

# HALIFAX

P.O. Box 1749  
Halifax, Nova Scotia  
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**Item No. 2**  
**Halifax Regional Council**  
**June 19, 2018**

**TO:** Mayor Savage and Members of Halifax Regional Council

**SUBMITTED BY:**

Original Signed by 

\_\_\_\_\_  
Jacques Dubé, Chief Administrative Officer

**DATE:** May 1, 2018

**SUBJECT:** **Reinstate Crosswalk by the Eastern Shore Memorial Hospital**

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## INFORMATION REPORT

### ORIGIN

Item 14.5.2 of the February 27, 2018 meeting of Halifax Regional Council:

Motion passed that Halifax Regional Council request a staff report on the reinstatement of the crosswalk by the Eastern Shore Memorial Hospital with consideration given to an alternative location at the intersection of Martin Lane & Hwy 7.

### LEGISLATIVE AUTHORITY

Motor Vehicle Act, R.S.N.S. 1989, c.293, subsection 90 (1) The traffic authority may establish and designate and may maintain, or cause to be maintained, by appropriate devices, marks or lines upon the surface of the highways, crosswalks at intersections where, in his opinion, there is particular danger to pedestrians crossing the highway, and at such other places as he may deem necessary.

## **BACKGROUND**

Highway 7 in this area is owned and maintained by the Province. Thus, the authority to establish, maintain or remove a marked crosswalk resides with the Provincial District Traffic Authority.

In 2015, Nova Scotia Transportation and Infrastructure Renewal (NSTIR) removed a mid-block crosswalk after an investigation was carried out because of a public safety concern. Subsequently, several requests have been received from residents to reinstate a marked crosswalk in the area.

NSTIR's policy for the installation of marked crosswalks on provincial roadways is included as Attachment A. The policy makes reference to the Pedestrian Crossing Control Manual which are guidelines published by the Transportation Association of Canada (TAC). These are the same guidelines used by the HRM Traffic Authority.

## **DISCUSSION**

The referenced section of Highway 7 is a two-lane roadway with a posted speed limit of 50 km/h with a sidewalk located on the northern side. The average daily traffic is approximately 2,500 vehicles per day.

NSTIR staff have reviewed a request from the Municipality to reinstate the crosswalk by the hospital and had recommended the crosswalk be relocated at the edge of the parking lot adjacent to Civic 22636 which is in close proximity to the original request. Installation of the crosswalk was completed this spring. They've indicated that although the pedestrian crossings at this location do not reach the levels recommended by TAC guidelines, there is enough demand that it does warrant a crosswalk between the hospital and senior's residence to the Lawton's store on the other side of the roadway.

This location meets the requirements for stopping sight distance for the reasonable approach speed. There is a curb cut and pedestrian ramp installed on the north side and a pedestrian refuge area on the south side of Highway 7. There is adequate street lighting, so no additional lighting was required at this location. NSTIR's Crosswalk Analysis and Map of the Area is included as Attachment B.

## **FINANCIAL IMPLICATIONS**

The actual work was performed by NSTIR. The costs associated with the installation and future maintenance will be the responsibility of HRM as per NSTIR's policy.

The estimated cost of the infrastructure required for the installation of the crosswalk is approximately \$3,000 as per the estimate provided by NSTIR and funding is available in Capital Project CT180005 Intersection Improvement Program.

<b>Budget Summary:</b>	<b>Project Account No. CT180005 – Intersection Improvement Program</b>
	Cumulative Unspent Budget \$803,774
	Less: Estimate for Crosswalk Installation <u>\$ 3,000</u>
	Balance \$800,774

The estimated cost associated with the annual maintenance of the crosswalk is \$300 and funding is available in operating account R747 Traffic Signs.

## **COMMUNITY ENGAGEMENT**

There was no need for community engagement as this report is in response to questions raised by the public.

**ATTACHMENTS**

Attachment A: Provincial Policy for Marked Crosswalk Installation

Attachment B: Crosswalk Analysis and Map of the Area

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A copy of this report can be obtained online at [halifax.ca](http://halifax.ca) or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Hugh Morrison, Traffic Services Supervisor, 902.490.5018

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# Attachment A

*Division: Highway Programs*  
*Section: Engineering & Construction*  
*Function: Traffic Management (HP 2.23.39)*  
*Policy Number: PO1005*

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## Marked Crosswalk Installation

### Policy Statement

The Department may install crosswalks on provincial highways if specific criteria are met to provide for a safe location. With the exception of signalized intersections, roundabouts and stop or yield controlled intersection approaches, the Department will only consider the installation of a crosswalk following a request from a Municipal Unit or School Board as detailed in this policy.

### Rationale

The Motor Vehicle Act (MVA) authorizes a Traffic Authority to establish a marked crosswalk on a highway. Deputy Provincial Traffic Authorities are responsible for provincial highways and therefore must approve any crosswalk installed on these highways.

The cost of installation and maintenance of the crosswalk is dependent on the type and location of the crosswalk as further outlined in this policy.

