

City of Ottawa – Cycling Safety

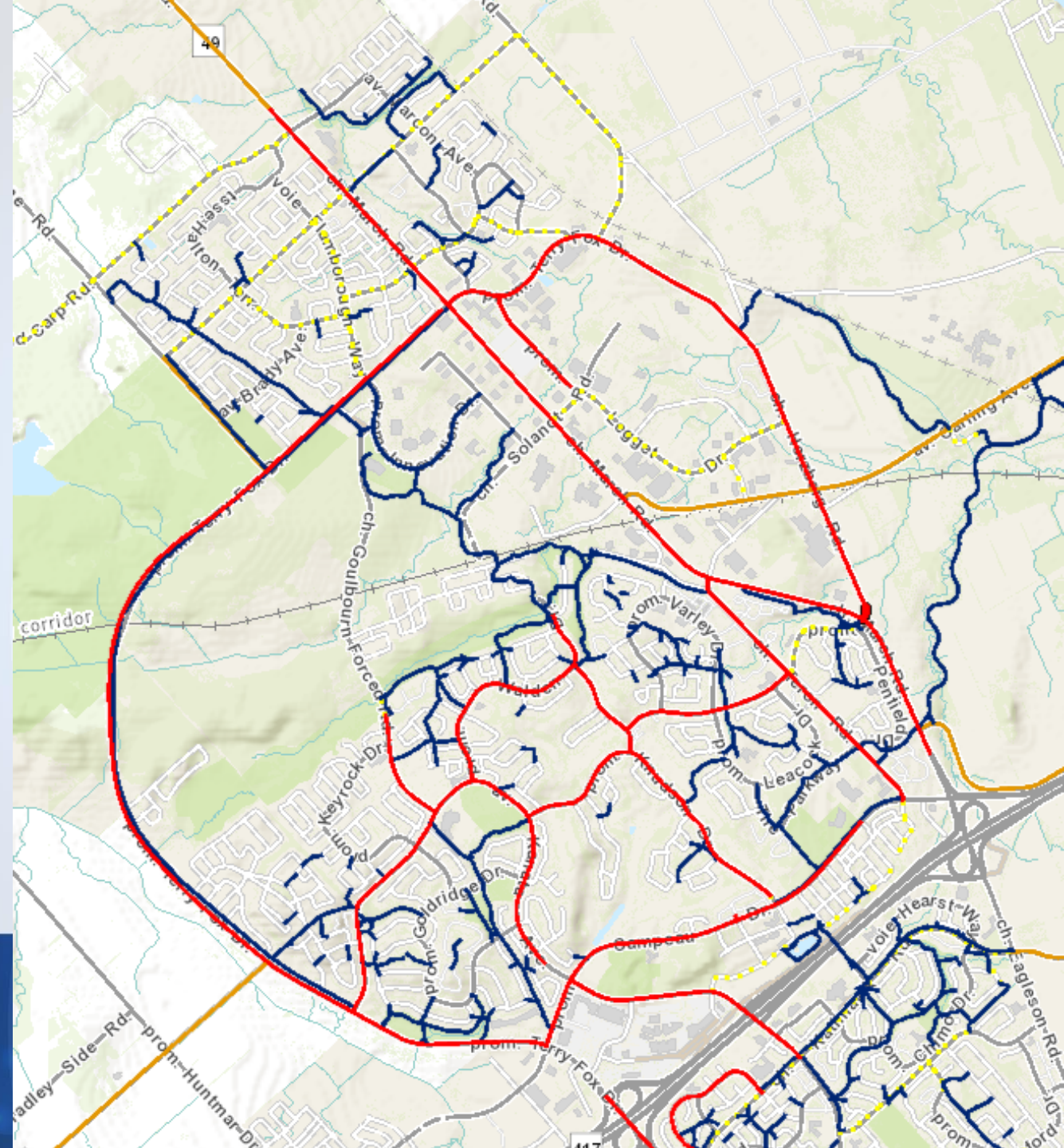


Alex Culley

Mobility Coordinator
Traffic Services Branch

Kanata North Existing Cycling Network

- New bike lanes vs “Courtesy Lanes”
- New MUP vs community pedestrian connections
- Barriers
 - Major arterials – March, Terry Fox, Campeau
 - Refrew rail corridor
 - South March Highlands Conservation area
- 417 Crossings



