

# **Decorative Crosswalk Guideline**



Trans Flag Decorative Crosswalk, Stirling Avenue

#### **Decorative Crosswalk Guideline**

#### 1.0 Introduction

Crosswalks are an integral component of the transportation network that distinctly indicates safe roadway crossing locations for pedestrians by means of lines or other markings on the surface of the roadway. Vehicle traffic is controlled at crosswalks with stop signs, pedestrian crossovers (PXO's), and partial or full traffic signals. Crosswalks exist at intersections, between intersections (mid-block) and on all road classification types throughout the City of Hamilton.

The size and colour of crosswalk pavement markings is governed by the Ontario Traffic Manual (OTM). The transverse lines, which are lines that run perpendicular to the roadway and establish the boundaries of the crosswalk, must be white and extend the entire length of the crosswalk. Ladder (also referred to as zebra) markings are suggested for crosswalks where higher visibility is desired. The longitudinal lines (rungs of the ladder) are also normally white; however, the OTM does not specify that they must be white.

The Highway Traffic Act (HTA), specifically Ontario Regulation 402/15: Pedestrian Crossover Signs, requires that PXO's include ladder pavement markings and that the longitudinal lines (rungs) are to the width and spacing as specified. Like OTM, the colour of the rungs are not mandated to be white.

The OTM does state that textured or coloured crosswalks should be "applied to increase the conspicuity of a pedestrian crossings and increase driver's awareness of potential conflicts". It goes on to state that the "materials should be designed to maintain visibility at night".

Decorative crosswalks are typically understood to be crosswalks that include elements (colour, design, imagery, texture and/or material) that are considered aesthetic enhancements above and beyond standard crosswalk treatments. In Hamilton, an example of a decorative crosswalk is the rainbow crosswalk located on Main Street West at Summers Lane in-front of City Hall, which was installed in 2018.

Crosswalks must always include two white transverse lines, and except for PXO's, the pavement marking treatment in between the transverse lines is not restricted. Therefore, decorative elements (artwork) can be legally applied to the road surface if they are 'framed' by the white transverse lines and the edge of the roadway (normally being curbs). However, it is implied that the design of the treatment would not negatively impact the safety of road users, visually or otherwise.

The Decorative Sidewalk Guideline is constructed to support and facilitate the installation of decorative crosswalks in the City of Hamilton. It directly aligns with the City of Hamilton Art in Public Places Policy which recognizes that "art in public places enriches the quality of life of its citizens adding cultural, social and economic value to our shared public spaces".

# 2.0 Process

The desire to install decorative crosswalks can be driven by external and internal interests. Individuals, communities, organizations or agencies may express interest to install a decorative crosswalk on a City roadway. Additionally, decorative crosswalks may be incorporated into City projects, such as roadway reconstruction or other similar initiatives.

Parties with an expressed interest to install a decorative crosswalk shall consult with the Public Works Department, Transportation Operations & Maintenance Division. An agreement between the applicant and the City may be necessary to formalize installation and maintenance cost terms and responsibilities.

Enabling the installation of decorative crosswalks aligns with the City of Hamilton Art in Public Places Policy. This policy provides a framework "to guide the conception, planning and implementation of successful art in public places projects". It includes five processes, specifically Publicly Commissioned Art, Donated Art, Community Art, Integrated Art and Temporary Art.

The Art in Public Places Policy is comprehensive and directly applicable to decorative crosswalks. Therefore, the Art in Public Places Policy shall be used to manage the application, selection and implementation of decorative crosswalks. Combined, the Art in Public Places Policy and the Decorative Crosswalk Guideline shall govern decorative crosswalks in the City of Hamilton.

#### 3.0 Permitted Locations

Selecting a location for the installation of decorative crosswalks is important to ensure that they are appropriate, sustainable and safe. The primary consideration in approving a decorative crosswalk location is the safety of pedestrians, cyclists and motorists. Where safety may be negatively impacted, a decorative crosswalk will not be permitted to be installed.

Decorative crosswalks should be avoided, without special consideration and permission, across roadways that have high volumes of traffic and/or a high percentage of truck traffic, specifically, major and minor arterial roadways as classified by the Urban Hamilton Official Plan and the Rural Hamilton Official Plan. On arterial roadways,

maintenance is cost prohibitive given the amount of tire wear and marks from large trucks.

Decorative crosswalks can be installed on collector and local classified roadways. This includes collector and local roadways that intersect with, or immediately parallel to, major/minor arterial roadways permitting that the crosswalk is located on the secondary leg(s) of the intersection.

It is important that the roadways are in acceptable condition. The installation location surface must be free of potholes, fatigue cracking, loose debris or other similar degraded conditions which would inhibit the installation of surface treatments or perceivably shorten the operational life. Asphalt roadways are preferred, however concrete roads can be considered. Roadways that are constructed using unit pavers, stamped textures or comprised of mixed materials (such as adjoining asphalt and concrete surfaces) should be avoided. Roadways that are scheduled for reconstruction or re-surfacing within five (5) years or less from the time of decorative crosswalk installation must be avoided so that the treatments are not inadvertently removed earlier than intended or before their operational end-of-life.

# 4.0 Installation & Maintenance

Proper installation and maintenance of decorative crosswalk treatments protects their overall integrity and longevity. Therefore, they must be installed in a professional by forces that are sufficiently trained and skilled, using appropriate materials and methods, routinely monitored, repaired and maintained.

