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CITY OF HAMILTON

CO-ORDINATED STREET FURNITURE GUIDELINES

MMM GROUP

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1. INTRODUCTION

1.1 Purpose of the Guidelines

MMM Group Limited (MMM) has worked closely with the City of Hamilton to develop site selection criteria and guidelines. The guidelines address the need for a unified street furniture program that contributes to a high quality public realm on the streets of Hamilton. A unified approach to street furniture will improve the streetscapes of Hamilton in terms of continuity and visual coherence, as well as streamline the design process. In addition, the guidelines will identify the street furniture elements that are suitable for limited and controlled advertising to maintain a visual quality of the streetscape, while providing an opportunity to offset the costs of providing and maintaining street furniture throughout the City. The intent of the guidelines is not to prescribe a series of "one fits all" solutions, but to be a flexible tool that is intended to be used at the discretion of the City or designers. The guidelines support context-specific approaches in responding to the variety of street types and uses that make up Hamilton`s urban fabric, and the creation of a diverse, yet coordinated urban landscape. These guidelines can be used when considering both new developments and retrofitting of existing streets, and should be used as guidance in applying discretion based on site-specific conditions and requirements.

1.1.1 Key Objectives

«Provide guidance to City staff for the establishment of a cohesive, accessible, safe, functional and expandable system of street furniture elements in the City of Hamilton;

«Encourage context-specific solutions, flexibility and innovation to respond to site-specific conditions and design requirements;

«Improve the image and identity of the City's streetscape;

«Provide guidance for incorporating controlled advertising on Hamilton`s street furniture.

1.2 Key Street Furniture Elements

Street furniture consists of a wide variety of elements and amenities installed in the public right of way for the use and convenience of the public. Key street furniture elements included within the scope of this study are listed as follows:

«Transit Shelters

«Litter/Recycling Receptacles

«Benches

«Multi-Publication Structures

«Wayfinding Kiosks

«Poster Kiosks

«Bicycle Racks

«Cigarette Receptacles

1.3 Context and Current Practices

Over time, numerous street furniture amenities have been introduced to Hamilton's streetscapes and demand continues to grow. The resulting streetscapes, in the absence of consistent design and placement guidelines, may consist of disordered design elements. Some of the examples of existing challenges are highlighted on the right.

1.3.1 Related Regulations and Initiatives

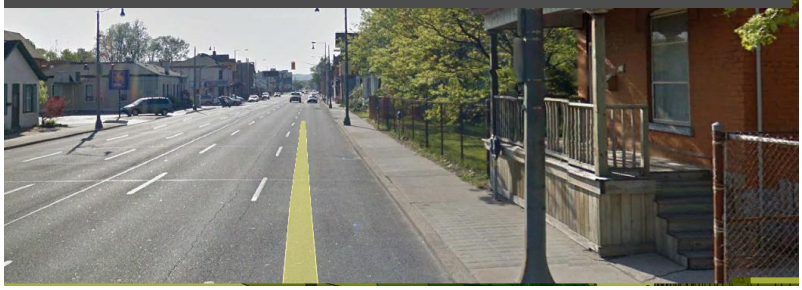
Street furniture selection and placement guidelines will assist the City and designers in integrating street furniture into the public realm in a manner that would be cohesive, accessible, safe, efficient and aesthetically pleasing.

These guidelines were prepared and should be subsequently used in accordance with all applicable National, Provincial and City of Hamilton Policies and Procedures as well as all other related standards and initiatives including:

- «Accessibility for Ontarians with Disabilities Act (2009)
- «Hamilton Mobility Street Master Plan (2003)
- «City of Hamilton Urban Braille System (2002)
- «City of Hamilton Transportation Master Plan (2007)
- «City of Hamilton Barrier Free Design Guidelines (2006)
- «City of Hamilton Transit Bus Stop Accessibility Criteria and Guidelines (2014)
- «City of Hamilton Bike Parking Strategy and Design Guidelines (in progress)
- «City of Hamilton Pedestrian Mobility Plan (2012)

Space Constraints, Obstacles

NARROW WALKWAYS OBSTRUCTED BY LIGHT STANDARDS AND OTHER STREET FURNITURE CAN CREATE POTENTIALLY INACCESSIBLE AREAS.



Functionality, Coordination

THE BENCH IS TOO FAR FROM A BUS STOP. THERE IS INSUFFICIENT PAVED SPACE AROUND THE BENCH TO MANEUVER AROUND IT WITHOUT STEPPING ON GRASS. FURNITURE DESIGNS ARE NOT COORDINATED WITH ONE ANOTHER.

Accessibility

BUS STOP IN A RURAL AREA PRESENTS ACCESSIBILITY CHALLENGES.

Clutter, Accessibility

A LOT OF FURNITURE IS CLUSTERED TIGHTLY IN A CONSTRAINED SPACE, CREATING CLUTTER AND OBSTACLES FOR MOVEMENT.

FIGURE 1.3.1 | Existing Furniture Placement Challenges

Image Credit: Google Earth

2.3 Pedestrian Zone Con gurations

Pedestrian zones can be combined in a number of ways with one another to make up a sidewalk corridor. The capability to adjust zone size, overlap and combine zones enables a wide diversity of possible sidewalk layouts that can be tailored to individual conditions and design requirements of a particular street, or even a specific location on a street.

The concept of pedestrian zones can also provide a framework for retrofitting existing streets in the City. For existing streets, zones can be conceptually assigned on the basis of existing conditions and availability of space (as illustrated in Fig. 2.3.2). Establishing an organizing system for street furniture placement based on the zones, and the opportunity to create a variety of possible street layouts through zone combinations, will help contribute to a diverse, yet coordinated streetscape in the City of Hamilton.

There are many potential pedestrian zone configurations. Common to all of them, the first priority for all accessible existing and new streets is to provide for a sufficient width walkway zone to accommodate pedestrian traffic in two directions of travel[1]. This means, for example, that if on an existing street there is only a minimum (1.50m) clear width available, a recommendation to remove existing obstructions from the walkway can be made, where feasible[2].

The proposed approach of flexible pedestrian zone configurations can be applied to a variety of circumstances, from retrofits of existing conditions, design of new streets or street improvements, and can be integrated into other policy documents.

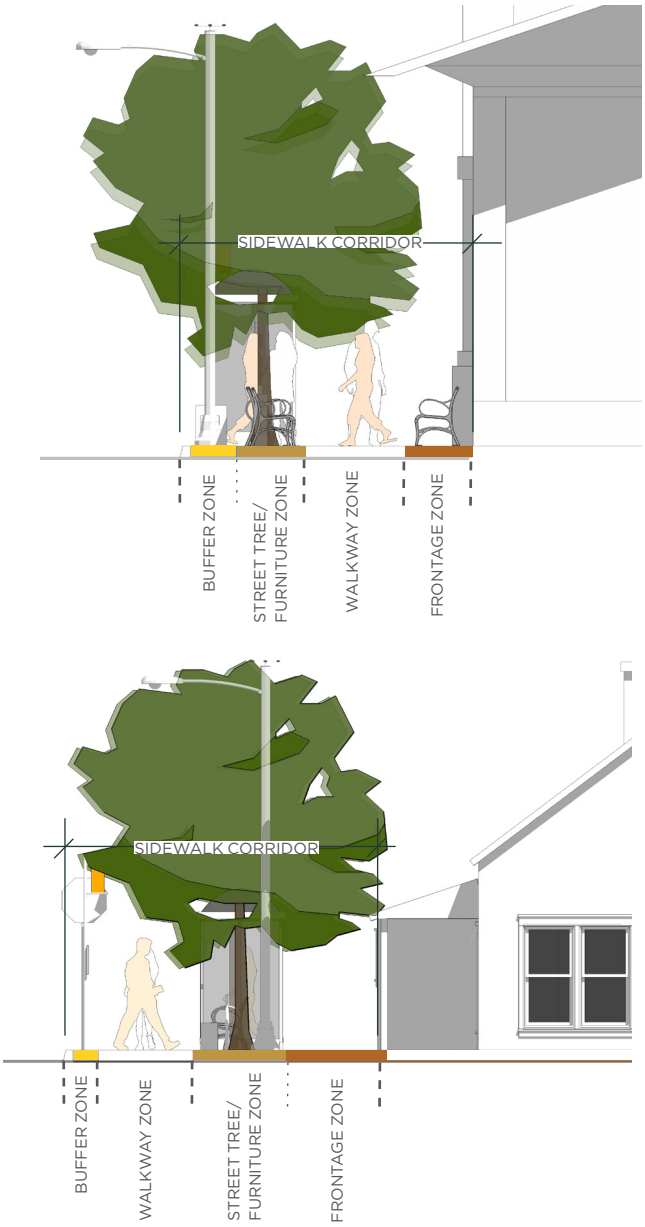


FIGURE 2.3.1 | Pedestrian Zones Can Be Combined in a Number of Ways

1 | See Section 1.4.1 Barrier Free Design, as well as AODA requirements and Hamilton Barrier Free Guidelines. AODA standards recommend a minimum of 1.50m for public paths of travel, such as walkways.