Map of the Ultimate Cycling Network

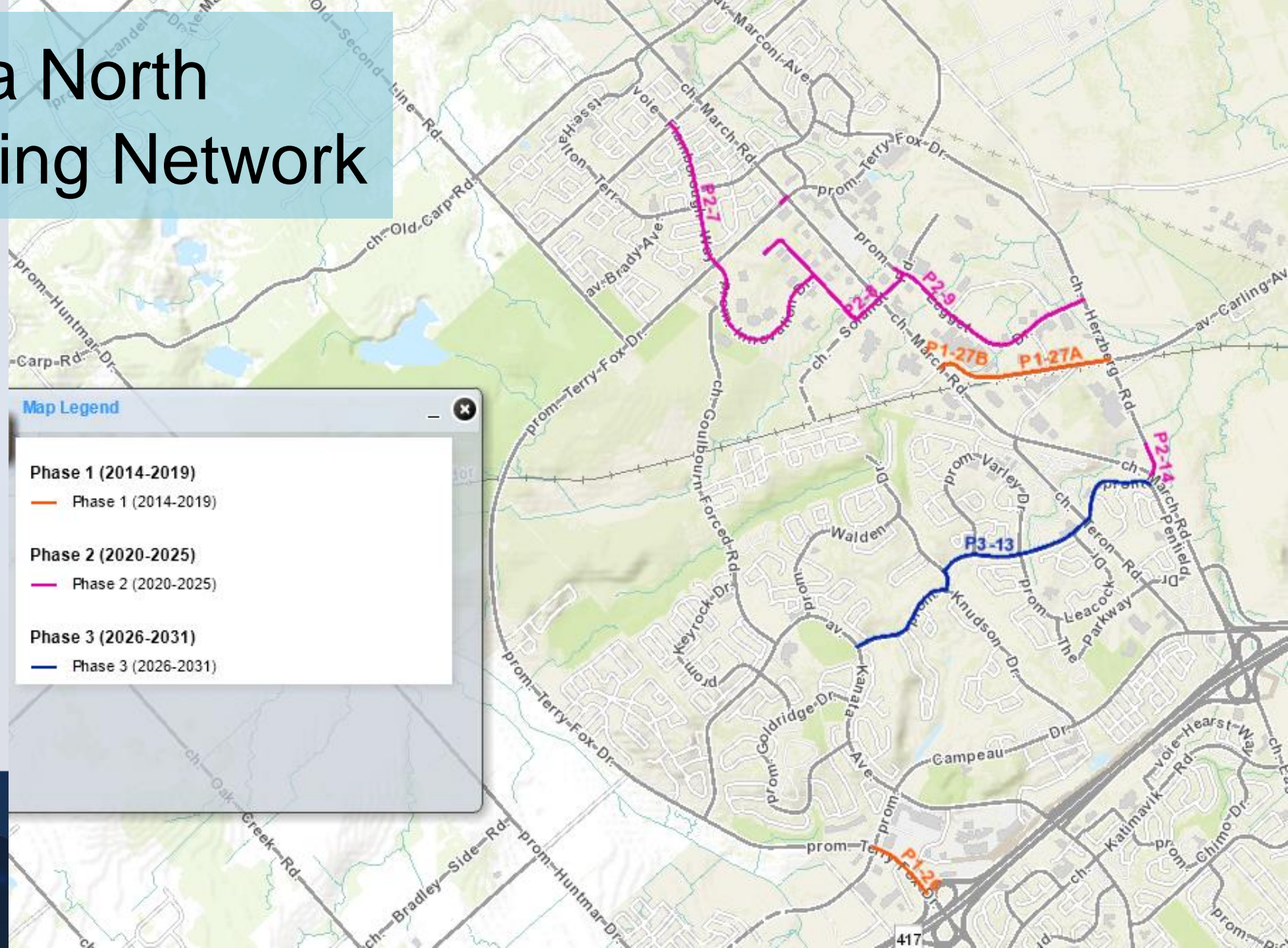
The map displays a network of cycling routes overlaid on a street map. The routes are color-coded according to the legend:

- Ultimate Cycling Network:**
 - Spine Route: Dark red line
 - Local Route: Yellow line
 - Major Pathway: Green line
 - Pathway Link: Light green line
- Neighbourhood Bikeways:**
 - Neighbourhood Bikeways: Bright green line
- Cross-Town Bikeways:**
 - Cross-Town Bikeways: Orange line

The map includes a legend window in the bottom-left corner with the title "Map Legend". It also features a scale bar and a north arrow. The background map shows residential streets, green spaces, and a railway corridor. Two blue circular markers with the number "8" are placed on the network. The title "Map of the Ultimate Cycling Network" is displayed in a large, bold, black font at the top left.

Kanata North Future Cycling Network

- P1-26: Terry Fox BL
- P1-27A&B: Carling Ave BL
- P2-14: Herzberg CT
- P2-7, 8, & 9: Flamborough, Innovation, Hines, Solandt, Leggett BL
- P3-13: Kanata North Neighbourhood Bikeway SL



Facility types



1. Painted Bike Lane



2. Separated Bike Lane



4. Multi-Use Pathway



6. Paved Shoulder (R)

1B. Painted Bike Lane



3. Cycle Track



5. Shared Lanes (R)

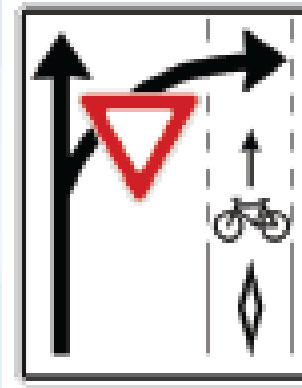


4B. Rural Pathway (R)

