impact study.

11.0 Measurement of Access Spacing

Access spacing shall be measured from the end of curve radii or taper at one access to the beginning of curve radii or taper at the adjacent access. If the access is a roundabout the spacing shall be measured from the beginning of the splitter island. Access spacing requirements apply to accesses on both sides of the roadway unless the roadway is divided by a non traversable median. Limits of access control as indicated on the Access Management Plans shall be measured in the same manner as access spacing.

12.0 Subdivision of Land

Subdivision of lands with frontage along roadways included in this access strategy must take into consideration access spacing standards. Subdivision plans that do not facilitate access in accordance with required spacings standards should not be approved.

13.0 Access Roads

Implementation of this AMS may result in properties within the plan area not being able to obtain direct access along their frontages (ie they are land locked). As a condition of access approval land owners may be required to provide deeded easements for access roadways to adjacent properties which are land locked.

14.0 Existing Accesses

Existing accesses within the plan area may remain provided the land use served by the access does not substantially change and the traffic generated at the existing access does not create a hazard to public safety. A substantial change in land use requires a new access permit and the entrance serving the changed land use shall be subject to the standards and restrictions contained in this AMS.

15.0 Waivers

A written request for a variation or waiver of the access requirements contained in this Access Management Strategy shall only be considered in very exceptional circumstances and shall require the approval of the Executive Director Maintenance and Operations.

Approved:

Access Management Engineer	Date
Manager Traffic Engineering Services	Date
Chief Engineer	Date