



Sidewalk Inspection Procedures

According to sections 16.1(1) and 16.2(1) of Ontario Regulation 239/02 Minimum Maintenance Standards for Municipal Highways (MMS) the standard for the frequency of inspecting sidewalks and inspecting the area adjacent to the sidewalk is to check for surface discontinuities or a highly unusual encroachments once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. In the **Centre of Excellence** document “**Encroachments in the Area Adjacent to a Sidewalk**” a procedure is outlined to assist in the identification of highly unusual encroachments that may present a significant hazard to pedestrians. This document will discuss procedures for inspecting the surface of the sidewalk and the area adjacent to the sidewalk.

Inspection General Requirements

1. Prepare an easy to use, standardized document to record the particulars of the inspection, including the date, time, location, the printed name of the inspector, the inspector’s signature and the conditions observed on the surface of the sidewalk and in the area adjacent to the sidewalk.
2. Each sidewalk segment on both sides of the street, if applicable, should be inspected and the results of the inspection recorded separately (i.e. block to block for example, on Main Street from King Street to Queen Street – north side of the street).

3. Always record the location of the defects observed. Either by reference to the house number it is at, linear referenced from the nearest cross street (e.g. on the north side of Main Street, 150m west of the intersection of King Street) or by GPS location.
4. Record your observations as you walk the sidewalk such as: tree roots which may be an issue causing future heaving; boulevards that are higher than the sidewalk which will pond water and require boulevard regrading; utility boxes, benches, newspaper and mail boxes, grates or anything that may be a potential future issue.

Inspecting the Surface of the Sidewalk

MMS defines a surface discontinuity as “a vertical discontinuity creating a step formation at any joint or crack in the surface of the sidewalk or any vertical height difference between a utility appurtenance found on or within the sidewalk and the surface of the sidewalk”. The regulation requires the inspector to look for surface discontinuities, but the inspection should look at more than just this single defect. The inspection should:

1. Occur via walking the sidewalk. Some municipalities have suggested using 3-wheeled bicycles or motorized vehicles such as an ATV or golf cart. But the sidewalk is for pedestrians and what would the inspector driving an ATV do if a pedestrian was

met on the sidewalk with no where to pull off to the side and allow the pedestrian to proceed. Also a plaintiff's lawyer may in a claim of non-repair question whether you were concentrating on driving the ATV or concentrating on observing defects in the sidewalk;

2. Look for sags which may pond water or heaves in slabs possibly caused by tree roots, excessive cross fall, cracks in slabs both transverse and longitudinal, loss of surface aggregate (referred to as spalling) as well as surface discontinuities;
3. Ensure all surface discontinuities are noted and measured for height of the discontinuity. If the surface discontinuity is less than 2cm it should be measured and recorded for future monitoring. If the surface discontinuity is greater than 2 centimeters, MMS requires that the surface discontinuity be treated within 14 days either permanently or temporarily. The inspector may choose to spray paint the surface discontinuity at the time of the inspection, which meets the requirements of the MMS by alerting user attention to the discontinuity. Unfortunately spray paint has a limited life and will require frequent repainting, therefore the municipality may choose to substitute the spray paint with a more robust temporary repair. NOTE: there is nothing stating that a temporary repair must be replaced by a permanent repair within a certain time frame. If, for example, the sidewalk is scheduled for replacement the temporary repair may remain in place until the sidewalk is replaced. A municipality will need to determine what is reasonable for a temporary repair given the location of the sidewalk, the volume of pedestrian traffic on the sidewalk, the effort and cost involve in confirming that the temporary repair has not deteriorated and caused another problem.

There are many methods to measure a surface discontinuity, some methods are better than others. One inexpensive method would be to use an adjustable carpenters square. The built-in level allows for an accurate measurement.

Measurements should be taken at multiple locations across the width of the sidewalk and take pictures to show the location of the discontinuity and a second closeup showing the measurement and the reading on the scale.

Inspecting the Area Adjacent to the Sidewalk

Section 16.2(3) of the MMS describes the area adjacent to a sidewalk as the area which “begins at the outer edges of a sidewalk and ends at the lesser of the limit of the highway [i.e. property line, limit of right of way], the back edge of a curb if there is a curb and a maximum of 45 cm”. As the inspector walks the sidewalk looking for defects in the surface of the sidewalk the inspector should also inspect the area adjacent to a sidewalk looking for highly unusual encroachments which constitutes a significant hazard to pedestrians. The inspector should:

1. Have the council approved list of highly unusual encroachments with them at the time of inspection. The policy document should include steps to be taken to address any highly unusual encroachments found that pose a significant hazard to pedestrians.
2. Consider looking at a 45cm area beyond the outer edge of the sidewalk on all sidewalks as the limit of the highway may not always be evident and if a highly unusual encroachment is found then determine if the highly unusual encroachment is within the highway. This may require a survey crew to establish the limits of the highway.