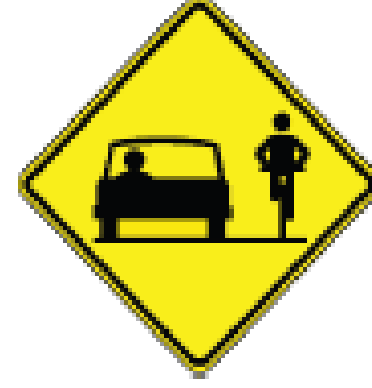


Principles of Signing & Pavement Markings

- Sign types
 - Regulatory
 - Warning
 - Informational / wayfinding
- Pavement Markings
 - Supplementary
 - User experience
- Clutter



RB-37 (TAC)



Wc-19 (OTM)



Shared Lanes

Figure 4.4 – Share the Road and Shared Use Lane Single File Signs)



Wc-19 (OTM)
(600 mm x 600 mm)



Wc-24 (OTM)
(600 mm x 600 mm)

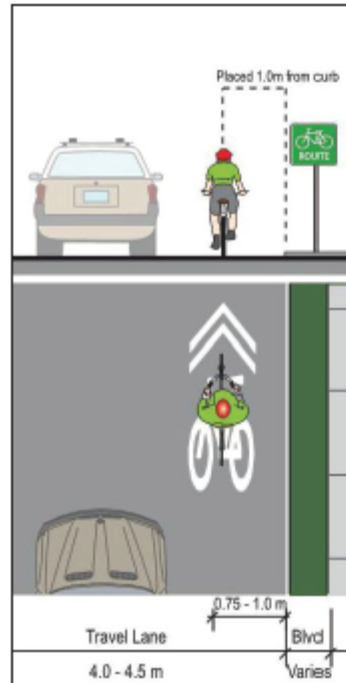


Wc-19t (OTM)
(300 mm x 600 mm)

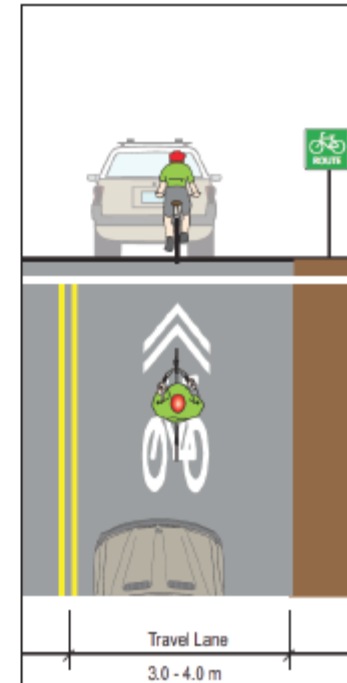


Wc-24t (OTM)
(300 mm x 600 mm)

Figure 4.2 – Cross-Sections of Shared Roadways and Signed Bicycle Routes
(See Table 4.1 for more details)



Wide Signed Bicycle Route
(with optional sharrow)



Narrow Signed Bicycle Route
(with optional sharrow)



Bike Lanes

Figure 4.20a – Overhead and Ground-mounted Reserved Bicycle Lane Signs (OTM)



Rb-84 (OTM)
(600 mm x 600 mm)



Rb-84A (OTM)
(600 mm x 600 mm)

Figure 4.20b – Reserved Lane Begins and Ends Tab Signs (OTM)

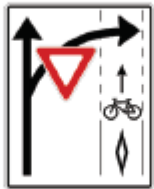


Rb-84t (OTM)
(200 mm x 600 mm)



Rb-85t (OTM)
(200 mm x 600 mm)

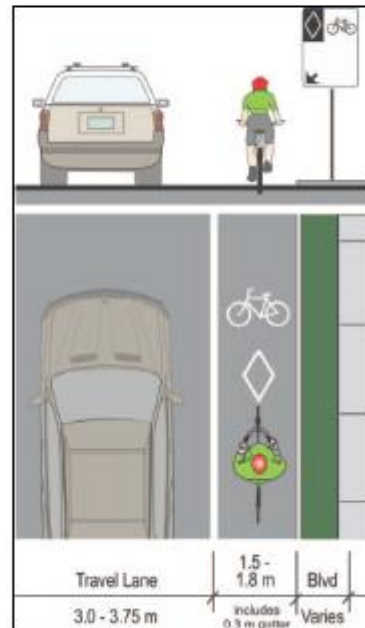
Figure 4.23 – Turning Vehicles Yield to Bicycles Sign



RB-37 (TAC)
(600 mm x 750 mm)