2 | I.e. Existing furnishings, such as benches can be relocated. This may prove more challenging when utilities and street trees act as obstacles on a walkway.

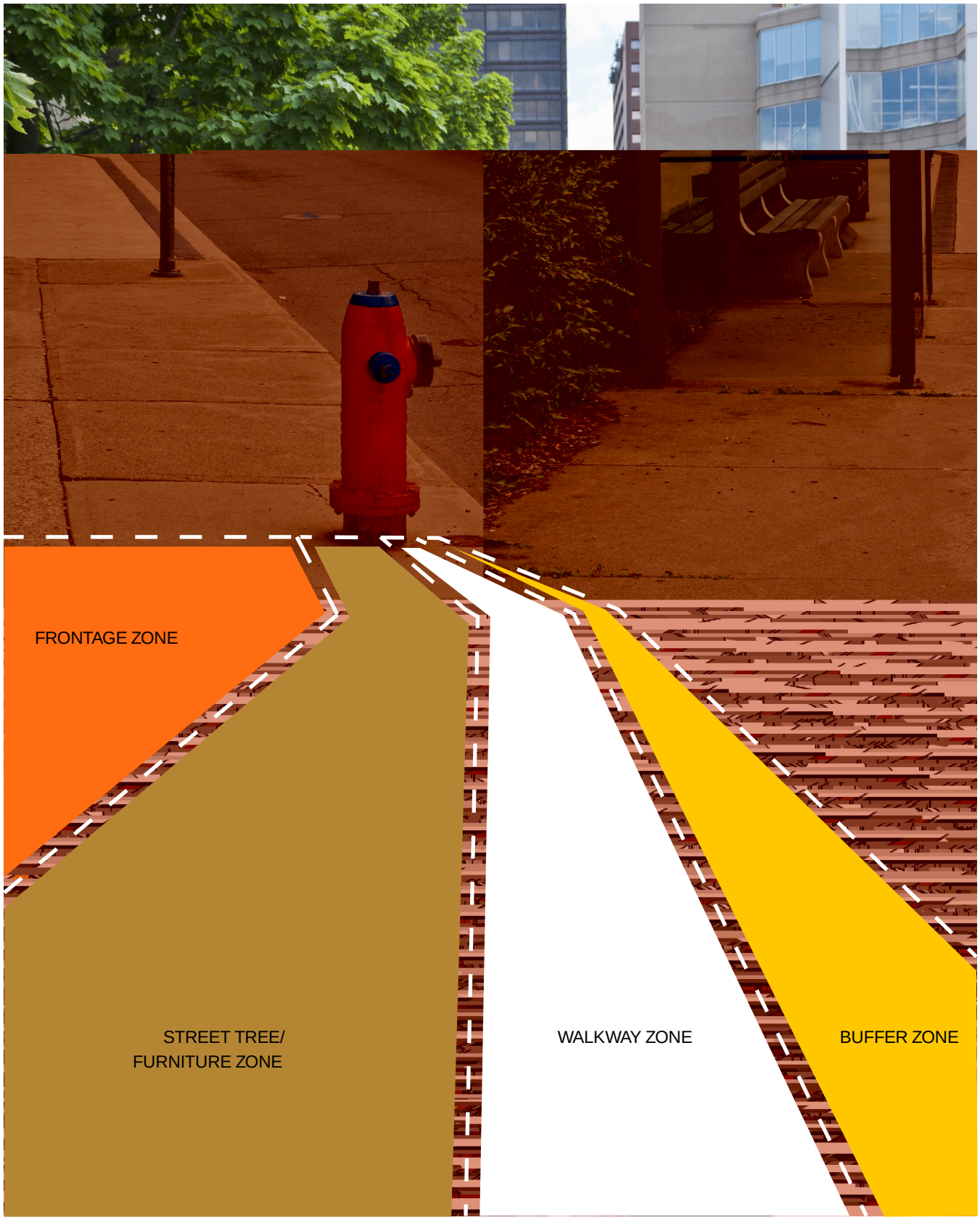


FIGURE 2.3.2 | Example of How Pedestrian Zones Could Be Conceptually Applied to an Existing Street

2.6 Use of Advertising

The primary objective of the Co-ordinated Street Furniture program is to create attractive, functional and usable streetscapes. Opportunities for limited and controlled advertising to offset the costs of providing street furniture throughout the City should be balanced with maintaining a visual quality of the streetscape. Frequently, private companies can provide for the design, fabrication, installation and maintenance of a co-ordinated family of furniture that minimize costs to the municipality in exchange for advertisement rights. Below are some of the considerations for incorporating advertising on City street furniture:

- «Advertising should not contribute to visual clutter on the street.
- «Select a maximum of 3 furniture items for placement of advertising. Transit shelters, advertising benches and poster kiosks are recommended for advertising purposes.
- «Best efforts should be made not to group more than 2 furniture pieces with advertising together. Where 2 pieces are placed together, a minimum of 3.00m should separate them to ensure they do not compete.
- «Advertising and visual information should be well integrated into the design of the furniture item, rather than appear added-on.
- «Best efforts should be made to not use advertising adjacent to wayfinding kiosks, and other wayfinding structures. This will reduce the effectiveness of wayfinding systems through the creation of visual clutter.
- «Technical requirements of the advertising panels should not dictate dimensions of the furniture.

Note: Any and all advertising is to be compliant with City of Hamilton by-laws.

3. STREET FURNITURE SELECTION AND PLACEMENT CRITERIA

3.1 General Selection and Placement Principles

Street furniture elements play a role in the visual identity of the streetscape. Furniture selection and placement should contribute to a legible and attractive streetscape. When selecting furnishing products it is important to balance function and aesthetics, and to consider all street elements as a unified urban design. The following considerations are intended as guidance for the selection and placement of furnishing elements.

3.1.1 Selection Principles

Identity and Unity

«The furniture elements materials, colours and finishes should compliment one another aesthetically and the surrounding streetscape.

«Consider developing or selecting a set or a family of furnishing elements. This is particularly important in special urban areas, such as BIAs.

«Consider developing or selecting a specially branded family of furniture for the transit system, particularly higher order transit.

«Encourage adjacent land owners within one area to use the preferred set of street furniture, except where special or unique features are desirable.

Size and Scale

«The furniture elements should be of a size that fit proportionately within the sidewalk corridor width.

«Street furniture selection and placement should take into account and be proportional to dimensions of the zones.

«Consider whether the same types of furniture can be provided in a range of sizes to accommodate varied usage and space requirements.

Flexibility

«Select products or product families that are modular or provide a range of elements that can be placed in a variety of different styles and configurations.

FIGURE 3.1.1 | Port Credit, Mississauga, ON

Accessibility and Comfort

«Select products that demonstrate inclusive design and have been designed for ease of use by people with a range of abilities.

Maintenance and Sustainability

«Select furniture elements that are easy to maintain and have modular parts that can be repaired or replaced individually.

«Select materials and technologies that are environmentally responsible, age well and do not require frequent replacement.

«Street furniture should be secure, weather-resistant and durable. The material and paint selection should be durable, graffiti and vandal resistant. Make sure the fittings and furniture cannot be stolen and transported off site.

«Consider the lessons and experience from previous uses of the products in other areas prior to selection.