### Policy Objectives

To ensure that crosswalks installed on provincial highways are done so only in safe locations and are installed and maintained in a consistent and uniform manner by those responsible.

### Application

This policy applies directly to staff of the Department and indirectly to staff of the Municipal Units.

### Accountability

Area Managers (AM) are responsible for processing requests for marked crosswalks and ensuring crosswalks are removed if maintenance or supervision commitments by the municipality or school board are not upheld.

District Traffic Supervisors (DTS) are responsible for investigating requests for marked crosswalks to determine if requested crosswalks are warranted and if the

requested location is suitable. The DTS is also responsible for determining the appropriate traffic control device placement for the crosswalk.

The Provincial Traffic Authority (PTA) or Deputy Provincial Traffic Authorities (DPTA) are responsible for approving the marked crosswalk. Operations Supervisors (OS), Maintenance Supervisors (MS) and Project Engineers (PE) are responsible for ensuring that crosswalks are constructed in accordance with policy, plans and specifications.

OS's and MS's are responsible for ensuring that crosswalks are maintained in accordance with the Department's Maintenance Standards.

### **Monitoring**

The Manager of Traffic Engineering and Road Safety will monitor the effectiveness of this policy.

### **Definitions**

**Marked Pedestrian Crosswalk** - A marked crosswalk that does not fall under the definition of a marked school crosswalk.

**Marked School Crosswalk** - A marked crosswalk that primarily serves a student walking population to and from a school where some or all of the student population includes any children in Grade 8 or lower. A marked crosswalk that falls within a school area is assumed to be a marked school crosswalk unless it can be proven that it does not primarily serve a student walking population.

**Reasonable Approach Speed (RAS)**- The expected speed of a vehicle, selected directionally and rounded up to the nearest 5 km/h increment, approaching a location based upon the posted speed zone or geometric features. RAS is often determined from the posted speed; however, if the DTS believes that the posted speed is not representative of prevailing speeds, they may determine the RAS by obtaining the 85th percentile speed. If the location being evaluated is not conducive to a spot speed study, the DTS may determine the RAS by conducting a number of test runs in their vehicle and averaging the results.

Pedestrian Generators and Attractors- Facilities and developments that produce or attract numbers of pedestrians. This can include, but is not limited to bus stops, schools, community centres, retail/commercial centres, and residential communities.

Pedestrian Desire Lines- The path that pedestrians typically will take, barring any controls or obstacles, to move from an origin to a destination.

## **Directives**

### **1.0 Marked Pedestrian Crosswalks**

- 1.1 The Department may install and maintain marked pedestrian crosswalks at signalized intersections and roundabouts.
- 1.2 The Department may install and maintain crosswalk lines across the mouth of a stop-controlled approach to an intersection.
- 1.3 At locations on provincial highway other than signalized intersections, roundabouts and stop-controlled approaches, the Department will install a pedestrian crosswalk when all of the following conditions have been met:
  - 1.3.1 The AM has received a request to install a marked crosswalk from a Municipal Unit which has agreed to pay the cost of installation and maintenance.
  - 1.3.2 The need for the crosswalk has been confirmed by the DTS, in consultation with the AM, taking into consideration:
    - the volume of pedestrian crossing demand,
    - the vehicle volumes on the section of highway approaching the crosswalk location,
    - the presence of pedestrian generators and attractors and/or desire lines,
    - the proximity of the proposed crosswalk to other existing crosswalks, and
    - the overall connectivity of the walking network.
  - 1.3.3 The crosswalk location has been approved by the DTS, who has verified the location meets the requirements for available stopping sight distance for the location's reasonable approach speed and grades.

1.4 Costs to the municipality to install each new pedestrian crosswalk consisting of two painted lines across the road and four ground-mounted (RA-4) signs are:

- Highways with two or fewer lanes \$500.00
- Highways with more than two lanes \$750.00

1.5 Annual costs to the municipality to maintain each new pedestrian crosswalk consisting of two painted lines across the road and four ground-mounted (RA-4) signs are:

- Highways with two or fewer lanes \$300.00
- Highways with more than two lanes \$500.00

1.6 Should the Department's investigation prove that there is a need for additional traffic control devices at the crosswalk such as extra signs, overhead beacons, etc., the municipality must agree to bear the costs for purchase, installation and maintenance for such devices. These costs will be determined based on the site conditions and the equipment required.

## 2.0 Marked School Crosswalks

2.1 The Department will install and maintain, at its cost, pavement markings and four ground-mounted (RA-3) signs to establish a school crosswalk if the following conditions are met:

2.1.1 The crosswalk has been requested by a municipality or school board that has agreed to fund and supply an adult crossing guard during the times that children are going to and leaving from the school. These times include the lunch break for schools with a walking population. The request by the school board is made to the Area Manager using the *School Crosswalk Request and Supervision Declaration* form.

2.1.2 The DTS has determined that the predominant users of the crosswalk are elementary or middle school age children going to or leaving the school.