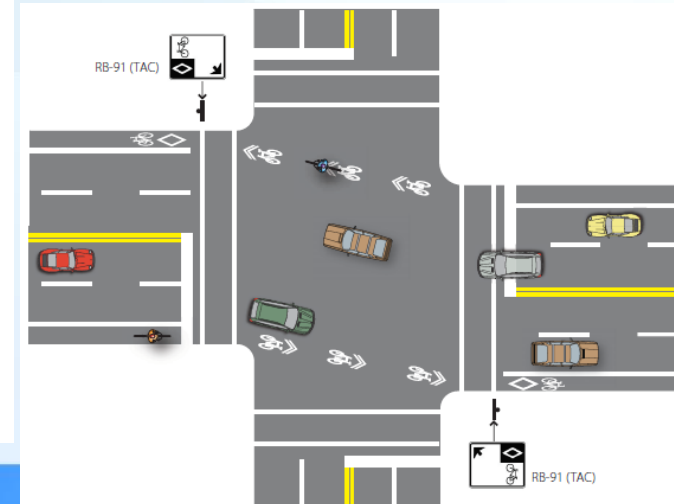
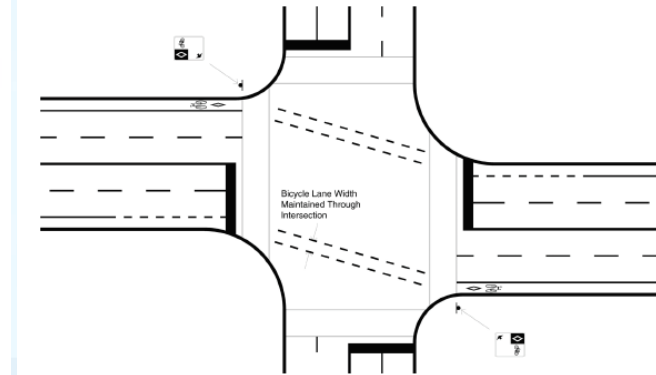
Figure 4.19 – Cross-Sections of Conventional Bicycle Lanes
(See Table 4.3 for more details. As an option, directional arrows may be applied within the bicycle lane.)

Conventional Bicycle Lane



Source: MMM, 2013

Bicycle Lane Adjacent to On-Street Parking



Separated Bike Lanes

Figure 4.20a – Overhead and Ground-mounted Reserved Bicycle Lane Signs (OTM)



Rb-84 (OTM)
(600 mm x 600 mm)



Rb-84A (OTM)
(600 mm x 600 mm)

Figure 4.20b – Reserved Lane Begins and Ends Tab Signs (OTM)

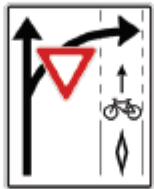


Rb-84t (OTM)
(200 mm x 600 mm)



Rb-85t (OTM)
(200 mm x 600 mm)

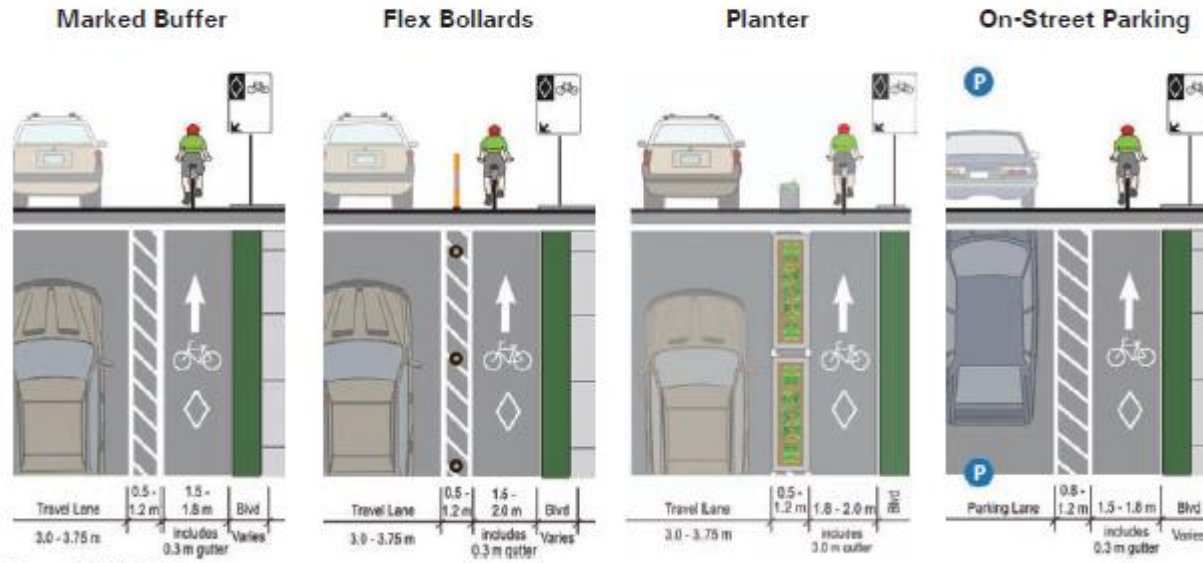
Figure 4.23 – Turning Vehicles Yield to Bicycles Sign



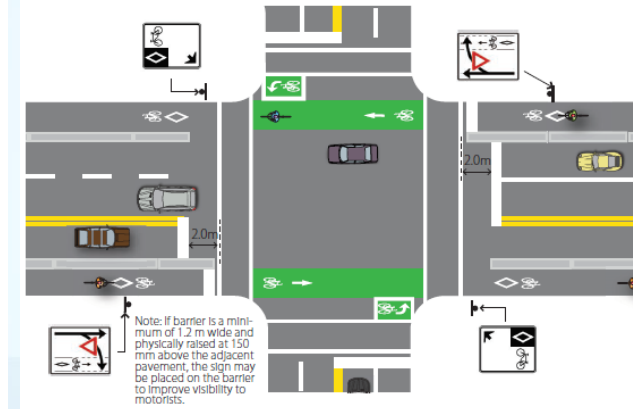
RB-37 (TAC)
(600 mm x 750 mm)

Figure 4.54 – Cross-Sections of Separated Bicycle Lanes with Buffers as indicated

(See Table 4.4 for more details. As an option, directional arrows may be applied within the bicycle lane.)