Typical or Unique Elements

«Some special urban areas, such as BIAs, higher order transit corridors or areas of cultural significance may warrant a uniquely identifiable family of furniture elements that enhance its urban design character.

Advertising

«Where present, advertising should be well integrated into the design of the furniture elements and enhance, rather than compromise the furniture's aesthetics.

«Adversiting requirements should not determine furniture design or dimensions.

Cost

«The cost effectiveness of the furniture products should be determined by balancing all of the above criteria.

3.1.2 Placement Principles

Grouping and Spacing of Elements

«The furniture elements should be laid out and grouped in such a way that avoids clutter on the street.

«Spacing, orientation and layout of street furniture items should balance function and aesthetics.

«Group furniture elements with complimentary designs, or from one family of furniture elements.

«Do not cluster all of the furniture in one area (i.e street intersections), because this can contribute to clutter and congestion. It is preferable to balance several smaller groupings of furniture at separate locations on a street.

«Consider small furniture groupings in key areas, such as bus stops and multimodal transportation connections. See Sections 2.4.1-2.4.2 for more information on key areas for furniture placement.

Accessibility, Use and Maintenance

«Ensure that furnishing elements are placed with sufficient setbacks and clearances that they can be accessed, used and maintained by people of various abilities.

«Ensure that furnishing elements can be accessed from pedestrian walkways and bus waiting areas via a continuous hard paved area. Provide pathways to furniture areas, if required.

«To be easily detectable by people using a long cane, street furniture should be placed max. 0.60m from edge of walkway. (CNIB, 2009)

«Layout of furnishing elements should not create interferences with pedestrian movement on the walkway clear zones, intersections or bus waiting areas.

Safety

«Street furniture should be placed in locations that are well used by pedestrians and have adequate lighting.

«Ensure important sightlines are maintained.

Relationship with the Surrounding Environment

«The furniture layout, orientation and placement respond to surrounding architecture and open space.

«Consider views and sightlines in furniture placement. Generally orient furniture toward the pedestrian walkway, or places of interest.

«Street tree/furniture zone is the preferred location for furniture placement, however, frontage zone may contain some furniture, so long as it is coordinated with adjacent property owners. An encroachment agreement would be needed if private owner locates street furniture on the ROW and easement/legal agreement would be required if the City provides street furniture on private property.

«Limited street elements, such as street signs and some utilities that do not interfere with snow clearance may be located in the buffer zone. Placement of street furniture adjacent to intersections and private driveways must be reviewed by Staff in the Public Works Department, City of Hamilton, to ensure it is in accordance with required sightlines for drivers and pedestrians.

Use Patterns

«Locations, quantities and types of furnishings should reflect usage patterns and placement opportunities. Ensure that placement of furniture is complimentary to adjacent uses and do not create conflicts with other uses (i.e intersections).

Site Speci c Conditions

«Consider situations where a site-specific approach for furniture selection and placement may be appropriate.

«Consider whether there is enough space available in the sidewalk corridor to allow placement of furniture without creating clutter or congestion on the walkway. Opt for more compact furniture styles or groupings or avoid placement of furniture in such areas.

Do Not Place Any Furniture

«Within the walkway zone or the bus pad clear zone;

«Within 1.00m from curb cut, driveway;

«Within 7.00m from street corner radius (intersection) at key intersections or 2.00m from street corner radius at non-key intersections;

«Within 0.50m from the edge of curb;

«Within 0.45m from the edge of walkway or edge of paving, utility pole, manhole, or other equipment;

«Within 0.30m from building edge;

«Within 1.50m from a fire hydrant;

«Within 1.50m from a transit shelter entrance;

«On an unstable surfaces and planted areas;

«Do not secure furniture to interlocking, instead secure to a concrete base;

«In an area adjacent to a steep slope or a drop-off, unless edge protection or safety railings are provided.

3.2 Individual Furniture Placement Guidelines

Detailed placement criteria were developed for several furniture types. The criteria are described through text and illustrations. Please refer to the next page for the legend for each of the furniture element symbols that are discussed on the following pages.

3.2.1 Clear Zones

A "clear zone" is a defined area of a sidewalk corridor that is clear and unobstructed. Pedestrian walkways, for example, are better understood as clear zones, to emphasize that a walkway needs a defined clear area for pedestrian through movement that is not obstructed by furniture, utilities or other street elements.

There are other several clear zones that are defined in this document. Bus pad clear zone, referred to in the previous sections, is a defined clear area for loading and unloading of passengers at transit bus stops. It is described in more detail further in the report.

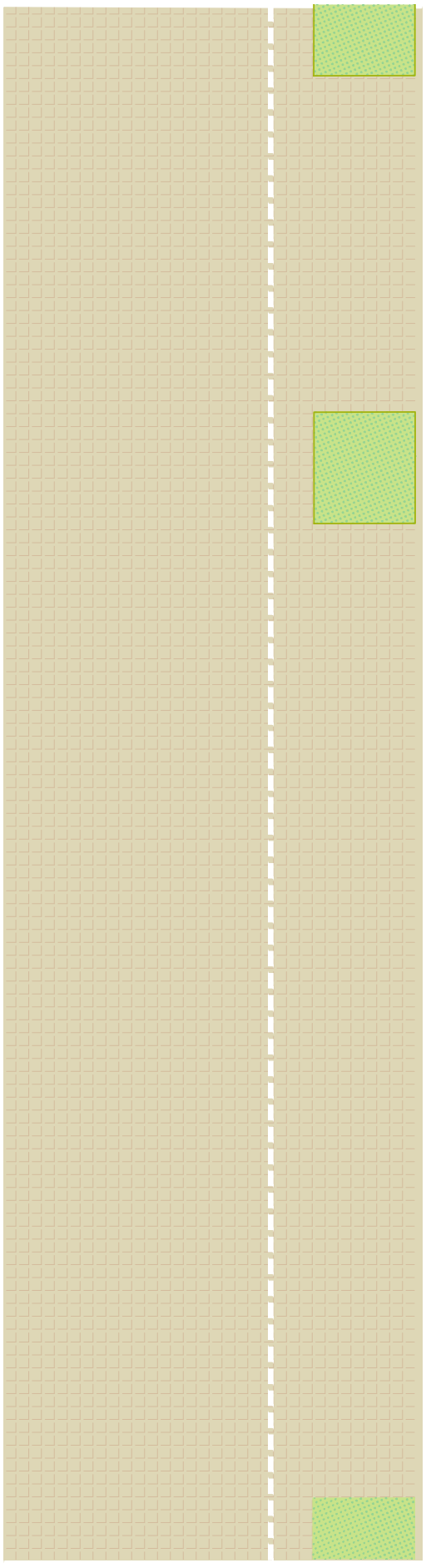
Clear zones are also established for individual furniture elements (see Fig. 3.2.1) The purpose of clear zones for the furniture elements is to establish a defined minimum clear area around the installed furniture item for access, use and maintenance. Clear zones may vary depending on the type, size and orientation of the furniture elements. Clear zones of individual furniture elements can be overlapped, and they can also be overlapped with the bus pad and walkway clear zones.

Concrete Pads for Furniture

When a furniture element is located in a grassed area of the sidewalk corridor, it should be installed on a hard surface (usually concrete) pad. The purpose of such pads is to provide a stable hard surface area for installation, access, use and maintenance.

Generally, the minimum dimensions of the furniture pad should correspond to the dimensions of the clear zone area defined for the particular furniture element, and may vary depending on furniture dimensions, orientation and placement. Additional considerations include:

- «In furniture groupings, furniture pads should accommodate the combined clear zones for all grouped pieces of furniture.
- «In situations where a furniture clear zone overlaps with a walkway or bus pad clear zone, the overlapping area can be subtracted from the furniture pad, or one combined pad be created.



Multi-Publication Structures

PERMITTED ZONES	MINIMUM ZONE WIDTH
STREET TREE/STREET FURNITURE ZONE	Multi-publication structure width + 0.45m
FRONTAGE ZONE	Multi-publication structure width + 0.75m

Multi-publication structures provide transit users and pedestrians with multiple publications in an orderly way. They also offer a visual presence within the streetscape and therefore their design and placement should balance function with aesthetics.

Considerations

Multi-publication structures should be limited to areas highly used by pedestrians.

