Figure 9E-1. Word, Symbol, and Arrow Pavement Markings for Bicycle Lanes

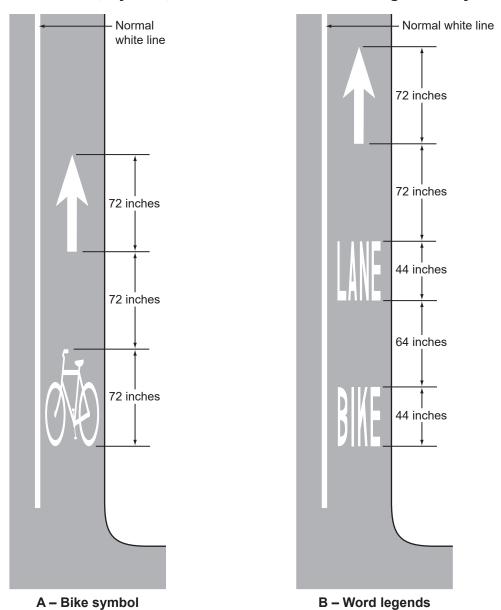
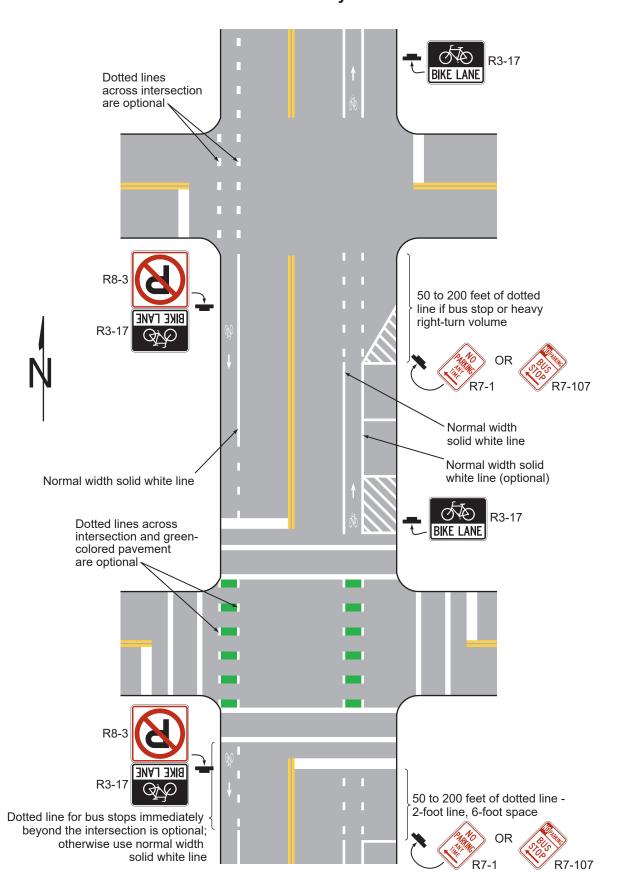


Figure 9E-2. Example of Pavement Markings for Bicycle Lanes on a Two-Way Street



9E-2(CA).
Figure 9C-6 (CA). Example of Pavement Markings for Bicycle Lanes on a Two-Way Street (Sheet 1 of 2) Dotted lines (option). Green Paint within dotted lines (option). R7 series sign (as appropriate) Minor intersection 50 to 200 feet Example of application **Example of application** where parking is prohibited where parking is permitted Normal width solid white line (optional) R3-17 **BIKE LANE** R7 series sign 830 AM (as appropriate) Signalized intersection Dotted lines (option). Green Paint within dotted lines (option). 50 to 200 feet

Figure 9E-2(CA). Example of Pavement Markings for Bicycle Lanes on a Two-Way Street (Sheet 2 of 2)

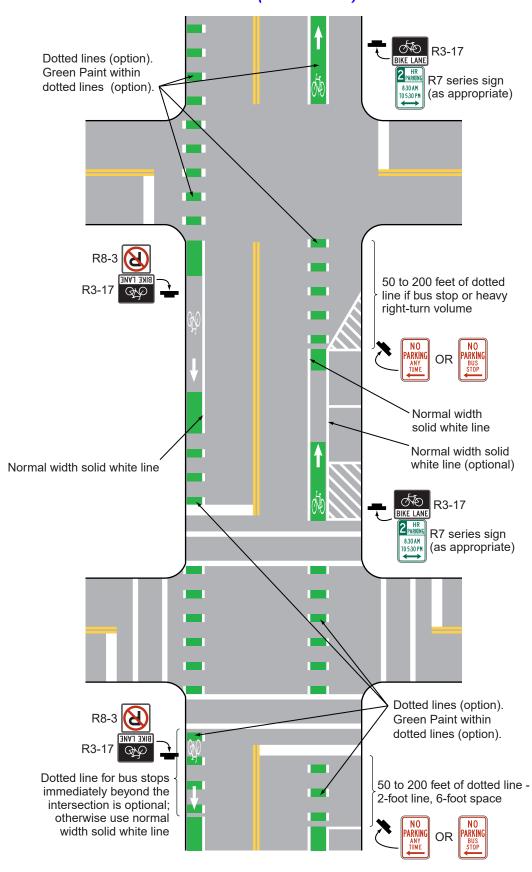


Figure 9E-3. Examples of Bicycle Lane Markings on an Approach to an Intersection (Sheet 1 of 3)

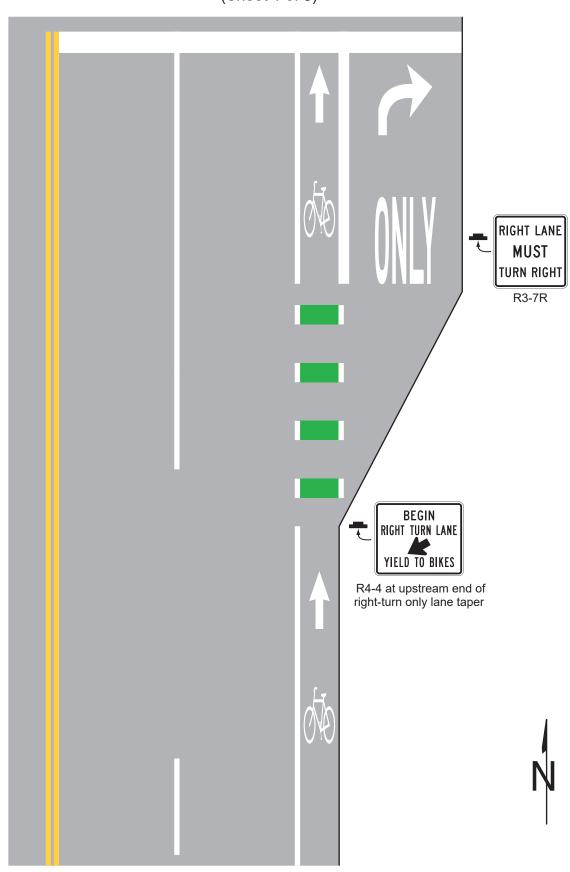


Figure 9E-3. Examples of Bicycle Lane Markings on an Approach to an Intersection (Sheet 2 of 3)

