for branding purposes, as with the example shown in **Figure 4.85**.



Figure 4.84 – Solid White Bicycle Lane Line

Source: TAC Bikeway Traffic Control Guidelines for Canada, 2012 (Table 7.1)



Figure 4.85 – Cycle Track Raised at Bus Stop, Toronto Credit: MMM, 2012

4.3.1.4 Design Applications

Cycle Tracks at Intersections

Practitioners may transition a one-way cycle track down a ramp to a conventional bicycle lane on the approach to an intersection as illustrated in **Figure 4.86**, and then transition back up a ramp to a cycle track following the intersection.

This design increases the visibility between rightturning motorists and through cyclists in advance of the conflict point. This may be appropriate for locations where cyclists on the cycle track are obscured from motorists by on-street parking. In that case, a triangular taper should be provided allowing a 10 to 15 metre gap between the end of the parking lane and the point at which cyclists will be alongside and parallel to the travel lane. The ideal offset from this point to the stop bar will vary between sites. Practitioners should consider the configuration of the approach to the intersection, particularly sight lines, and the behaviour of drivers and cyclists. Consideration should also be given to cyclists who must merge with traffic to make a vehicular left turn. Designers may consider providing a two-stage left turn queue box or bike box to facilitate this movement. The layout for the queue box will be similar to that for separated bike lanes. Please refer to **Figure 4.64** in **Section 4.2.2.4** for more details.

Alternatively, practitioners may design the cycle track through the intersection as a crossride, as shown in **Figure 4.87**. A variable offset of up to 4.0 metres is recommended between the crossride and the travel lane. This means that turning motorists will approach the crossride at an oblique angle, allowing them good visibility of crossing cyclists. This design may require the side road stop bar to be set back. The impact of this on the visibility that motorists turning right from the side road have of through traffic on the main road should also be considered. The adequacy of pedestrian storage at the intersection should also be reviewed, particularly where cyclist or pedestrian volumes are expected to be high.

Where the facility intersects the sidewalk, guidance should be provided on where cyclists should wait at the intersection. A white stop bar should be placed one metre from the sidewalk and should be accompanied by a "Cyclists Stop Here on Red Signal" sign, together with a cyclist pushbutton if the approach is actuated. A solid yellow centreline should extend 15 metres from the stop bar where a "SLOW Watch for Turning Vehicles" sign may be installed to warn cyclists approaching the intersection while a "Bicycle Crossing on Side Street" sign may be installed to warn motorists approaching the intersection. A Yield to Pedestrians sign (RA-39) may also be installed to remind cyclists that they are approaching a pedestrian zone. Practitioners should refer to **Sections 4.4.1.4 and 5.8.1** for more information on the design of crossrides. Unlike the design shown in **Figure 4.86**, the layout illustrated in **Figure 4.87** may also be used to carry two-way cycle tracks through an intersection.



Figure 4.86 – Cycle Track Transition to a Conventional Bike Lane on the approach to an Intersection

(Design elements not to scale. Slope of ramp between cycle track and bike lane to be maximum 1:8. Practitioners should consider providing a two-stage left turn queue box or bike box.

Directional arrows should be applied within the cycle track.)

Source: Based on NACTO Urban Bikeway Design Guide



Figure 4.87 – Cycle Track Carried Through an Intersection

(Directional arrows should be applied within the cycle track) Source: MMM/ALTA, 2013

Considerations for Two-Way Cycle Tracks at Intersections

Unlike the design shown in **Figure 4.86**, the layout shown in **Figure 4.87** may also be used to carry a bi-directional cycle tracks through an intersection. However, practitioners should consider driver expectations at such locations, and take mitigating measures where appropriate. See **section 5.4.1.2** for further guidance.

4.4 In-Boulevard Facilities

4.4.1 In-Boulevard Bicycle Facility and In-Boulevard Active Transportation Facility

An **In-Boulevard Bicycle Facility** is a cycling facility separated from motor vehicle traffic by a boulevard or a verge within the roadway right-of-way. These are typically implemented adjacent to roadways with higher motor vehicle speeds and volumes along key cycling corridors. An in-boulevard facility can be constructed with the bicycle path distinct from the sidewalk (which is equivalent to an in-