- «City of Hamilton by-law does not permit more than three boxes within a multi-publication structure.
- «Place more frequently in commercial/civic areas, adjacent to major intersections and bus stops.
- «Orient so that the openings of a multi-publication structure face the walkway.
- «Place in highly visible locations to deter vandalism.
- «Permanently installed multi-publication structures should not interfere with entrances to buildings, heavily used loading zones, and other potential conflicts.
- «Secure multi-publication structures to a flat, firm and stable surface.
- «Limit use of advertising on multi-publication structures.

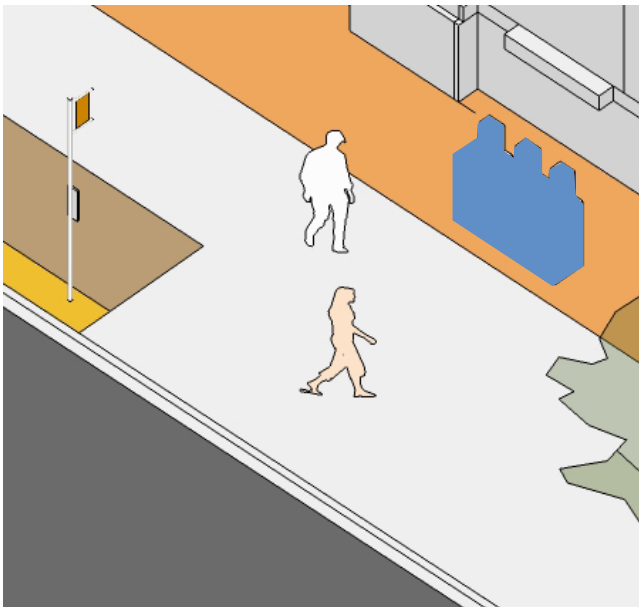
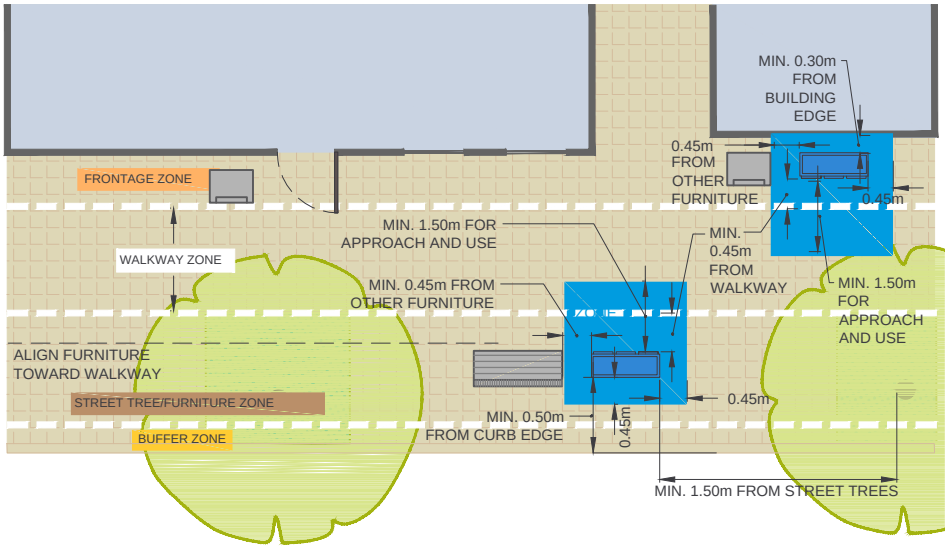


FIGURE 3.2.11 | Multi-publication Structure

LAYOUT 1: MULTI-PUBLICATION STRUCTURE IN THE STREET TREE/FURNITURE AND FRONTAGE ZONES



LAYOUT 2: MULTI-PUBLICATION STRUCTURE ADJACENT TO A BUS STOP

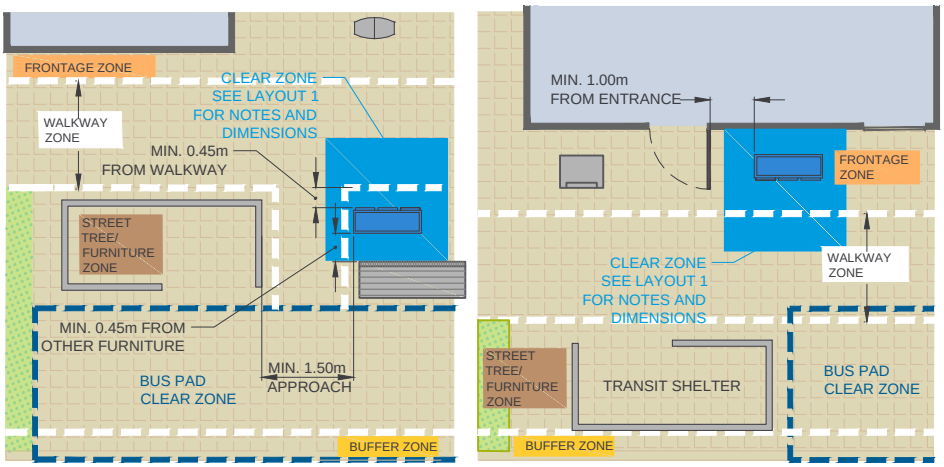


FIGURE 3.2.12 | Multi-publication Structure Sample Layouts

NOTES:

«The setbacks and placement guidelines described on this page apply regardless of zone configuration.

«The minimum zone dimensions, setbacks and placement guidelines assume that a 0.50m buffer zone and/or a 0.50m frontage zone is provided.

«The preferred placement for the proposed multi-publication structure is within the City ROW. However, in case placement encroaches on a private property, coordinate placement with the property owner.

Setbacks

«MIN. 0.50m from edge of curb

«MIN. 0.45m from edge of walkway

«MIN. 1.50m clear space in front of the multi-publication structure openings.

«MIN. 0.30m from building edge to allow for maintenance access

«MIN. 1.50m from tree trunks

«MIN. 0.45m from other street furniture

«MIN. 1.50m from fire hydrants

Poster Kiosks

PERMITTED ZONES	MINIMUM ZONE WIDTH
STREET TREE/STREET FURNITURE ZONE	Poster kiosk width + 0.45m
FRONTAGE ZONE	Poster kiosk width + 0.75m

Poster kiosks provide the opportunity to display community information or advertising and have a visual presence within the streetscape.

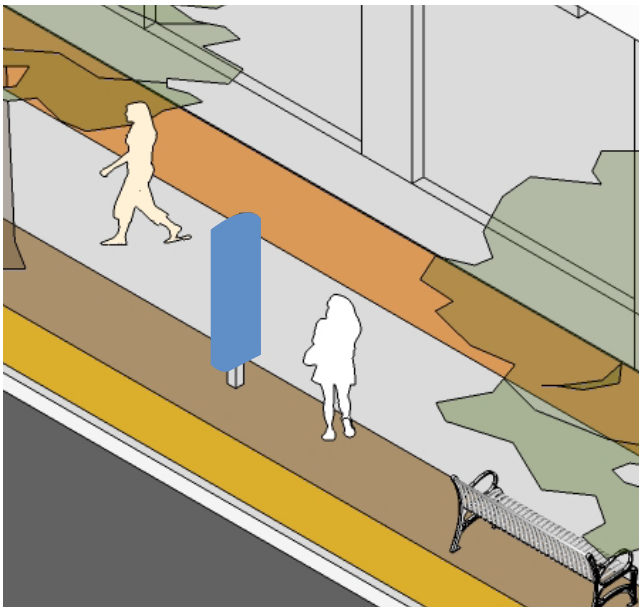
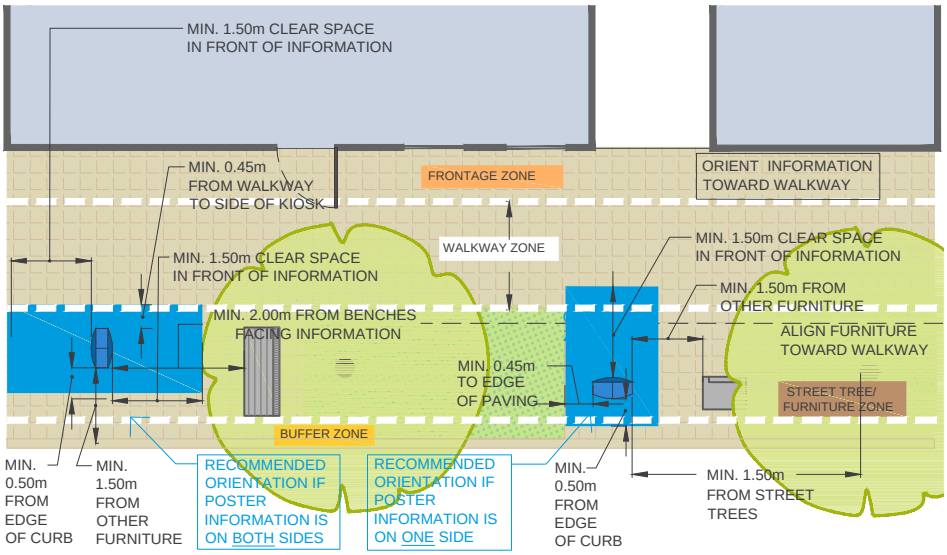