Source: MMM, 2013



Cycle Tracks

Figure 4.20a – Overhead and Ground-mounted Reserved Bicycle Lane Signs (OTM)



Rb-84 (OTM)
(600 mm x 600 mm)



Rb-84A (OTM)
(600 mm x 600 mm)

Figure 4.20b – Reserved Lane Begins and Ends Tab Signs (OTM)



Rb-84t (OTM)
(200 mm x 600 mm)



Rb-85t (OTM)
(200 mm x 600 mm)

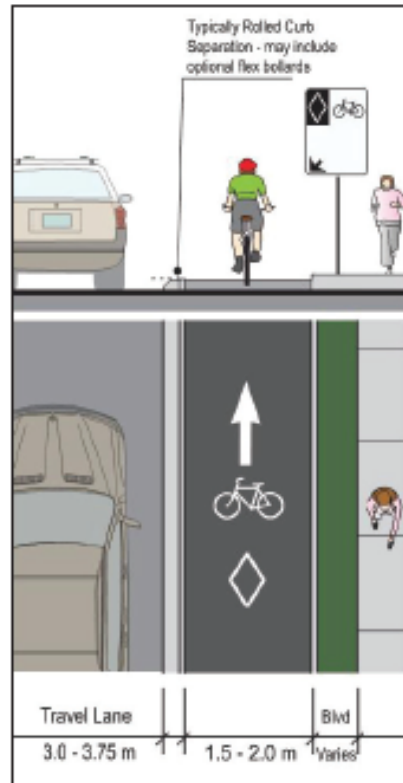
Figure 4.23 – Turning Vehicles Yield to Bicycles Sign



RB-37 (TAC)
(600 mm x 750 mm)

Figure 4.77 – Cross-Sections of One-way and Two-Way Raised Cycle Tracks
(See Table 4.6 for more details)

One-Way Raised Cycle Track



Source: MMM, 2013

Two-Way Raised Cycle Track

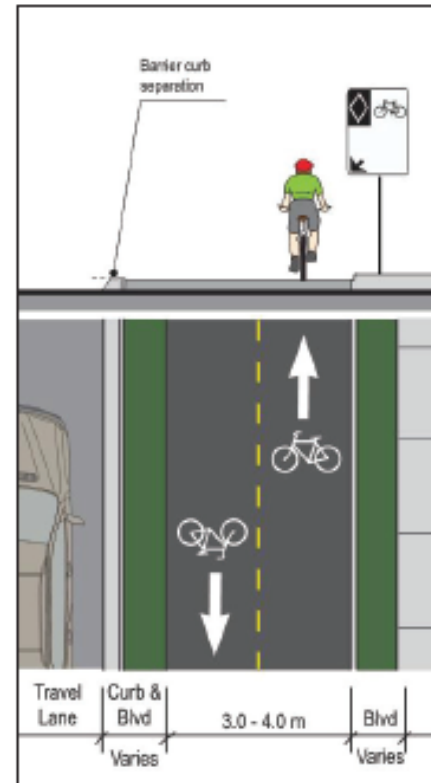
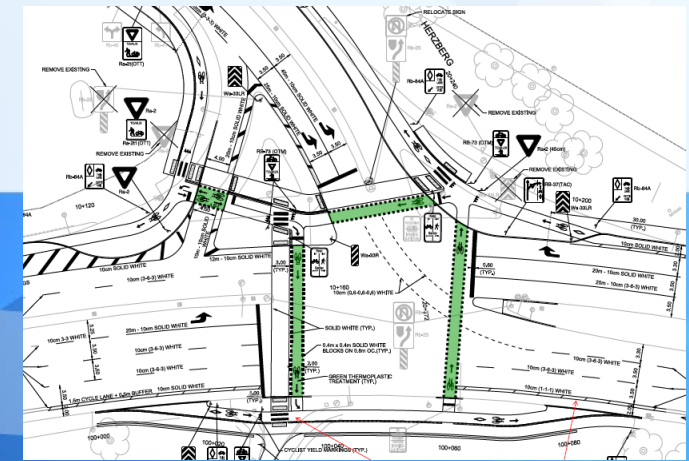
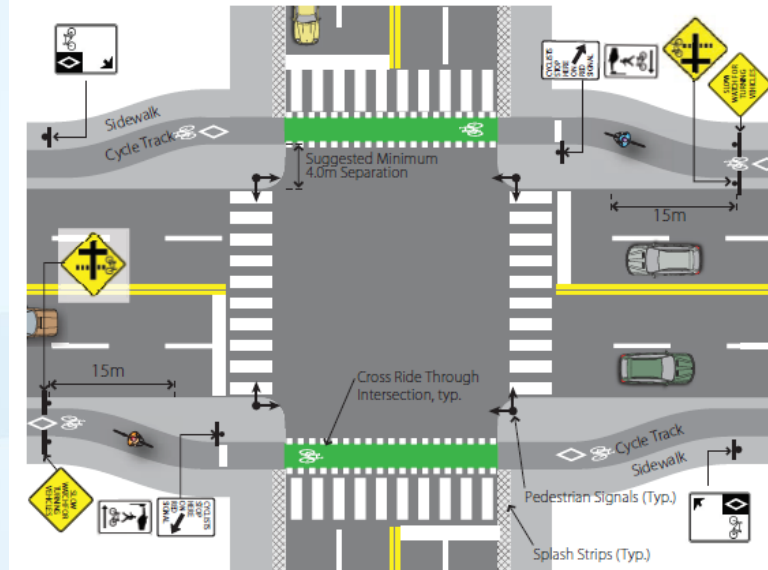