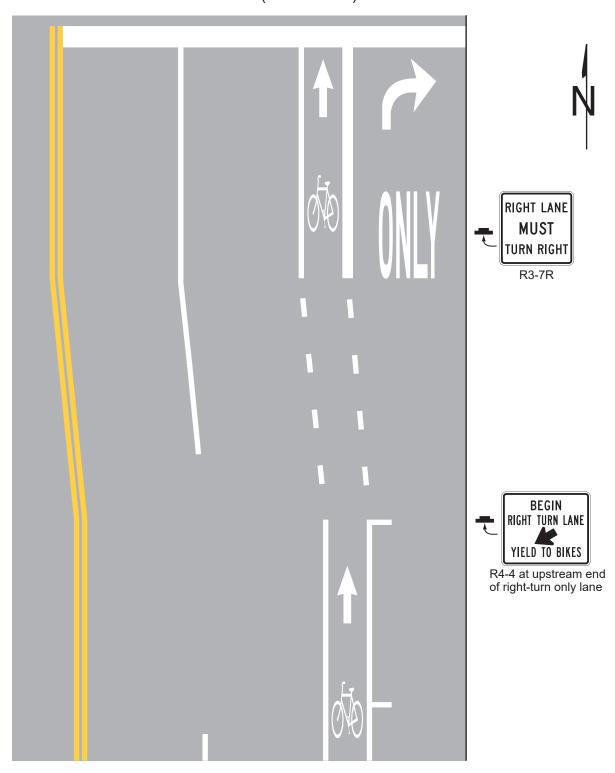


Figure 9E-3. Examples of Bicycle Lane Markings on an Approach to an Intersection (Sheet 3 of 3)

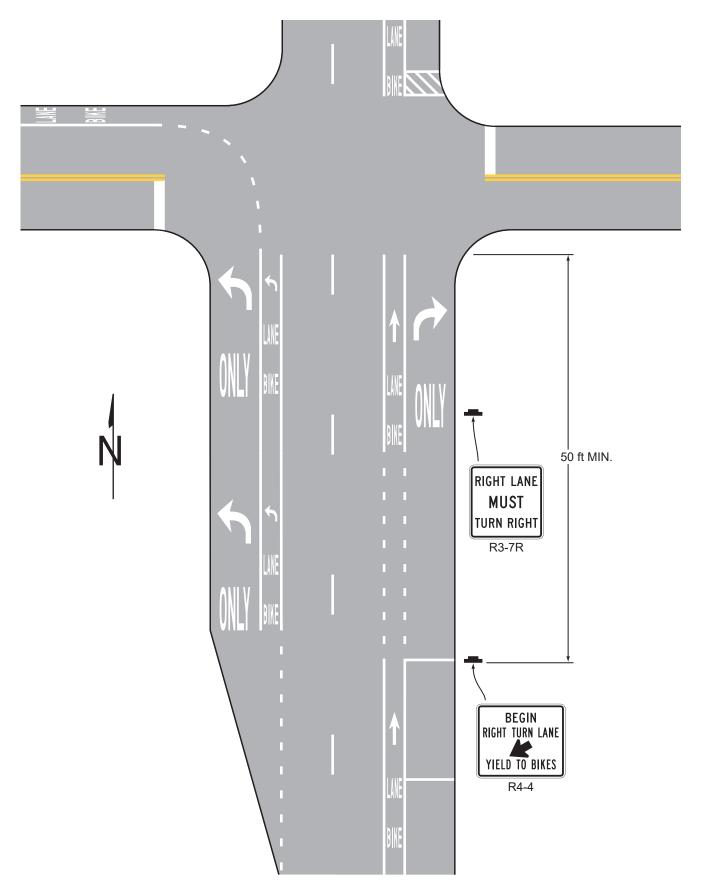


Figure 9E-3(CA). Example of Bicycle Lane Markings on an Approach to an Intersection (Sheet 1 of 6)

A. Example of Bicycle Lane Treatment at a Right Turn Only Lane

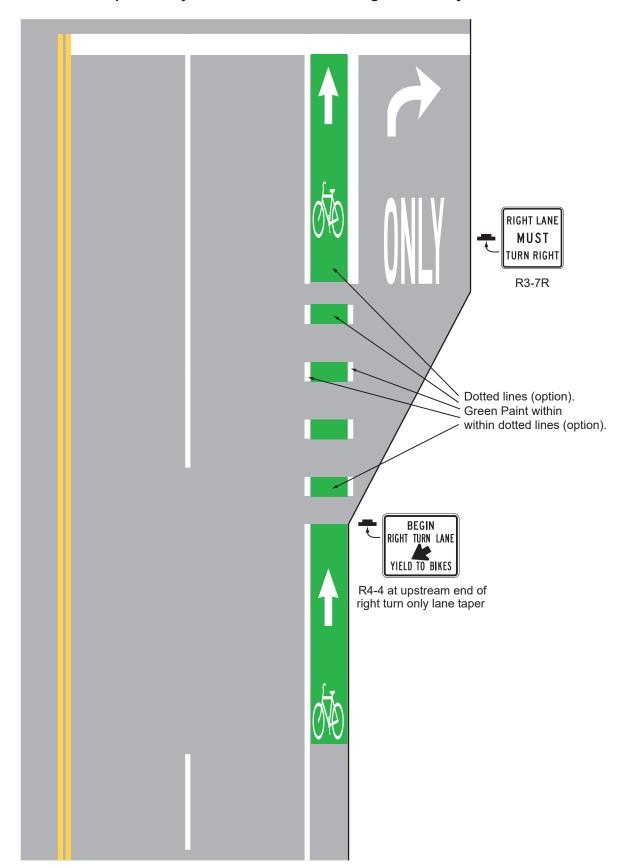
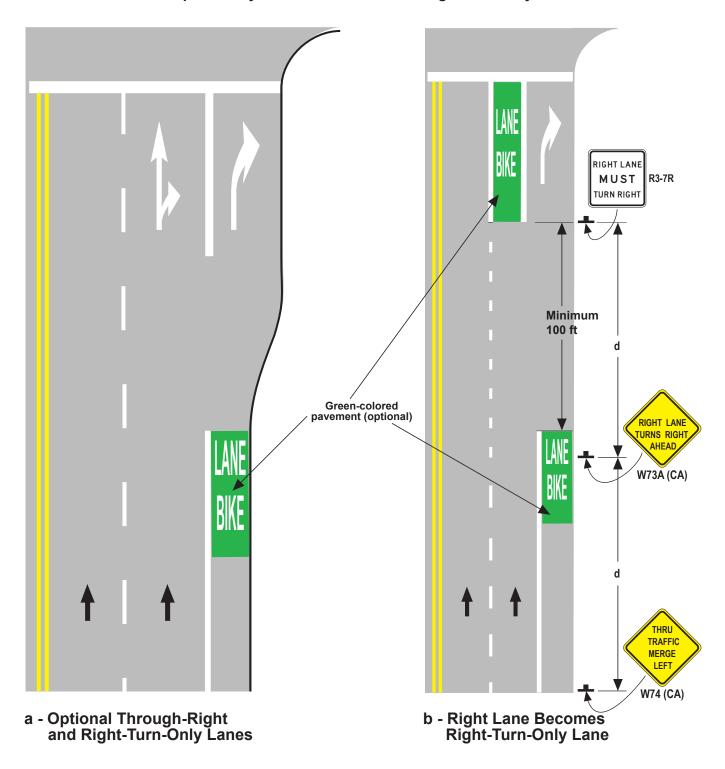


Figure 9E-3(CA). Example of Bicycle Lane Markings on an Approach to an Intersection (Sheet 2 of 6)

B. Example of Bicycle Lane Treatment at a Right Turn Only Lane



* 4 ft minimum width, 6 ft minimum width for posted speed greater than 40 mph d = Advance Placement Distance (See Section 2C.05)