FIGURE 3.2.13 | Poster Kiosk

Considerations

- «Place more frequently in commercial/civic areas and major routes and destinations; adjacent to major intersections and bus stops.
- «Information should be oriented so that it is visible (or detectable) from the path of travel on the walkway, or from a bus clear zone. See layouts on the opposite page for placement variations for the poster kiosk that contains information on either one side only, or both sides.
- «Ensure that there is adequate clearance available for approach by people without blocking of the walkway, if an approach is required.
- «Ensure that sightlines to poster kiosks are not blocked by other objects, such as transit shelters, trees, other signs.
- «Poster kiosks should be at a height to be visible by people of different heights, including children and individuals who are in wheelchairs.
- «Create a consistent identity for each family of poster or signage type to be easily identifiable.
- «Ensure that there is clearance available for approach by people, if an approach is required. This additional clearance is intended so that the pedestrian traffic is not impeded on the walkway.
- «Do not place poster kiosks directly in front of building entrances or exits.
- «Do not place poster kiosks directly in front of windows (except where coordinated with a property owner).
- «Secure poster kiosks to a flat, firm and stable surface.
- «Advertising can be incorporated within poster kiosks.

LAYOUT 1: POSTER KIOSK IN STREET TREE/FURNITURE ZONE



LAYOUT 2: POSTER KIOSK IN FRONTAGE ZONE / ADJACENT TO BUS STOP

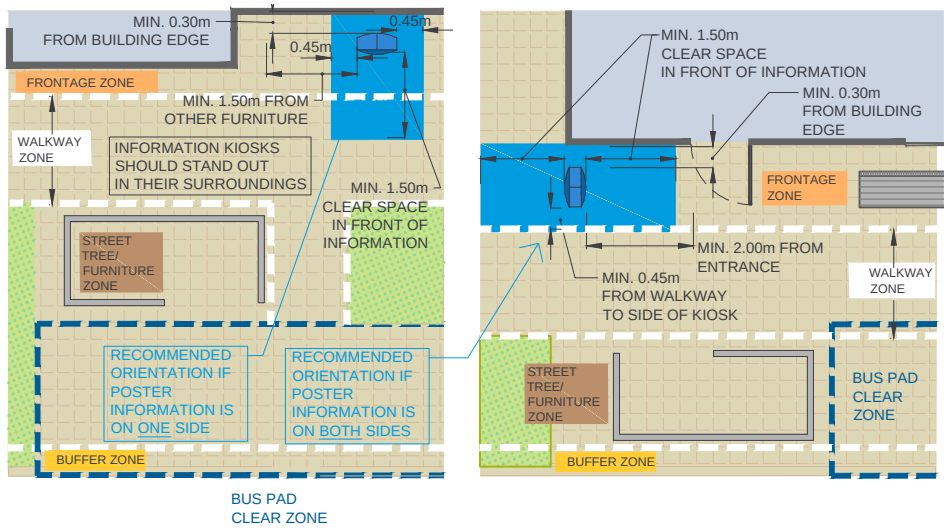


FIGURE 3.2.14 | Poster Kiosk Sample Layouts

Setbacks

- «MIN. 0.50m from poster kiosk to edge of curb
- «MIN. 0.45m from side of poster kiosk to edge of walkway
- «MIN. 0.30m from building edge to allow for maintenance access
- «MIN. 1.50m clear space in front of poster information for approach and maintenance
- «MIN. 1.50m from tree trunks
- «MIN. 1.50m from other street furniture
- «MIN. 1.50m from fire hydrants

NOTES:

- «The setbacks and placement guidelines described on this page apply regardless of zone configuration.
- «The minimum zone dimensions, setbacks and placement guidelines assume that a 0.50m buffer zone and/or a 0.50m frontage zone is provided.
- «All setbacks are from the largest dimension of the structure (i.e from the poster edge, rather than centre pole)
- «When the proposed poster kiosk placement may encroach on a private property, coordinate placement with the property owner.

Way nding Kiosks

PERMITTED ZONES	MINIMUM ZONE WIDTH
STREET TREE/STREET FURNITURE ZONE	Wayfinding kiosk width + 0.45m
FRONTAGE ZONE	Wayfinding kiosk width + 0.75m

Wayfinding kiosks are free standing permanent structures within streets. They generally contain a map clearly showing the current location and best routes to nearby destinations as well as directional signage. They may add visual interest and contribute to the vibrancy of the street.

Considerations

Generally wayfinding kiosks are placed in the city centre, BIAs, major intersections and other tourist-oriented areas. Overuse dilutes their effectiveness and clutters the streetscape.

«Place wayfinding kiosks at key decision-making points, such as near key street intersections, destinations and main transit routes.

«Place in the street furniture zone, adjacent to but not directly within intersections (outside of the corner clear zone).

«Wayfinding kiosks should stand out in their surroundings to be easily located by users. Ensure that sightlines to wayfinding kiosks are not blocked by other objects, such as transit shelters, trees, other signs. Avoid grouping closely with other furniture, particularly furniture that contains other information or advertising.

«Orient so that the wayfinding kiosk is visible (or detectable) from the path of travel on the walkway, or from a bus clear zone. See layouts on the opposite page for placement variations for the kiosk that contains information on either one side only, or both sides.

«Ensure the information is legible from a distance it is intended to be viewed.

«Wayfinding kiosks should be limited in size to minimize visual impacts while providing adequate space in which to post information.

«Wayfinding kiosks should be at a height to be visible by people of different heights, including children and individuals who are in wheelchairs.

«In crowded areas, signs and wayfinding information can be placed above head level to increase visibility from a distance. An additional sign at lower level, with raised print and braille is also recommended (CNIB, 2009)

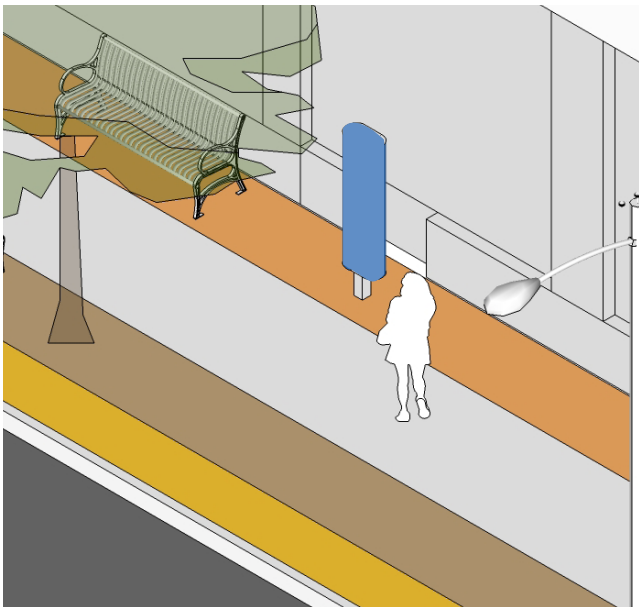


FIGURE 3.2.15 | Wayfinding Kiosk

«Ensure wayfinding information is legible at night (through illumination, for example).