Figure 4.87 – Raised Cycle Track Carried Through an Intersection
(Directional arrows should be applied within the raised cycle track)



Multi-Use Pathways



Rb-71 (OTM)



Rb-72a (OTM)



Rb-72b (OTM)



Rb-73 (OTM)



Rb-70 (OTM)



Wc-15 (OTM)

Two-way In-Boulevard Shared-Use Facility

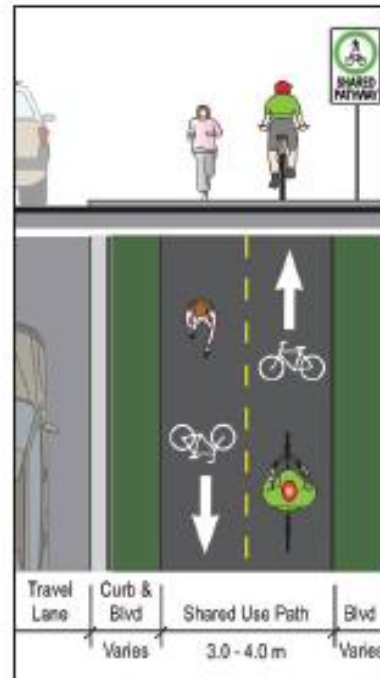
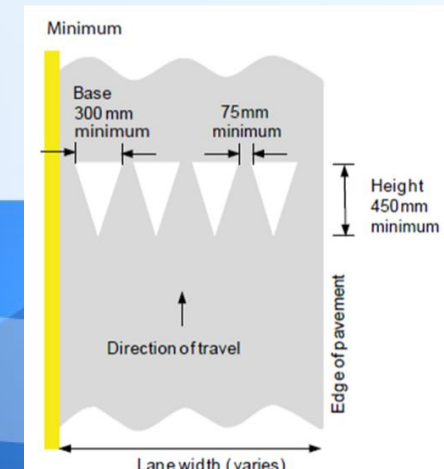
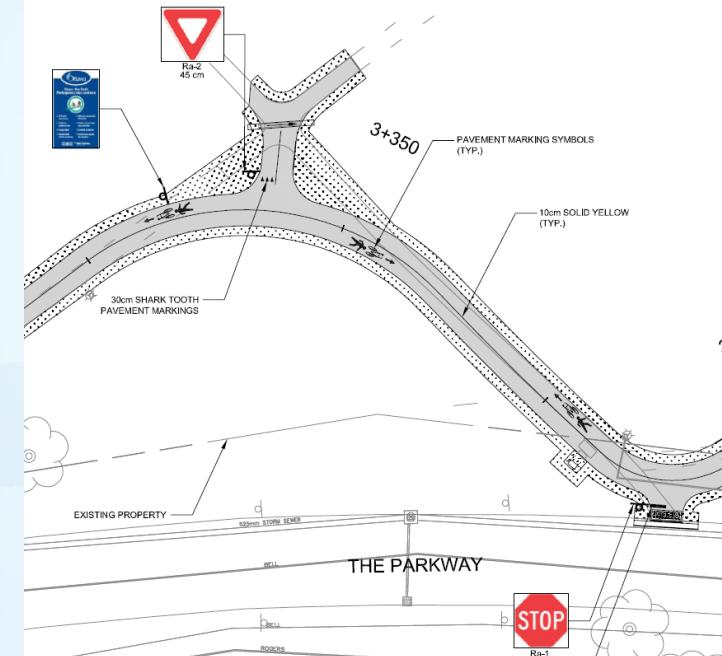


Figure 4.98 – Typical Pavement Markings for Two-Way In-Boulevard Shared Use Paths (Broken versus solid yellow centre line)

(Pavement stencils optional)



Source: MMM, 2013



Crossings / Crossrides

Figure 4.101 – Separate Pedestrian and Cyclist Crossride (Signalized Example)

(As an option, directional arrows may be applied within the in-boulevard facility)