LEGEND

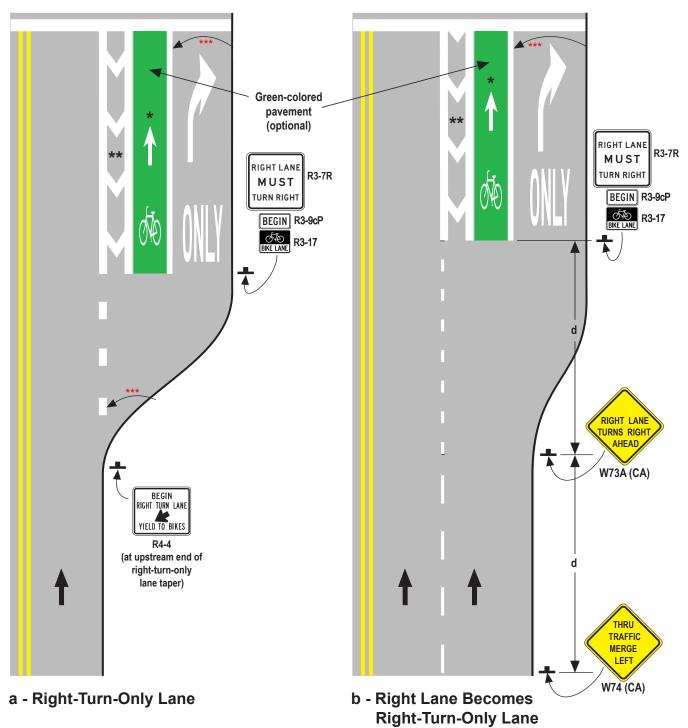
Direction of Travel

NOT TO SCALE

Figure 9E-3(CA). Example of Bicycle Lane Markings on an Approach to an Intersection (Sheet 3 of 6)

C. Example of Bicycle Lane Treatment at a Right Turn Only Lane, Posted Speed > 40 mph

*** These Arrows/Lines will be deleted



* 4 ft minimum width

** 2 ft (minimum 18 in) buffered area may be striped on the left or on the right within the space for bicycle use
d = Advance Placement Distance (See Section 2C.05)

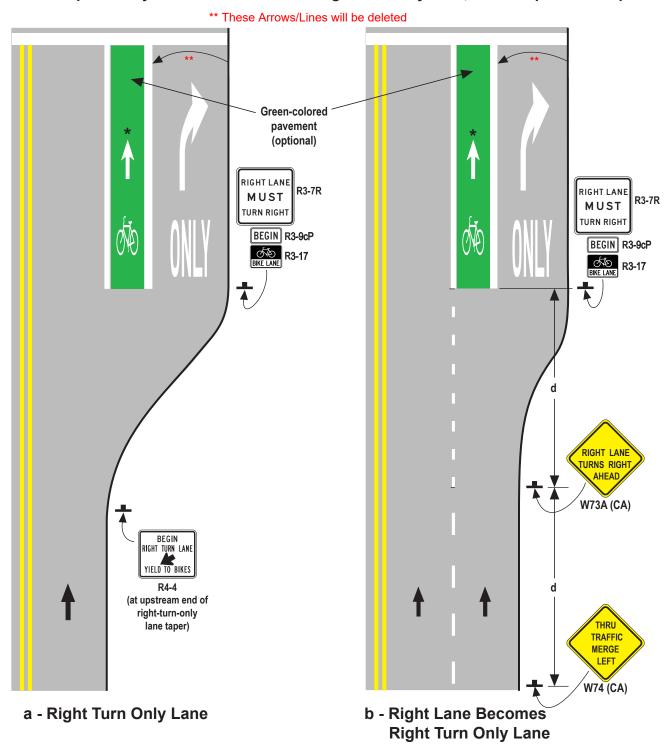
LEGEND

Direction of Travel

NOT TO SCALE

Figure 9E-3(CA). Example of Bicycle Lane Markings on an Approach to an Intersection (Sheet 4 of 6)

D. Example of Bicycle Lane Treatment at a Right Turn Only Lane, Posted Speed ≤ 40 mph

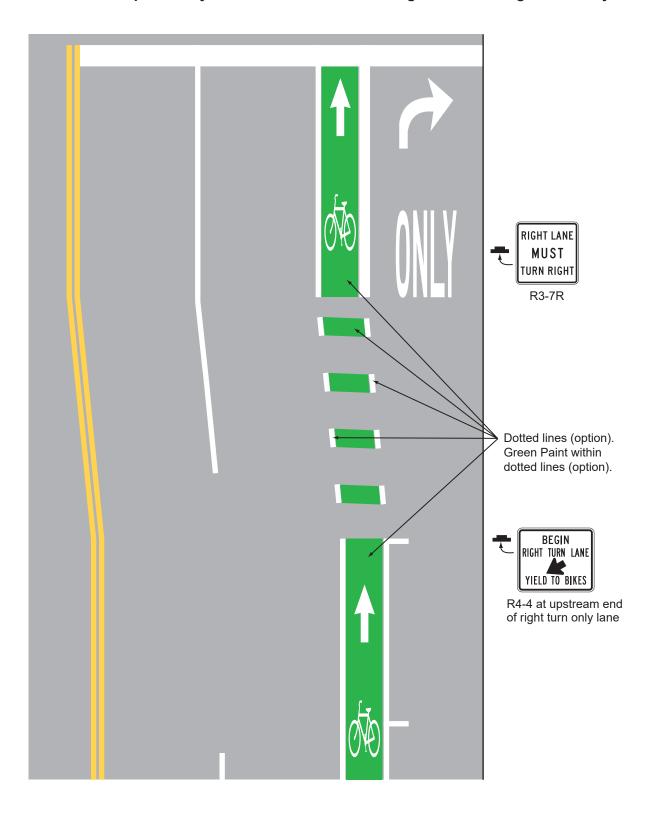


* 4 ft minimum width d = Advance Placement Distance (See Section 2C.05)



Figure 9E-3(CA). Example of Bicycle Lane Markings on an Approach to an Intersection (Sheet 5 of 6)

E. Example of Bicycle Lane Treatment at Parking Lane into a Right Turn Only Lane



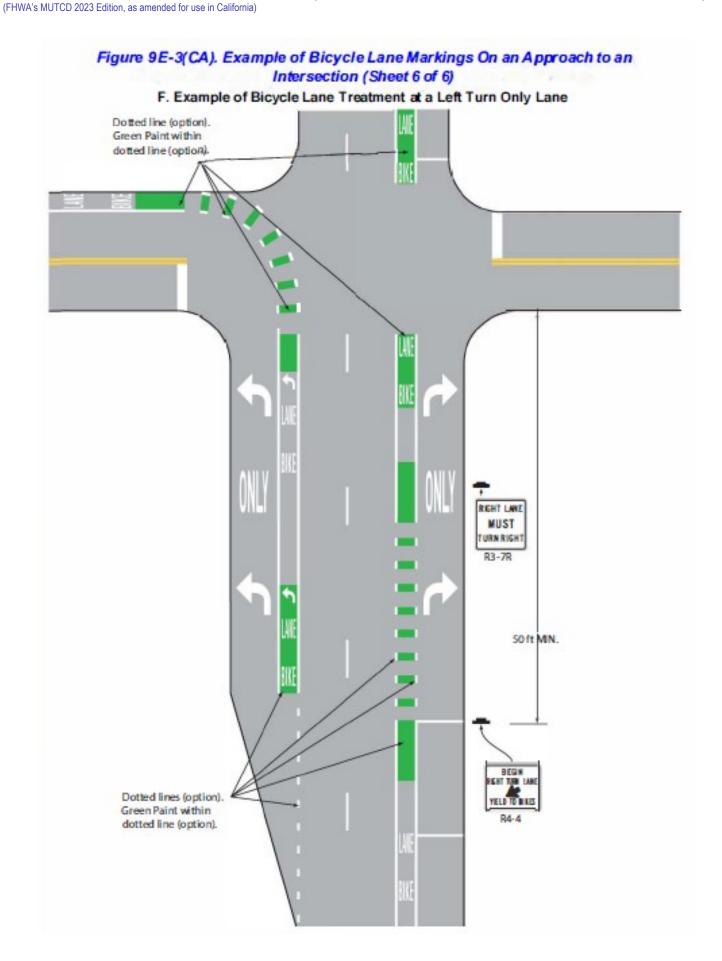


Figure 9E-4. Example of Bicycle Lane Markings on an Approach to an Intersection that Transitions from a Shared Lane