«Ensure wayfinding information is accessible for people with vision loss. CNIB provides resources and support in serving for people with vision loss, and can be consulted for criteria for accessibility of information.

«Create a consistent identity for each family of wayfinding type to be easily identifiable.

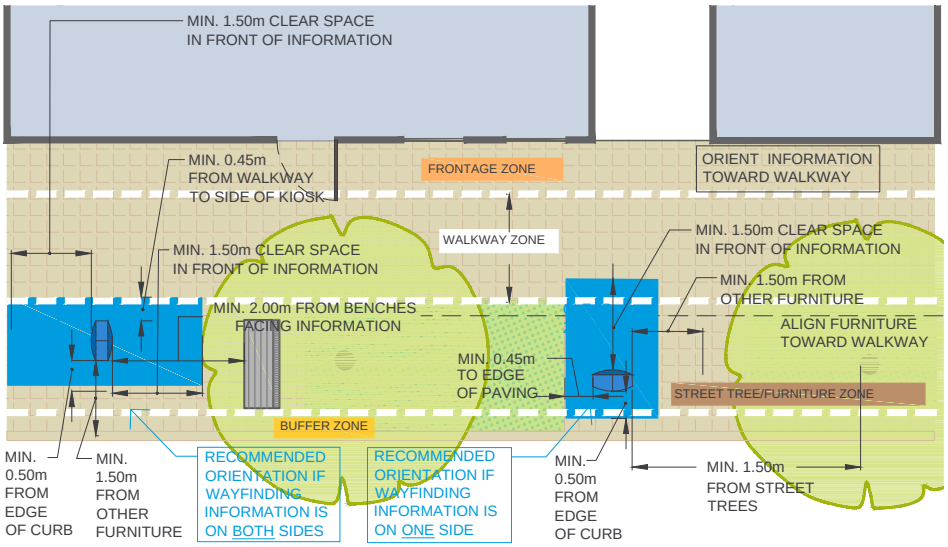
«Ensure that there is clearance available for approach by people, if an approach is required. This additional clearance is intended so that the pedestrian traffic is not impeded on the walkway.

«Do not place wayfinding kiosks directly in front of building entrances or exits.

«Do not place wayfinding kiosks directly in front of windows (except where coordinated with a property owner).

«Secure wayfinding kiosks to a flat, firm and stable surface.

LAYOUT 1: WAYFINDING KIOSK IN THE STREET TREE/FURNITURE ZONE



LAYOUT 2: WAYFINDING KIOSK ADJACENT TO A BUS STOP

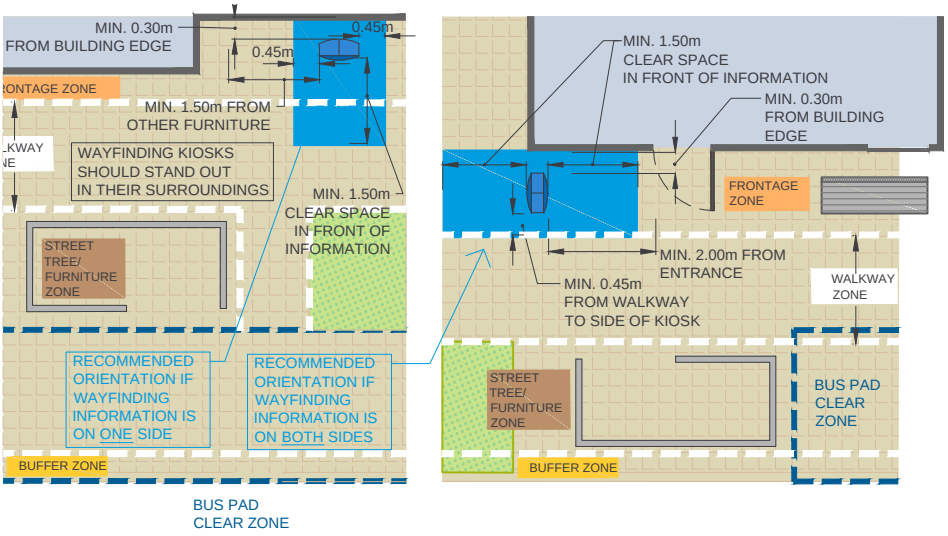


FIGURE 3.2.16 | Wayfinding Kiosk Sample Layouts

Setbacks

- «MIN. 0.50m from edge of curb
- «MIN. 0.45m from edge of walkway
- «MIN. 0.30m from building edge to allow for maintenance access
- «MIN. 1.50m clear space in front of wayfinding information for approach and maintenance.
- «MIN. 1.50m from tree trunks
- «MIN. 1.50m from other street furniture
- «MIN. 1.50m from fire hydrants

NOTES:

- «The setbacks and placement guidelines described on this page apply regardless of zone configuration.
- «The minimum zone dimensions, setbacks and placement guidelines assume that a 0.50m buffer zone and/or a 0.50m frontage zone is provided.
- «All setbacks are from the largest dimension of the structure (i.e from the kiosk edge, rather than centre pole)
- «When the proposed wayfinding kiosk placement may encroach on a private property, coordinate placement with the property owner and obtain written consent from the owner.

Bicycle Racks

PERMITTED ZONES	MINIMUM ZONE WIDTH
STREET TREE/STREET FURNITURE ZONE	Bicycle parking clear zone + 0.45m
FRONTAGE ZONE	Bicycle parking clear zone + 0.90m

In conjunction with the Sobi (Social Bicycles bikeshare program), well located, safe and secure bicycle racks are an important factor in encouraging people to choose to cycle in the City of Hamilton. People use bicycles to exercise, while sightseeing, while running errands, as affordable personal transportation to school or work, and other daily activities. The need for more bicycle parking on Hamilton's streets is evidenced by a number of bikes locked to street signs,street trees and fences.

For the purposes of the guidelines, two types of bicycle racks are considered, the post and ring and a multi-ring. Bicycle parking is addressed in further detail in City of Hamilton's Bike Parking Strategy. Please refer to this document for additional bicycle parking types, requirements and considerations.

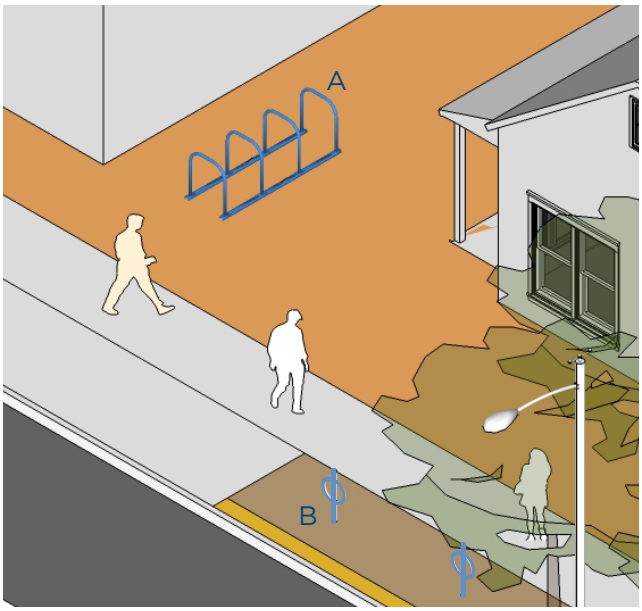


FIGURE 3.2.17 | Bicycle Racks: Multi-ring (A) and Post and Ring (B)

Considerations

«Bicycle parking should be provided on as many Hamilton streets as possible, recognizing that streets should accommodate a variety of modes of transportation: vehicular, transit, bicycling, pedestrians, personal mobility devices users.

«Place more frequently in commercial/ civic areas, multi-modal transportation connections (i.e bus and other transit stops), along cycling routes, adjacent to major intersections, adjacent to public building entrances, community facilities (shopping centres, libraries, etc), and where there is unmet demand (i.e. areas where bicycles are frequently parked to trees or signs).

«Orient so that the parked bicycles do not project onto the walkway or the road, and for access to the bicycles made from the walkway (rather than road).

«Typically, parked bicycles are oriented parallel to curb edge, but other orientations are acceptable, provided that the required setbacks are met.

«Do not place bicycle parking directly in front of building entrances or exits.

«Do not place bicycle parking directly in front of windows (except where coordinated with a property owner).