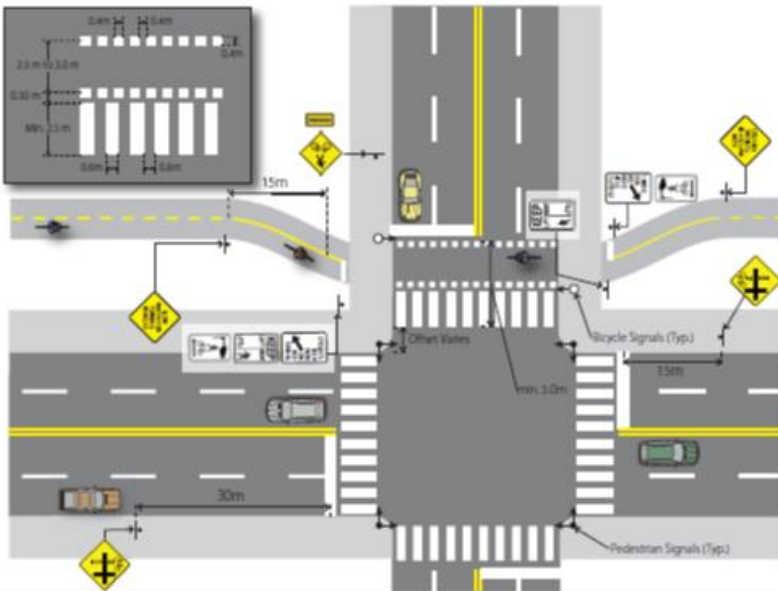


Figure 4.102 – Combined Pedestrian and Cyclist Crossride (Signalized Example)

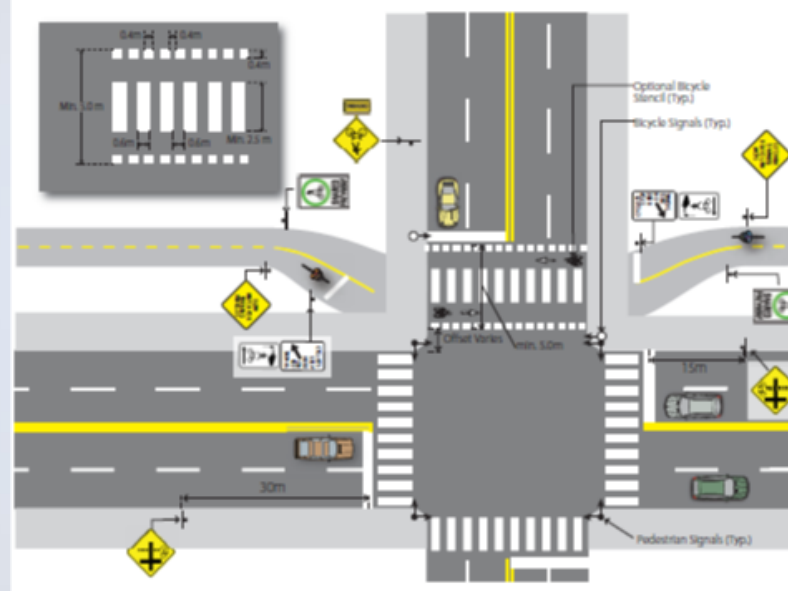
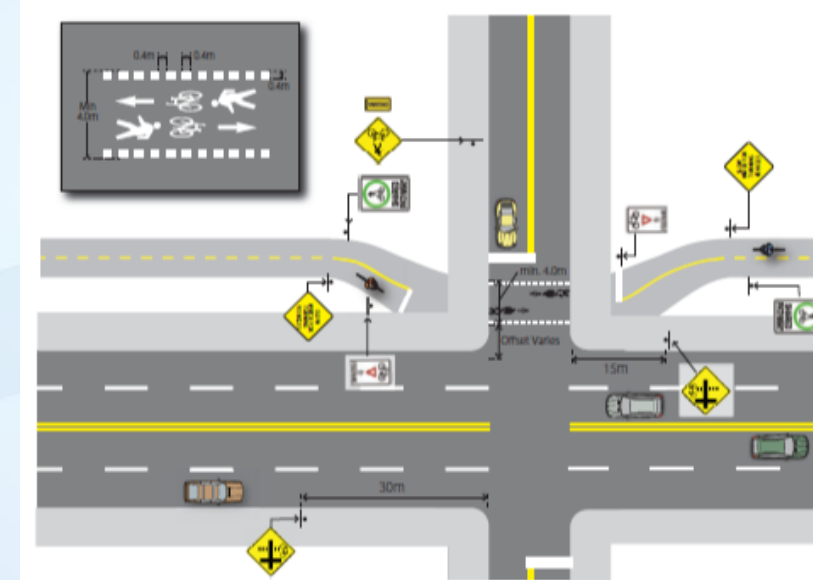
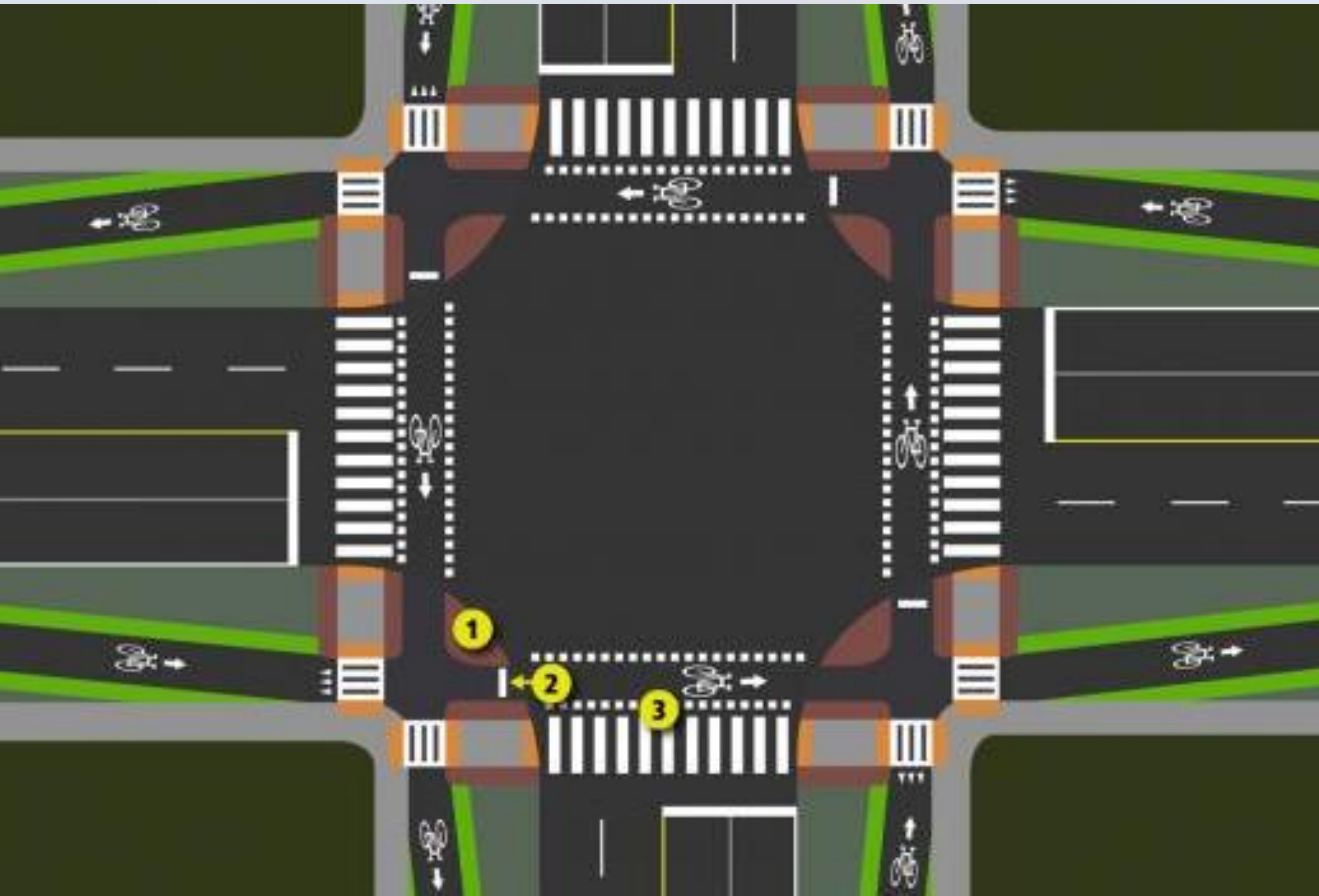