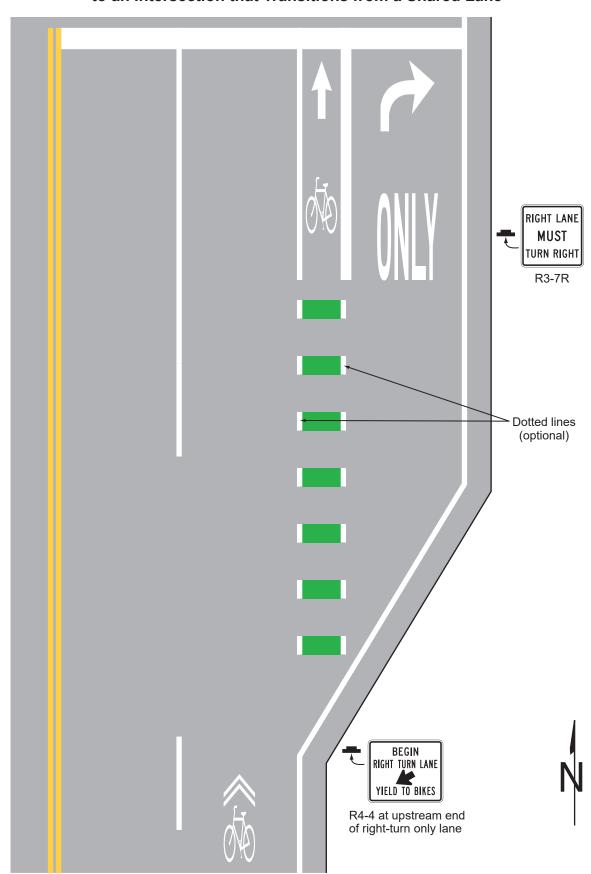
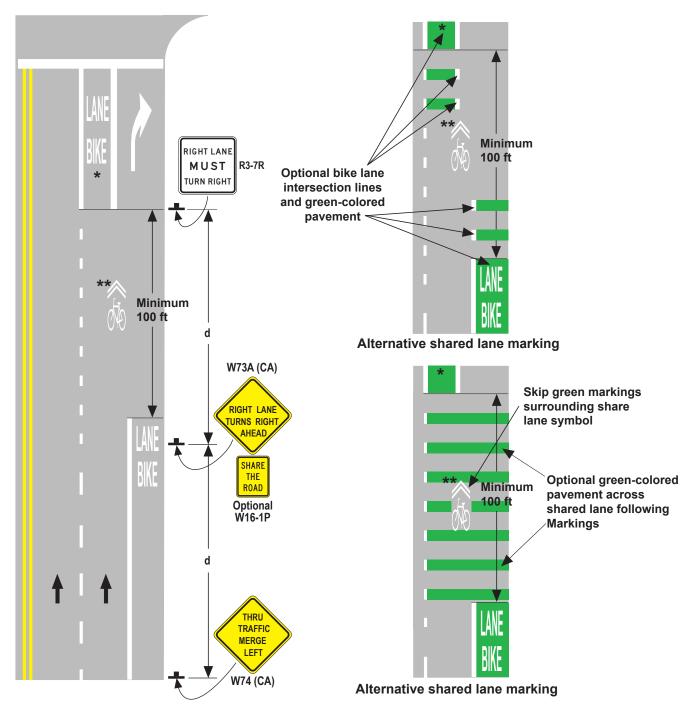


Figure 9E-4(CA). Example of Bicycle Lane Markings on an Approach to an Intersection that Transitions from a Shared Lane

Example of Shared Lane Marking While Approaching an Intersection



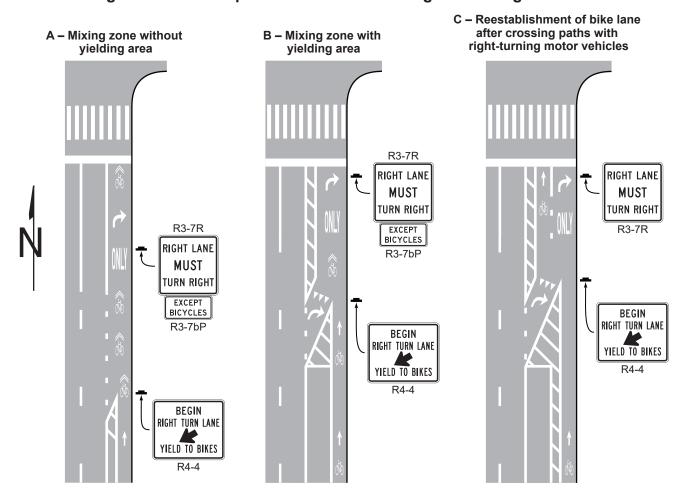
- * 4 ft minimum width, 6 ft minimum width for posted speed greater than 40 mph.
- The shared lane markings are appropriate to assist bicyclists with positioning, with or without a bicycle lane at the intersection. More than one shared lane marking may be placed.
 d = Advance Placement Distance (See Section 2C.05)

LEGEND

Direction of Travel

NOT TO SCALE

Figure 9E-5. Examples of Pavement Markings for Mixing Zones

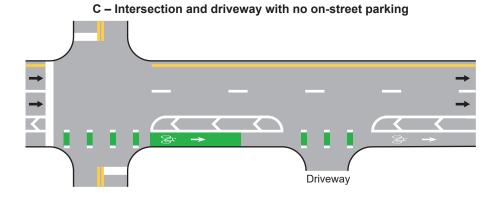


used to define it

Figure 9E-6. Examples of Markings for Buffer-Separated Bicycle Lanes

A – Buffer-separated bicycle lanes on a two-way street with no parking For a buffer space greater than 3 feet wide, chevron or diagonal markings shall be applied Normal width solid white line be at least three times the width of longitudinal lines Normal width of longitudinal lines Normal width solid white line be at least three times the width of longitudinal lines Normal width solid white line be at least three times the width of longitudinal lines Normal width solid white line be at least three times the width of longitudinal lines Normal width solid white line be at least three times the width of longitudinal lines Normal width solid white line be at least three times the width of longitudinal lines

within the space



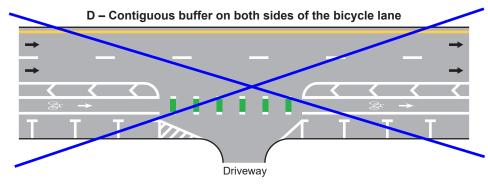
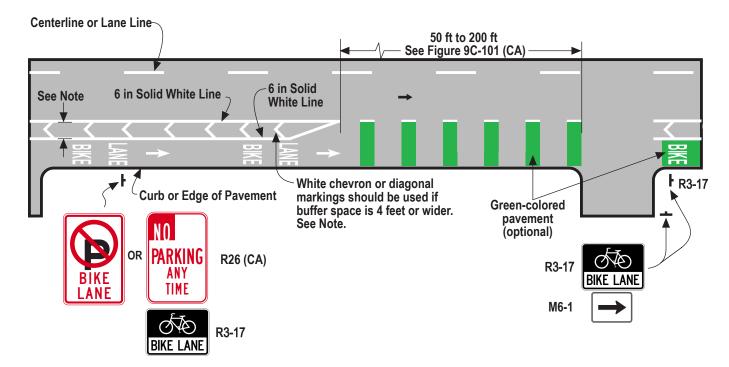
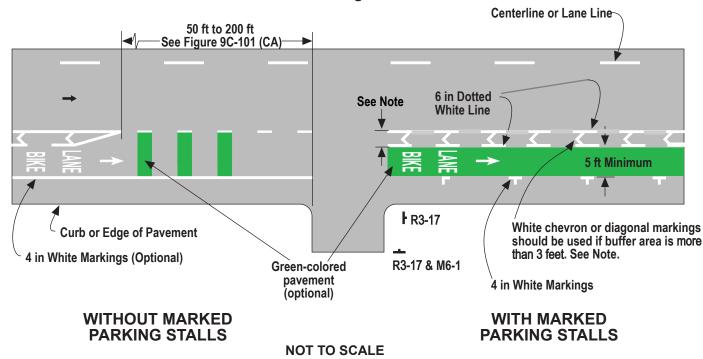