«The bicycle rack should support the weight of a bicycle at two points.

«The bicycle rack should support different bicycle frame sizes and types, and different locking mechanisms.

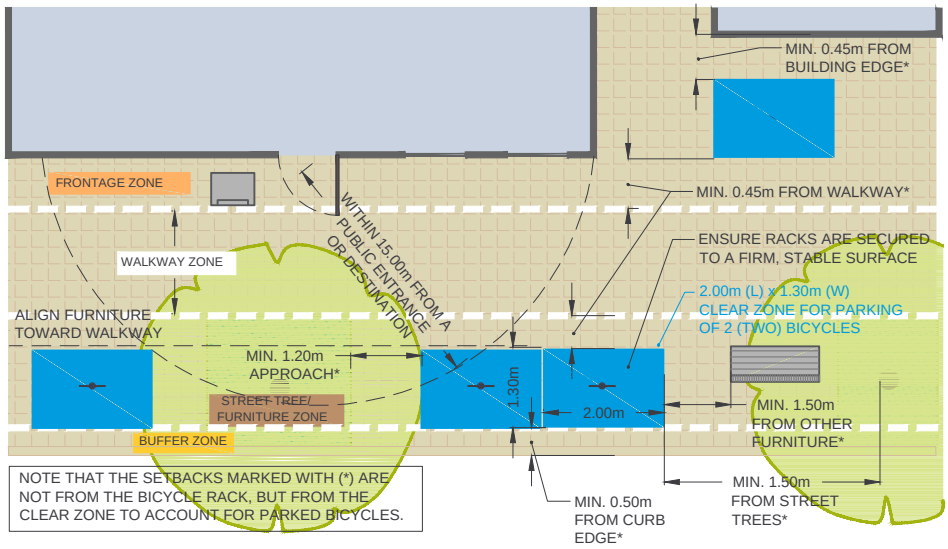
«Where there is on street parking, consider placing a cluster of bicycle racks into 1 vehicle parking spot. 1 parking spot can fit 8-10 bicycles.

«Bicycle racks may be provided by property owners (in public facilities, offices, destinations) subject to compliance with the guidelines.

«Secure the bicycle rack to a flat, firm and stable surface.

«Provide a cover or a shelter for bicycle parking, where possible.

LAYOUT 1: POST AND RING BICYCLE PARKING



LAYOUT 2: MULTI-RING BICYCLE PARKING

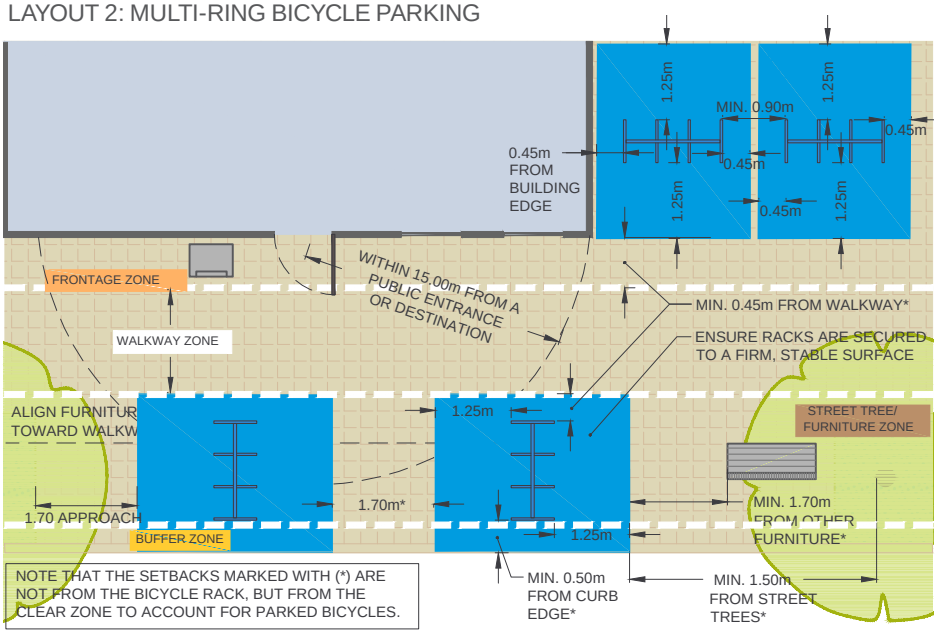


FIGURE 3.2.18 | Bicycle Rack Sample Layouts

NOTES:

«The setbacks and placement guidelines described on this page apply regardless of zone configuration.

«Setbacks marked with (*) indicate that the setback begins at the clear zone, rather than the bicycle rack, to account for parked bicycles.

«The minimum zone dimensions, setbacks and placement guidelines assume that a 0.50m buffer zone and/or a 0.50m frontage zone is provided.

«When the proposed bicycle rack placement may encroach on a private property, coordinate placement with the property owner and obtain written consent from the owner.

Setbacks

«MIN. 0.50m from edge of curb to clear zone

«MIN. 0.45m from edge of walkway to clear zone

«MIN. 0.45m from building edge to clear zone.

«MIN. 1.50m from tree trunks to clear zone.

«MIN. 1.50m from other street furniture to clear zone for post and ring rack. (1.70m for multi-ring bicycle racks)

«MIN. 1.50m from fire hydrants to clear zone.

«Bicycle parking may be oriented in different ways, as long as all setbacks and clear zones are provided.

Cigarette Receptacles

PERMITTED ZONES	MINIMUM ZONE WIDTH
STREET TREE/STREET FURNITURE ZONE	Cigarette Receptacle width + 0.45m
FRONTAGE ZONE	Cigarette Receptacle + 9.45m

Cigarette receptacles provide pedestrians an opportunity to properly dispose of their cigarettes and avoid throwing them onto the street.

Considerations

- «Place cigarette receptacle more frequently in commercial/civic areas, major routes, adjacent to major intersections and bus stops.
- «Place cigarette receptacle openings adjacent to a walkway.
- «Do not place cigarette receptacles directly in front of building entrances or exits.
- «Do not place cigarette receptacles directly in front of windows (except where coordinated with a property owner).
- «Secure the cigarette receptacle to a flat, firm and stable surface.
- «Ensure the location of cigarette receptacles take into account vehicular and pedestrian safety and access.
- «Preference should be given to bins that have smooth or rounded edges.
- «Should be located at the periphery of no smoking zones to provide smokers an opportunity to dispose of cigarettes prior to entering the area.
- «Limit use of advertising on cigarette receptacles.

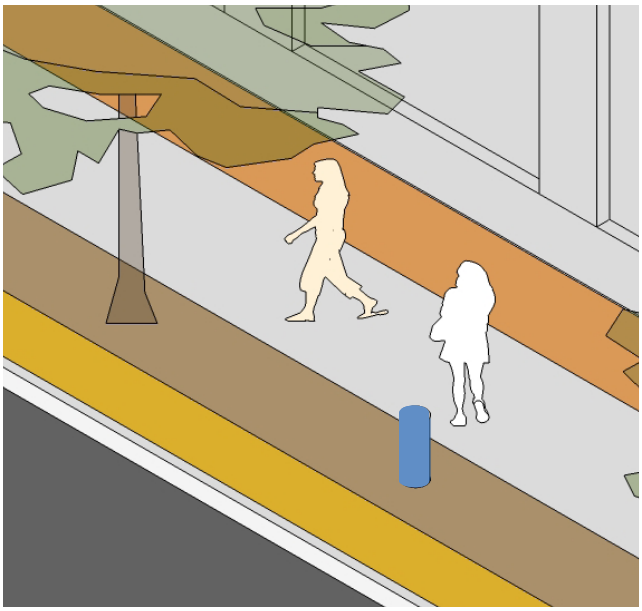
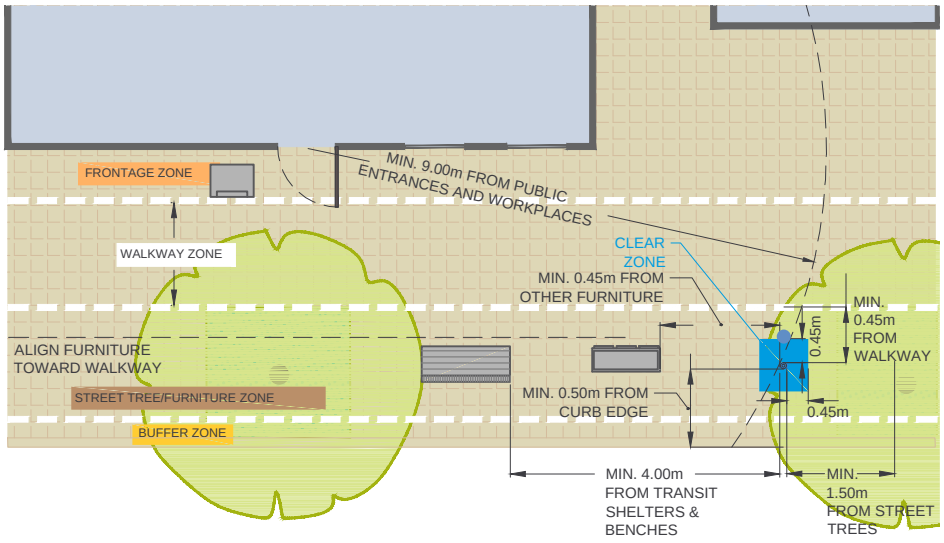