Figure 4.103 – Mixed Pedestrian and Cyclist Crossride (Unsignalized Example)

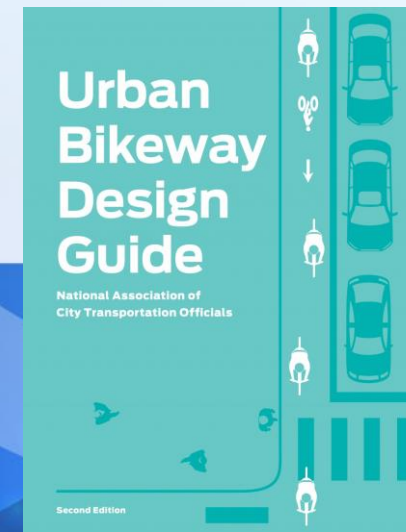
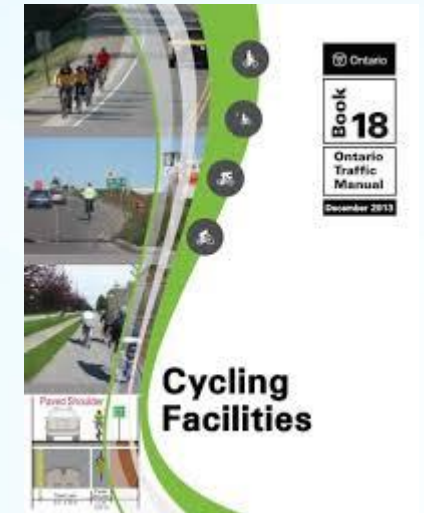


Protected Intersection



Resources

- Laws, and Standards and Design Guidelines
 - Ontario - Highway Traffic Act
 - National Standards – Transportation Association of Canada
 - Provincial Standards – Ontario Traffic Manuals
 - American and international Standards
- City Materials
 - www.Ottawa.ca/cycling
 - Ottawa Cycling Plan
 - Transportation Master Plan



Questions?

Thank you