

City of Mississauga Memorandum



Date: 2024/04/02
 To: Mississauga Cycling Advisory Committee
 From: Fred Sandoval, Active Transportation Coordinator
 Meeting Date: 2024/04/09
 Subject: Feasibility of Bicycle Lane Separation on Confederation Parkway

Summary

Active Transportation staff studied the feasibility of adding bollard separation to the bicycle lanes on Confederation Parkway, between Rathburn Road West and Burnhamthorpe Road West. It was determined that it would not be feasible to add bollards due to the existing road width being too narrow for the minimum bike lane, parking lane, and buffer widths required to ensure safe bicycle operation and accommodate snow clearance and sweeping operations.

Confederation Parkway Lane Widths

Confederation Parkway is classified as a major collector roadway and has a concrete median separating the roadway within the study area. The general traffic lanes, bicycle lanes, gutter, and parking bays are all at the minimum widths as per City of Mississauga standards. These are listed below and illustrated in Figure 1.

- General traffic lane: 3.35 m
- Turn lane: 3.0 m
- Bicycle lane: 1.5 m
- Gutter (adjacent to curb): 0.3 m
- Gutter (adjacent to parking bay): 0.5 m
- Parking bay: 2.6 m

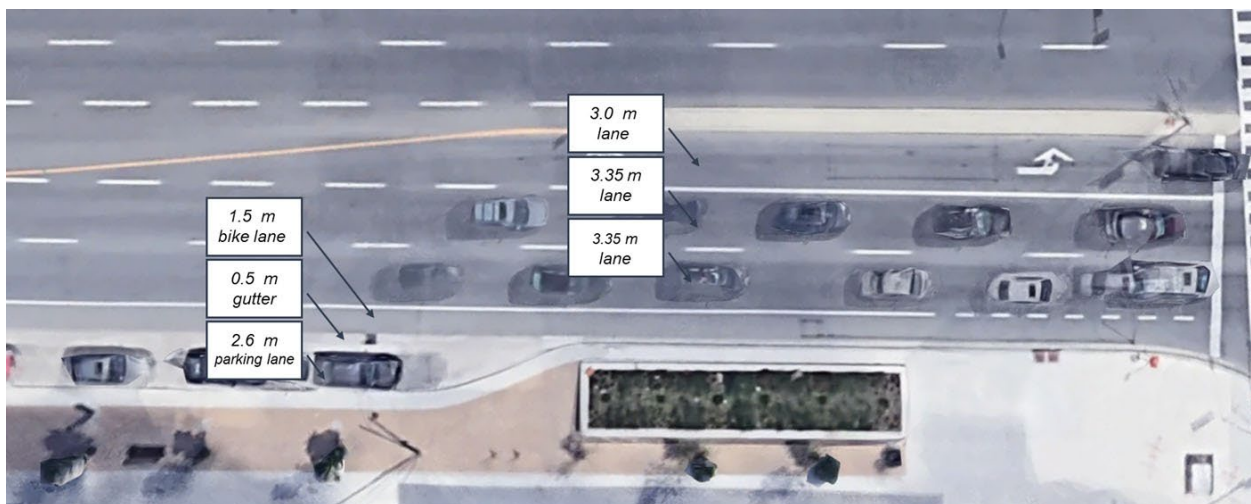


Figure 1: Confederation Parkway existing lane widths, between Rathburn Road West and Burnhamthorpe Road West

Minimum Separated Bicycle Lane Widths

Separated bicycle lanes in the City of Mississauga require an absolute minimum clear width of 2.0 m to accommodate snow clearing and road sweeping equipment. This clear width includes the road gutter and any setback of the separation element (bollards and/or curbs). General traffic lanes adjacent to curbs or other physical separation must be at least 3.5 m. On Confederation Parkway, an additional 0.55 m of road space on each side would be required to accommodate the minimum widths for separated bicycle lanes. This is broken down below:

Existing bicycle lane width on Confederation Parkway:

Bicycle lane: 1.5 m

Gutter: 0.3 m

Total: 1.8 m

Minimum width required for separated bicycle lane:

Additional traffic lane width: 0.15 m (to widen 3.35 m lane to 3.5 m lane)

Bollard width (at base): 0.2 m

Bicycle lane 1.7 m

Gutter 0.3 m

Total: 2.35 m

Note that a painted buffer containing the separation would be included within the above lane widths and is typically 0.5 m (0.3 m minimum).