FIGURE 3.2.19 | Cigarette Receptacles

LAYOUT 1: CIGARETTE RECEPTACLES IN THE STREET TREE/FURNITURE ZONE



Setbacks

- «MIN. 0.50m from edge of curb
- «MIN. 0.45m from edge of walkway
- «MIN. 4.00m from transit shelters/ benches
- «MIN. 9.00m from all public place and work place entrances/ doorways
- «MIN. 1.50m from tree trunks
- «MIN. 0.45m from other street furniture
- «MIN. 1.50m from fire hydrants

FIGURE 3.2.20 | Cigarette Receptacles Sample Layout

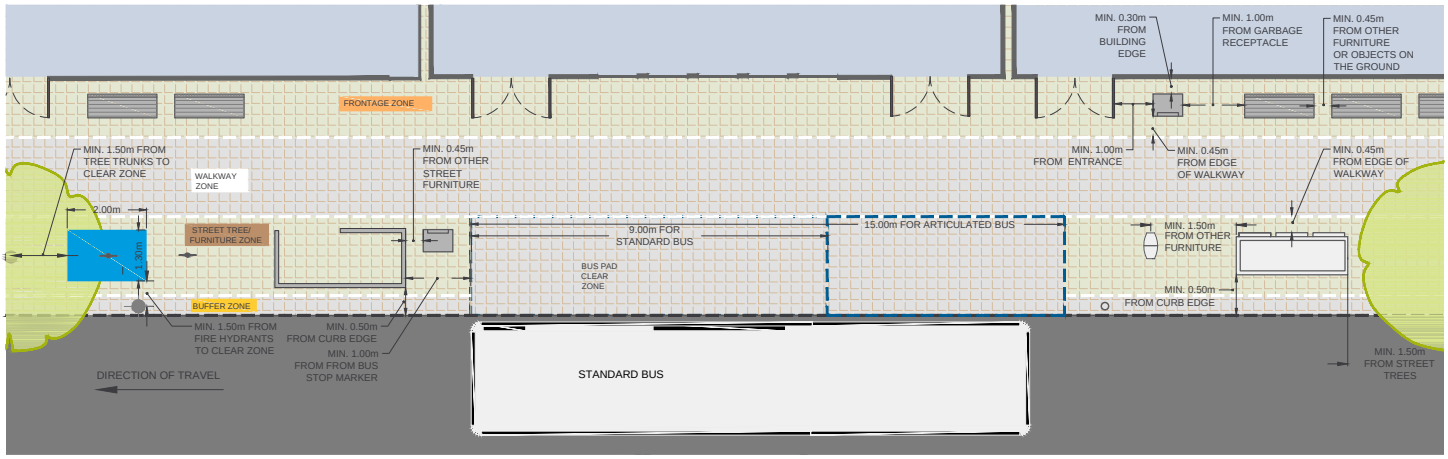
NOTES:

- «The setbacks and placement guidelines described on this page apply regardless of zone configuration.
- «The minimum zone dimensions, setbacks and placement guidelines assume that a 0.50m buffer zone and/or a 0.50m frontage zone is provided.
- «When the proposed cigarette receptacle placement may encroach on a private property, coordinate placement with the property owner and obtain written consent from the owner.
- «Ensure compliance with applicable laws and by-laws. Where the requirements are conflicting, the applicable laws and by-laws take precedence.

3.2.3 Sample Layouts: Street Furniture Groupings Adjacent to Bus Stops

This Section includes several sample layouts with street furniture combinations adjacent to bus stops. All bus stop furniture layout and placement is subject to selection and placement criteria discussed in the previous sections.

LAYOUT 1: MIDBLOCK LAYOUT IN DOWNTOWN COMMERCIAL AREA



LAYOUT 2: INTERSECTION LAYOUT IN DOWNTOWN COMMERCIAL AREA

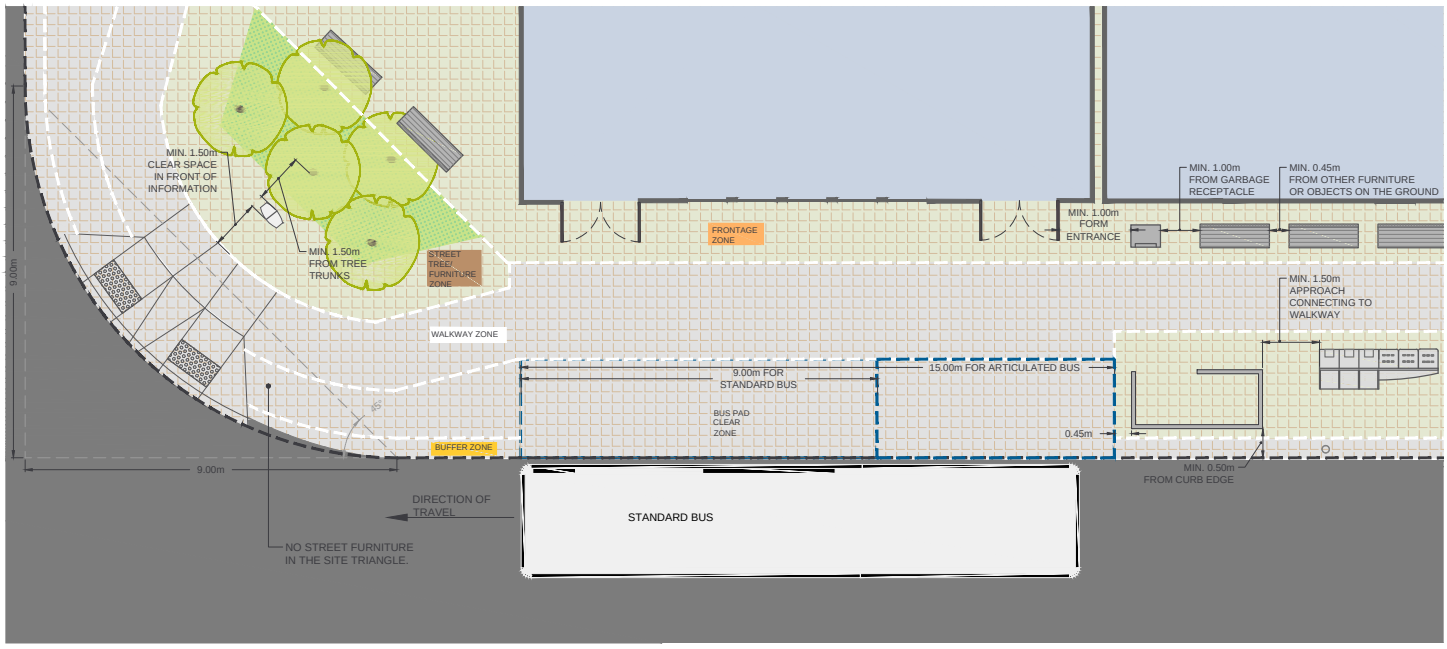


FIGURE 3.2.21 | Sample Layouts 1-2