2.1.3 The crosswalk location has been approved by the District Traffic Supervisor, who has verified the location meets the requirements for available stopping sight distance for the location's reasonable approach speed and grades.

- 2.2 Should the Department's investigation prove that there is a need for additional traffic control devices at the crosswalk, such as additional signs, overhead beacons, etc., the Municipal Unit or School Board must agree to bear the costs for purchase, installation and maintenance of these devices. These costs will be determined based on the site conditions and the equipment required.
  - 2.3 If a marked school crosswalk is established on a section of highway, outside of the boundaries of a typical school area that is adjacent to a school, a school area must be established around the school crosswalk. Refer to PO1054 *Establishment of School Areas on Provincial Highways* for further details.
  - 2.4 Annually, before the school year begins, the Municipality or School Board must recertify that an adult crossing guard will be provided for the school crosswalk for the upcoming school year. This is done using the *School Crosswalk Request and Supervision Declaration* form (Appendix A).
  - 2.5 It is the responsibility of the School or School Board to ensure the adult crossing guard is competent and trained in accordance with the *Nova Scotia Crossing Guard Training Manual*.
  - 2.6 If the AM becomes aware that either the adult crossing guard is no longer being supplied, or the school is closed (other than during the summer), the AM will request the DTS to arrange for the removal of the crosswalk.
- 3.0 All Marked Crosswalks
- 3.1 Marking and signing of crosswalks must conform to the Department standard drawings for Marked Crosswalks.
  - 3.2 Installation and maintenance of marked crosswalks, including any additional traffic control devices at the crosswalk such as overhead beacons, etc., must be completed by either Department forces or a contractor working for the Department. Municipalities are not permitted to install or maintain marked crosswalks on provincial highways.
  - 3.3 Stopping sight distance for marked crosswalks is to be measured using a 150 mm object height and 1.05 m eye height.
  - 3.4 Crosswalks must be avoided at:
    - 3.4.1 Locations with restricted stopping sight distance.
    - 3.4.2 Locations in close proximity to signalized intersections.

## **Guidelines**

### **1.0 Marked Pedestrian Crosswalks**

- 1.1 To determine the need for a pedestrian crosswalk, the DTS should consider:
  - 1.1.1 The volume of pedestrians crossing the road at or near the desired crosswalk location.
  - 1.1.2 Traffic volumes on the highway approaches.
  - 1.1.3 The available crossing opportunities.
  - 1.1.4 The proximity to pedestrian traffic generators such as shopping centres, recreational complexes, post offices, etc.
  - 1.1.5 Pedestrian facility connectivity (termination points of sidewalks, etc.).
  - 1.1.6 The proximity of existing pedestrian crossing facilities.

### **2.0 All Marked Crosswalks**

- 2.1 Marked crosswalks should be located at intersections where practicable and mid-block locations should be avoided unless there is no practical alternative.
- 2.2 Guidelines contained in the Pedestrian Crossing Control Manual should be used to select the appropriate treatment system to use at a given location.

## **References**

- *Motor Vehicle Act, s.90(1)*
- PO1054 *Establishment of School Areas on Provincial Highways*, Department Policy Manual
- *Crossing Guard Training Manual*, Nova Scotia Transportation and Public Works, February 2001
- *Crossing Guards Handbook*, Nova Scotia Transportation and Public Works, 2002
- *Pedestrian Crossing Control Guidelines for Canada*, Transportation Association of Canada, December 2012
- *Manual of Uniform Traffic Control Devices for Canada*, Transportation Association of Canada

**Enquiries**

District Traffic Supervisor  
Traffic Engineering and Road Safety Staff

**Appendices**

Appendix A - *School Crosswalk Request and Supervision Declaration form*

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*Approved by: Bruce Fitzner, CEHP*  
*Approval date: 15-MAR-2002*  
*Effective date: 15-MAR-2002*

*Transportation & Infrastructure Renewal*  
*Manual of Policies and Procedures*  
*Revision date: 12-NOV-2014*

Attachment B



STOPPING SIGHT DISTANCE:

SITE A  
 EB Approach: 139m at 0% slope  
 WB Approach: 157m at 0% slope

SITE B  
 EB Approach: 155m at 0% slope  
 WB Approach: 192m at +1% slope

LAWTONS

FORMER CROSSWALK

EASTERN MEMORIAL HOSPITAL

HARBOURVIEW LODGE

ERECT RA-4R & RA-4L AS DEPICTED

ERECT RA-4R & RA-4L AS DEPICTED

INSTALL ZEBRA TYPE PAVEMENT MARKING

INSTALL PEDESTRIAN REFUGE

RADAR SITE:  
 85 Percentile Speed: 55km/h  
 ADT: 2577  
 Date: March 26-28, 2018

**NOVA SCOTIA** Transportation and Infrastructure Renewal

Title: Crosswalk Analysis  
Trunk 7 at Hospital, Lawtons

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

Approved: \_\_\_\_\_ Date: April 5, 2018  
District Traffic Supervisor

Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
District Traffic Authority

Scale: NTS Sheet: \_\_\_\_\_