# 4.1 Decorative Crosswalk Specifications

- i. Artwork must be contained within the two white standard transverse lines of the crosswalk and the edge of the roadway. Treatment must be configured so that a pedestrian's first step is onto asphalt (the bare road surface), achieved by starting the artwork approximately 1.0 metre away from the curb/edge of road. It must not continue or extend onto median islands, curb gutters, curbs, sidewalks or other roadway features;
- ii. Artwork must not be applied to utility manhole covers, chamber lids, frames or other similar infrastructure;
- iii. Artwork should provide visual contrast and be reflective as per the requirements of the Ontario Traffic Manual;

- Artwork that would be considered ladder (or zebra) markings, must dimensionally conform to the requirements of the HTA and Ontario Traffic Manual;
- v. Artwork shall respect community standards concerning appropriate subjects and imagery for display in public places. Further, commercial interests such as advertising and copyright protected content is not permitted without special consideration and explicit permission;
- vi. Artwork must not be comprised of any elements that road users, particularly pedestrians, would interact with such as hopscotch as an example;
- vii. Artwork must not directly or inadvertently mislead the general use or guidance of the crosswalk, especially users whom are visually impaired; and
- viii. Artwork shall comply with the City of Hamilton Art in Public Places Policy.

# 4.2 Material & Installation

- i. Durable skid resistant pavement markings, such as thermoplastic or cold plastic, must be used for artwork and as specified by the Public Works Department. The in-service operational life of durable pavement markings is approximately five (5) years, and dependent upon roadway surface conditions and traffic volumes.
- ii. Artwork must be reflective as per the requirements of the Ontario Traffic Manual;
- iii. Decorative crosswalks must be installed by the City of Hamilton, Public Works Department or by contractors as directed by the same;
- Artwork designs shall be reasonable, easily reproduced and installed using the noted marking materials and their associated installation methods. Artwork must be acceptable and appropriate based upon the Art in Public Places policy process and requirements; and
- Installation shall be scheduled to occur seasonally in the late spring to early fall or as weather and conditions permit to ensure optimal adherence of materials to roadway surfaces.

# 4.3 Maintenance & Operations

- i. Decorative crosswalks shall be maintained (repaired, cleaned, etc.) by the City of Hamilton, Public Works Department;
- It is recognized that decorative crosswalks do not have an attributed level of service as defined by Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways. However, decorative crosswalks shall generally be inspected by the City of Hamilton, Public Works Department, once per calendar year, typically in the late spring;
- iii. Maintenance of decorative crosswalks shall be safety focused, but also to maintain the integrity and longevity of the artwork. Maintenance shall be generally conducted on an as-needed basis;
- iv. Decorative crosswalks do not have an infinite life and would need to be removed (and replaced if appropriate) when deemed necessary or as required by any terms and/or agreements of their installation;
- v. Requestors of decorative crosswalks shall be responsible for installation costs and share maintenance costs with the City of Hamilton as described in Section 5.0 of this guideline.

# 5.0 Attributed Costs

The cost of installing and maintaining decorative crosswalks will have an impact on capital and existing operational budgets. Because of this, the person or agency requesting decorative crosswalks shall share in all or part of the costs. Table 5.1 outlines installation cost sharing.

Installation Cost	City Share	Requestor's Share
Existing non-ladder crosswalk	40% (Cost of white durable pavement markings)	60% (Cost difference between standard ladder markings and artwork)
Existing ladder crosswalk (< = 3 years old)	None	100%
Existing ladder crosswalk (> = 3 years old)	40% (Cost of white durable pavement markings)	60% (Cost difference between standard ladder markings and artwork)
All other locations	None	100%

#### Table 5.1 – Decorative Crosswalk Cost Sharing

The cost of installing a decorative crosswalk is be dependent upon the intricacy, width of the roadway, coverage of the artwork and location. It is estimated that installation costs would be between \$5,000 and \$15,000 depending on the length of the crossing.

The ongoing maintenance of the decorative crosswalks shall be shared between the City of Hamilton and the requestor based upon the cost difference between standard crosswalks and decorative crosswalks. Costs would also be dependent upon the same primary cost drivers noted as part of installation (above).

Maintenance costs shall be determined at the time of approval and based upon the design of the decorative crosswalks and perceived attributed maintenance cost pressures.

Installation and maintenance costs which are shared with the City of Hamilton by requestors should be formalized by establishment of a written agreement.

Decorative crosswalks that are not requested by external people or agencies, but rather internal to the City of Hamilton, installation costs shall be funded from an appropriate capital budget. Maintenance and operation costs shall be funded from an appropriate operating budget and annual budgets shall be reasonably adjusted as decorative crosswalks are added or removed.

#### 6.0 Roles & Responsibilities

- i. The General Manager of Public Works, or their delegate, shall be responsible for administering and recommending updates to this guideline;
- ii. Decorative crosswalk artwork approval shall be the responsibility of the Public Works Department, Transportation Operations & Maintenance Division and in collaboration with the Planning & Economic Development Department, Tourism & Culture Division.
- iii. The Public Works Department, Transportation Operations and Maintenance Division shall be responsible for coordinating, planning, implementing and maintaining decorative crosswalks in the City of Hamilton; and
- iv. Requestors shall share in the ownership and responsibility of decorative crosswalks as governed by any formal agreements or terms as they apply.