Parking bays/lanes are 2.6 m wide. When adjacent to a separated bicycle lane, the painted buffer should be 1.0 m wide, but can include up to 0.6 m of the parking lane, with the remainder containing the bollard, and encroaching into the bike lane. The buffer ensures a car door swing does not encroach into the bike lane. On Confederation Parkway, where there are parking bays, an additional 0.2 m would be required to meet the minimum width requirements, as shown below. Figure 2 illustrates a typical configuration with minimum widths for a separated bicycle lane adjacent to parking.

Existing bicycle lane and adjacent parking bay width on Confederation Parkway:

Bicycle lane: 1.5 m

Gutter: 0.5 m

Parking bay: 2.6 m

Total: 4.6 m

Minimum width required for separated bicycle lane and adjacent parking lane:

Parking lane: 2.6 m

Bollard base: 0.2 m

Bicycle lane: 1.7 m

Gutter: 0.3 m

Total: 4.8 m

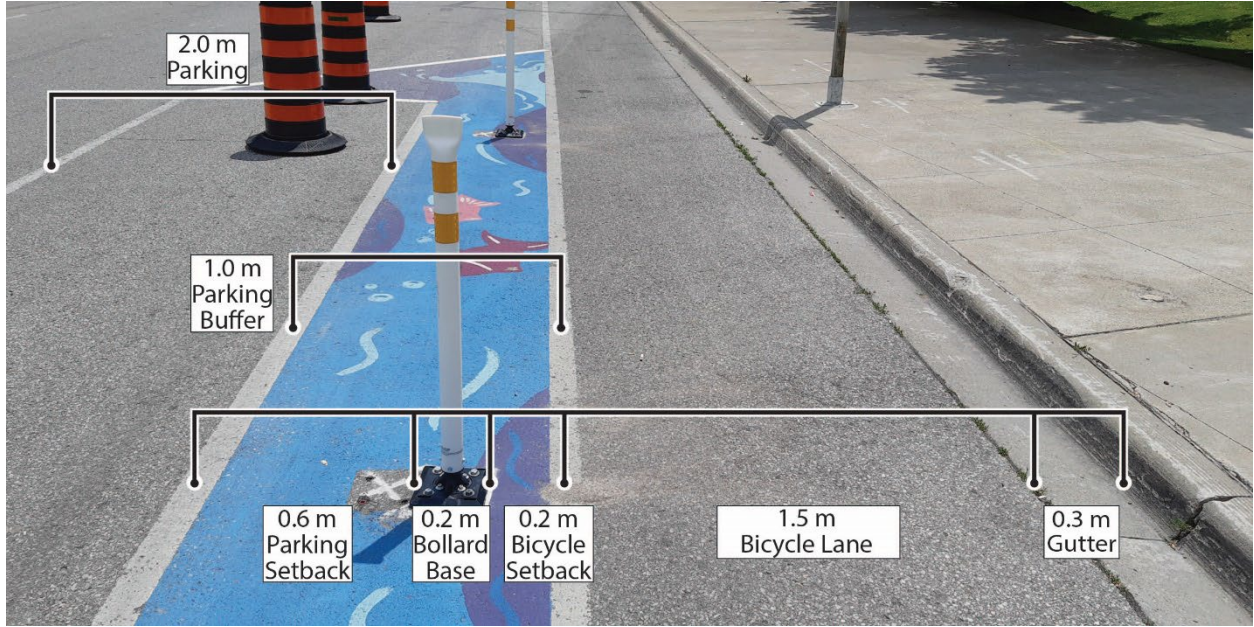


Figure 2: Minimum required widths for separated bike lanes adjacent to parking

Fred Sandoval, Active Transportation Coordinator