Figure 9E-6(CA). Examples of Markings for Buffer-Separated Bicycle Lanes (Sheet 1 of 2)

A. Buffer Between Bicycle Lane and General Purpose Lane Where Vehicle Parking is Prohibited



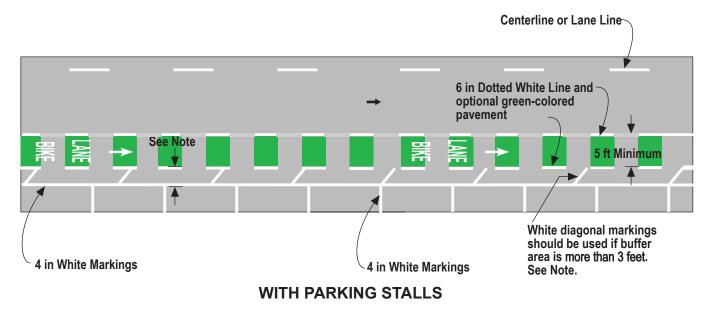
B. Buffer Between Bicycle Lane and General Purpose Lane Where Vehicle Parking is Permitted



NOTE: 18 in Minimum for Buffered Area Width. The Buffer Area Width includes the width of the parallel White Lines

Figure 9E-6(CA). Examples of Markings for Buffer-Separated Bicycle Lanes (Sheet 2 of 2)

C. Buffer Between Bicycle Lane and Parking Lane



NOT TO SCALE

NOTE: 18 in Minimum for Buffered Area Width. The Buffer Area Width includes the width of the parallel White Lines

D. Contiguous buffer on both sides of the bicycle lane

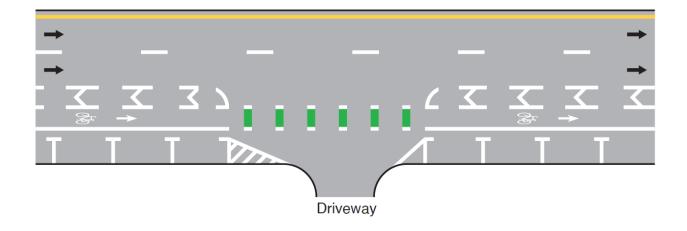


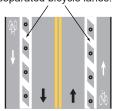
Figure 9E-7. Examples of Lane Markings for Separated Bicycle Lanes (Sheet 1 of 2)

A – One-way bicycle lanes on a two-way street

B – One-way bicycle lane on a one-way street behind on-street parking

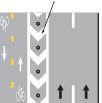
C – Two-way bicycle lane on a one-way street

Note: Diagonal or chevron markings shall be used if buffer width is 2 feet or greater for separated bicycle lanes.

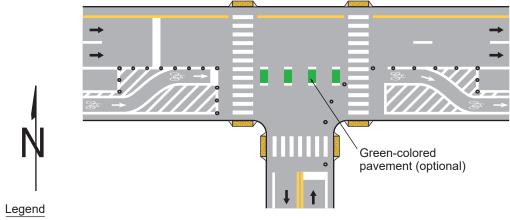


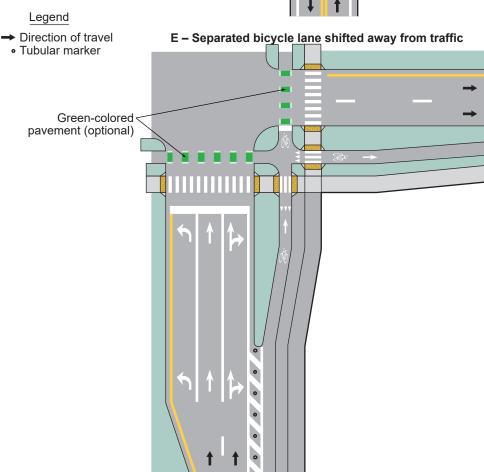


Note: Diagonal or chevron markings shall be used if buffer width is 2 feet or greater for separated bicycle lanes.



D - Separated bicycle lane shifted toward the adjacent general-purpose lane





Legend

Figure 9E-7. Examples of Lane Markings for Separated Bicycle Lanes (Sheet 2 of 2)

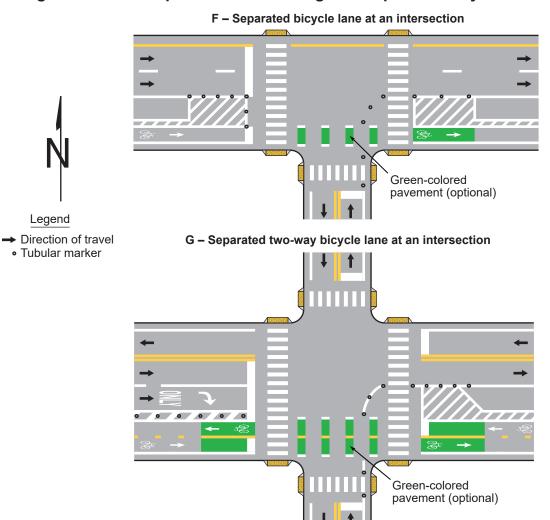


Figure 9E-8. Example of Counter-Flow Bicycle Lanes at an Intersection

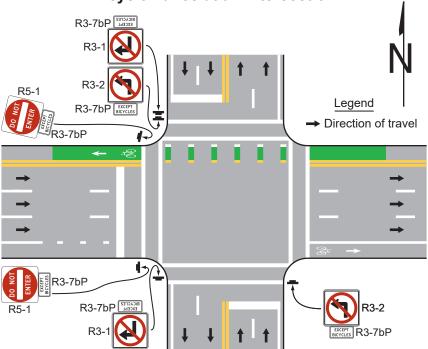


Figure 9E-8(CA). Example of Counter-Flow Bicycle Lanes (Sheet 1 of 2)

Alternative 1. Simple Lane Markings

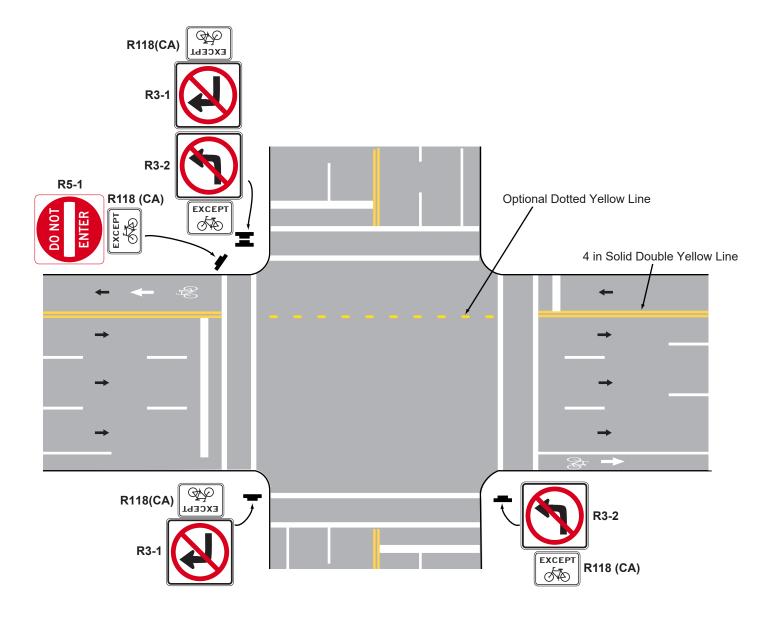


Figure 9E-8(CA). Example of Counter-Flow Bicycle Lanes (Sheet 2 of 2)

Alternative 2. With Optional Green-colored Pavement

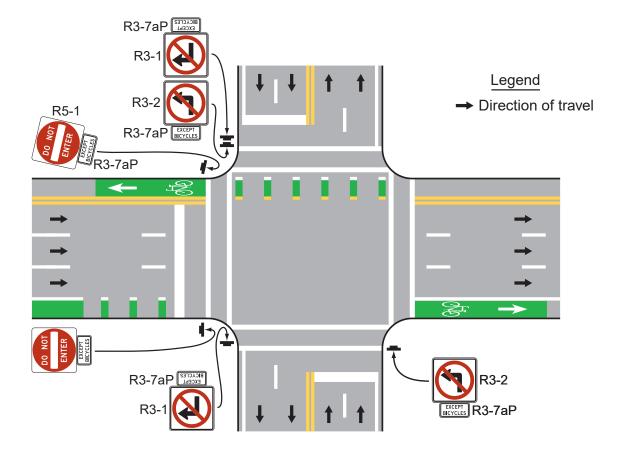
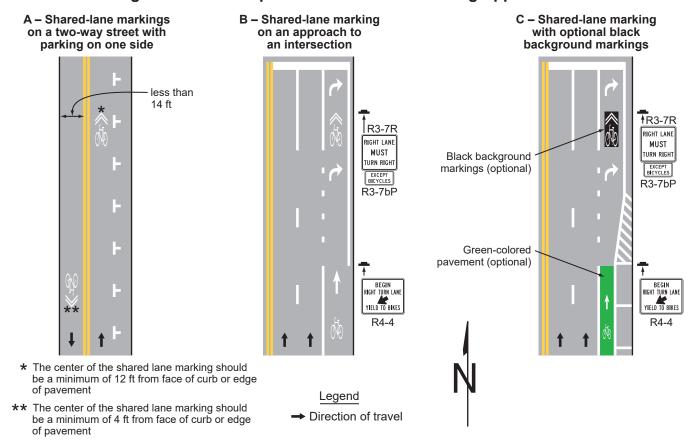


Figure 9E-9. Examples of Shared-Lane Marking Applications



Note: For shared-lane marking design details, see the Pavement Markings chapter of the Standard Highway Signs publication

Figure 9E-10. Examples of Two-Stage Turn Box Locations at Intersections

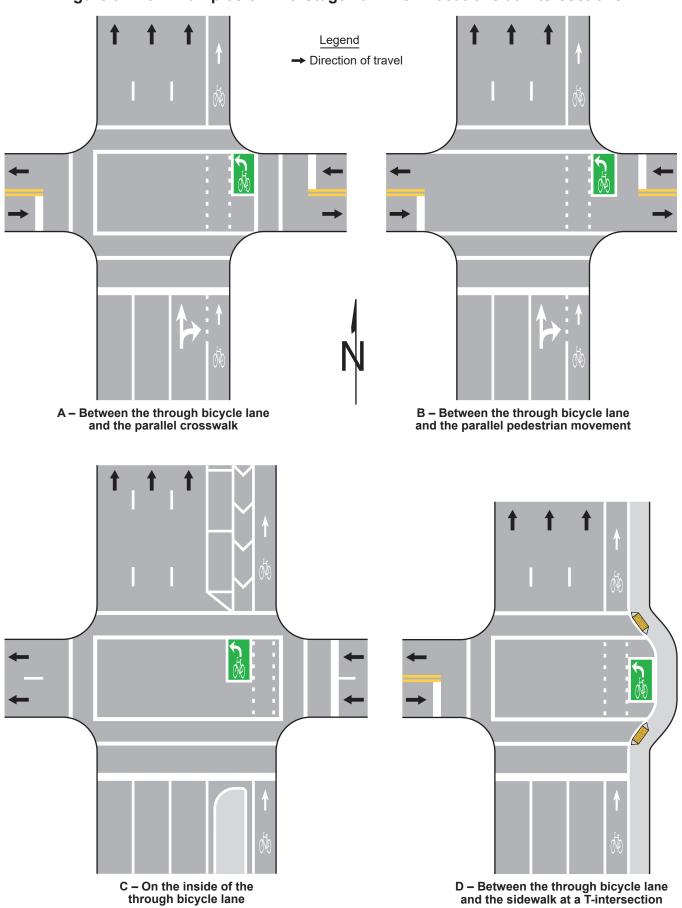


Figure 9E-11. Example of a Two-Stage Turn Box Location at an Intersection with a Two-Way Bikeway

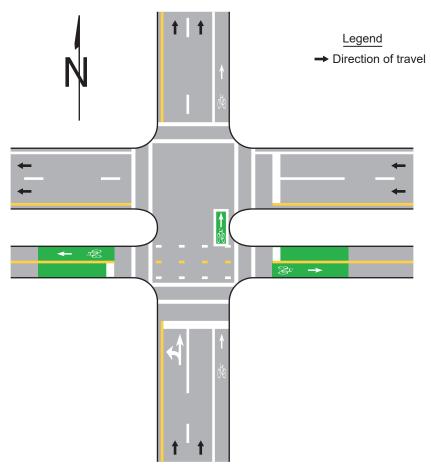


Figure 9E-12. Examples of Intersection Bicycle Boxes (Sheet 1 of 2)

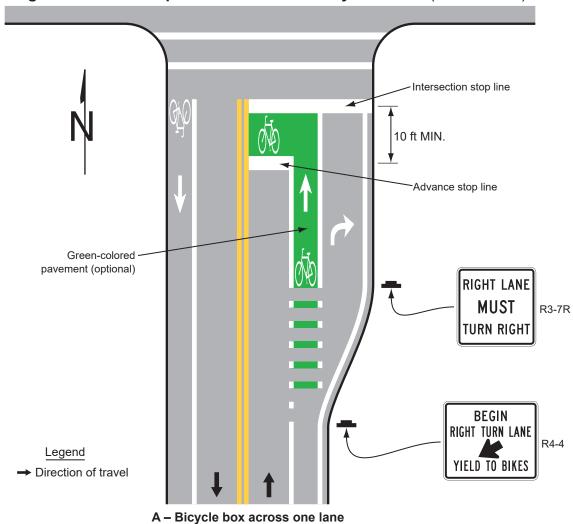


Figure 9E-12. Examples of Intersection Bicycle Boxes (Sheet 2 of 2) NO Green-colored **TURN** pavement (optional) R10-11* ON RED Pedestrian signal with countdown display 10 ft MIN. **STOP** (required where bicycle box crosses more than one lane) HERE R10-6a ON **RED EXCEPT** R3-7bP Legend BICYCLES → Direction of travel Note: Signs and pedestrian signals shown for northbound *Place in accordance with Section 2B.60 approach only B - Bicycle box across multiple lanes

Figure 9E-13. Examples of Center Line Markings for Shared-Use Paths

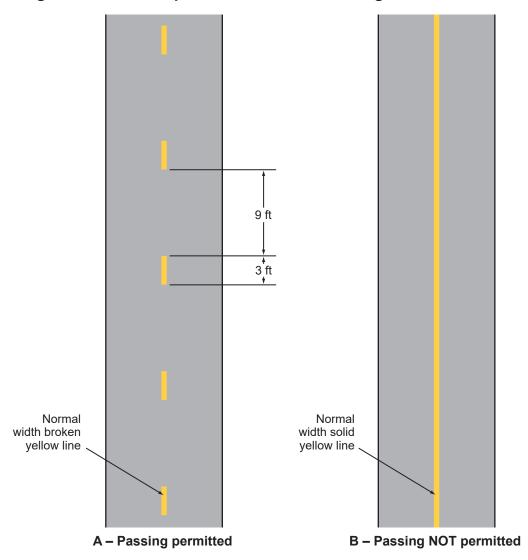


Figure 9E-14. Example of Pavement Markings for a Shared-Use Path with Mode Separation

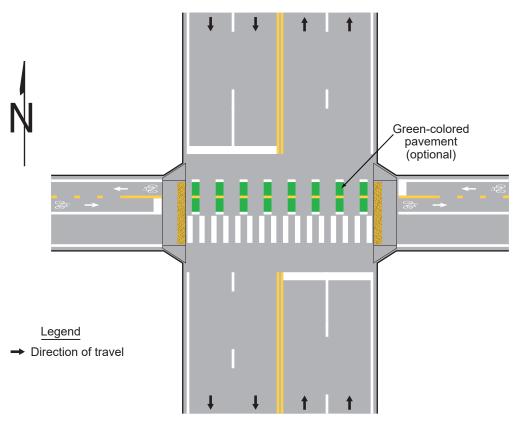


Figure 9E-15. Example of Placement of Route Markers for Shared-Use Paths

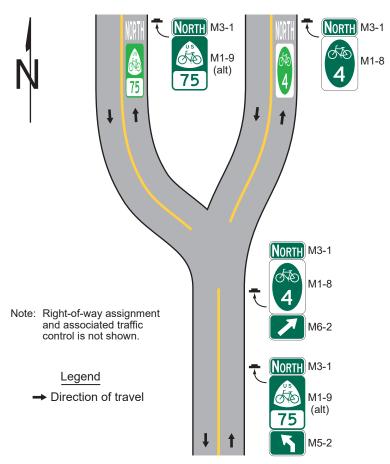
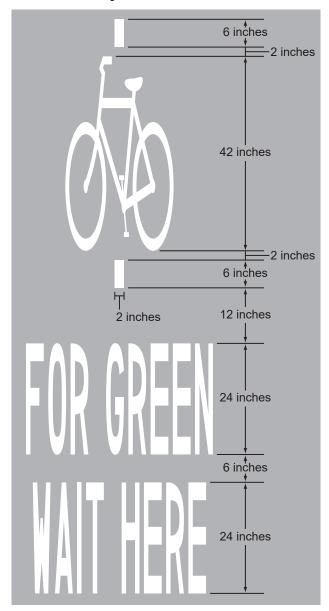
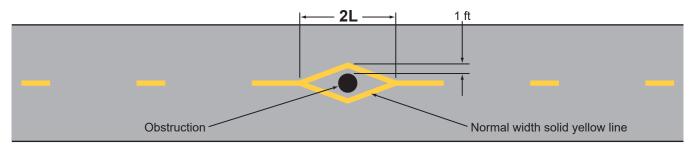


Figure 9E-16. Bicycle Detector Pavement Marking

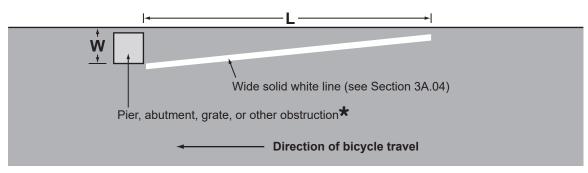


Note: The word pavement markings are optional.

Figure 9E-17. Examples of Obstruction Pavement Markings



A - Obstruction within the path



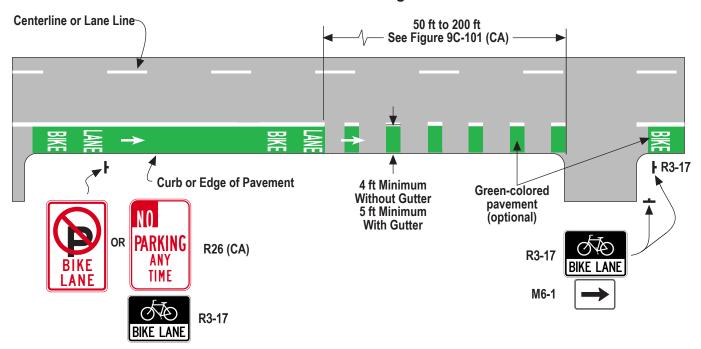
B - Obstruction at the edge of the path or roadway

L = WS, where W is the offset in feet and S is bicycle approach speed in mph

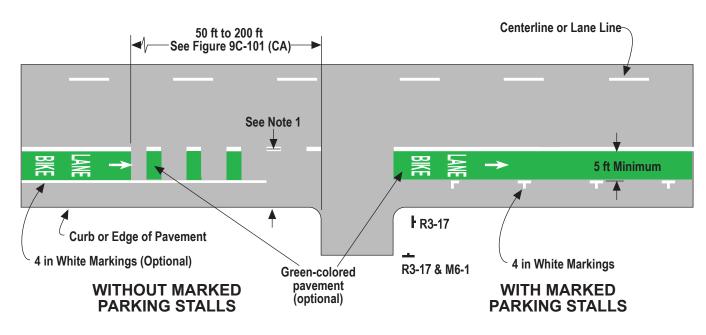
★ Provide an additional foot of offset for a raised obstruction and use the formula L = (W+1) S for the taper length

Figure 9E-101(CA). Examples of Bicycle Lane Treatment Where Vehicle Parking is Prohibited/ Permitted

A. Where Vehicle Parking is Prohibited



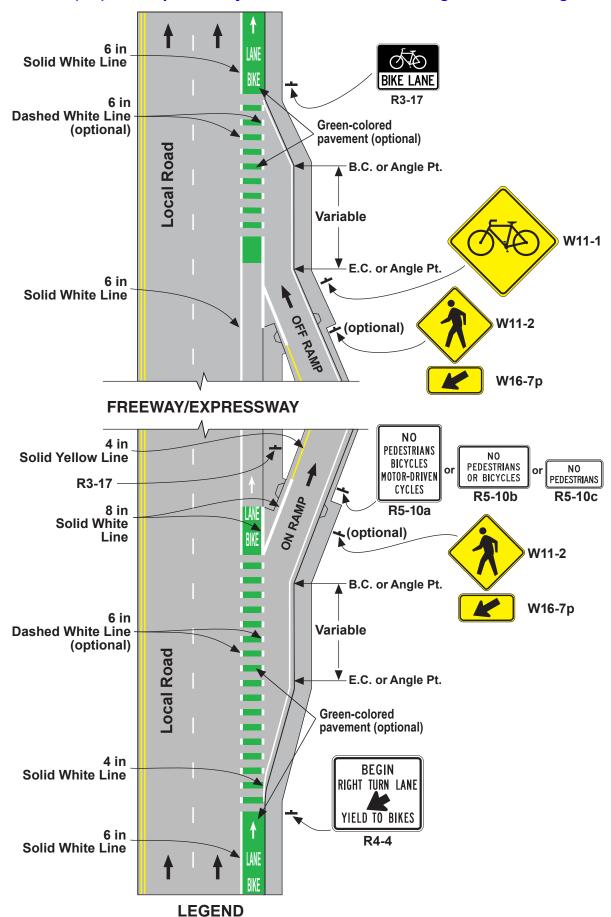
B. Where Vehicle Parking is Permitted



NOT TO SCALE

NOTE: 11 ft Minimum for Rolled Curb 12 ft Minimum for Vertical Curb

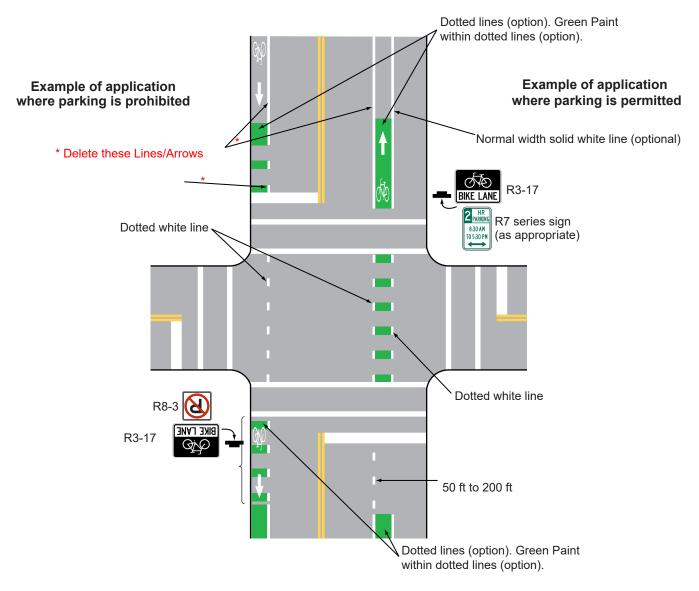
Figure 9E-102(CA). Example of Bicycle Lane Treatment Through an Interchange



NOT TO SCALE

Direction of Travel

Figure 9E-103(CA). Examples of Bicycle Lane Extensions Through Intersection



NOT TO SCALE

Figure 9E-104(CA). Example of Marking for a One-Lane Roundabout with Shared Lane Markings and Bicycle Lanes

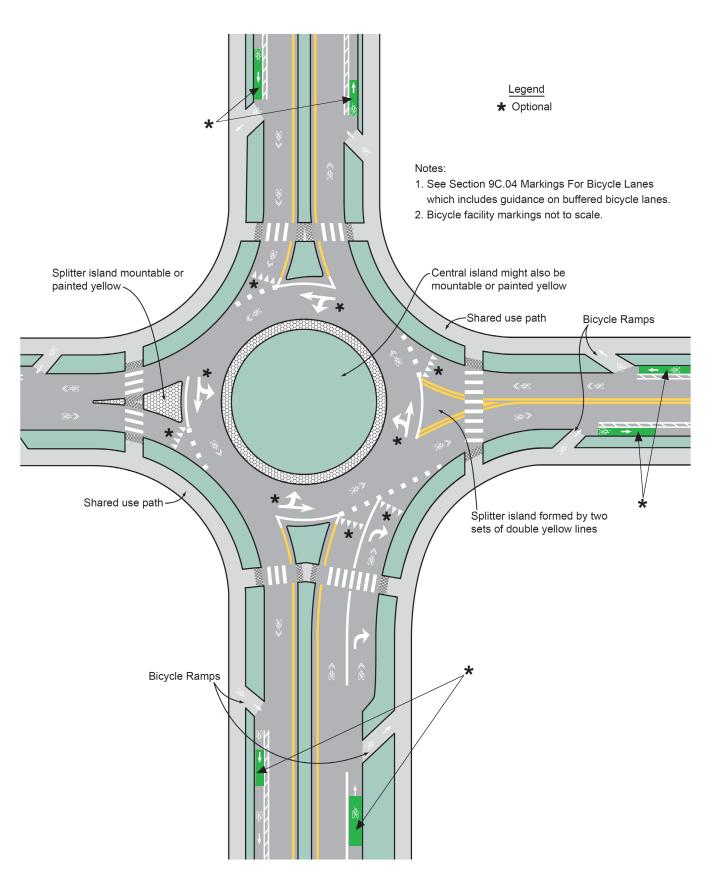
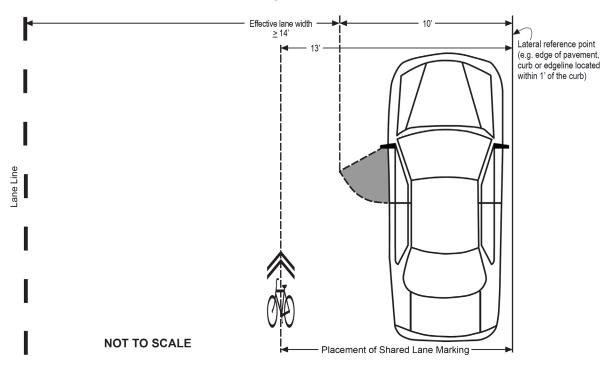
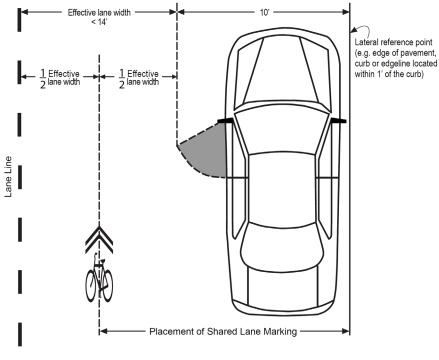


Figure 9E-106(CA). Example of Placement of Shared Lane Markings

A. Shared Lane Marking When Effective Lane Width ≥ 14'



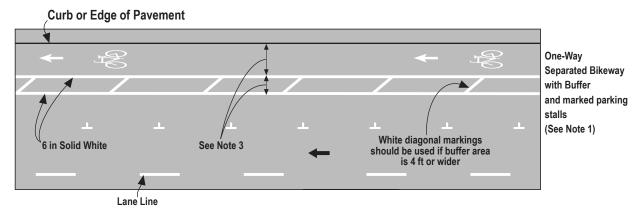
B. Shared Lane Marking When Effective Lane Width < 14'



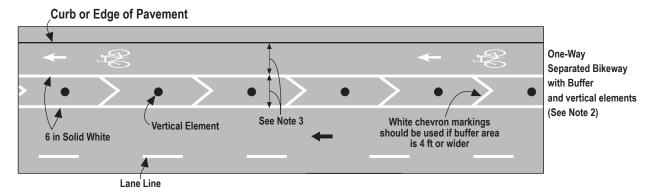
NOT TO SCALE

Figure 9E-106(CA). Examples of Markings for Separated Bikeways (Sheet 1 of 4)

A. One-Way Separated Bikeway With On-Street Parking



B. One-Way Separated Bikeway On Street With No Parking



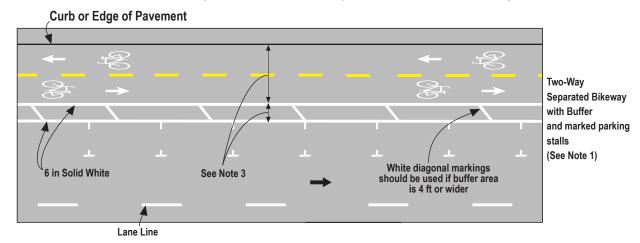
NOT TO SCALE

NOTES:

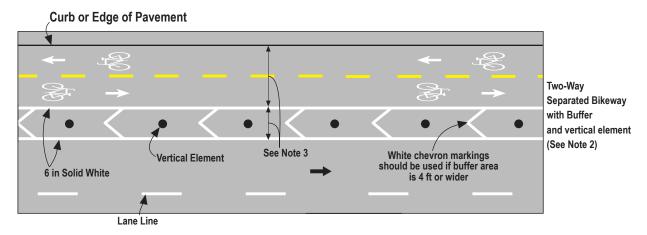
- 1. See Figure 3B-23 for examples of parking space markings.
- 2. Vertical elements in the buffer are an important separation feature of the Separated Bikeway. These may include grade separation, flexible posts, inflexible physical barriers, or on-street parking. See DIB 89 for more information.
- 3. See DIB 89 for separated bikeway width and buffer width.

Figure 9E-106(CA). Examples of Markings for Separated Bikeways (Sheet 2 of 4)

C. Two-Way Separated Bikeway With On-Street Parking



D. Two-Way Separated Bikeway With No Parking

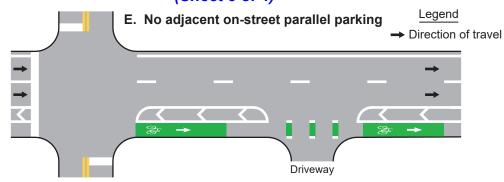


NOT TO SCALE

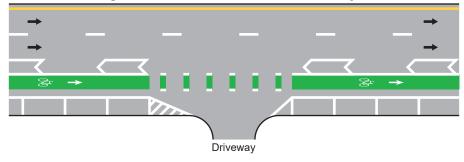
NOTES:

- 1. See Figure 3B-23 for examples of parking space markings.
- 2. Vertical elements in the buffer are an important separation feature of the Separated Bikeway. These may include grade separation, flexible posts, inflexible physical barriers, or on-street parking. See DIB 89 for more information.
- 3. See DIB 89 for separated bikeway width and buffer width.

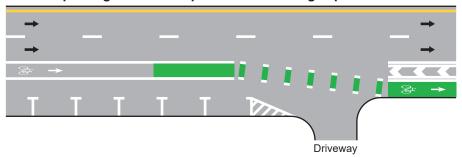
Figure 9E-106(CA). Examples of Markings for Separated Bikeways (Sheet 3 of 4)



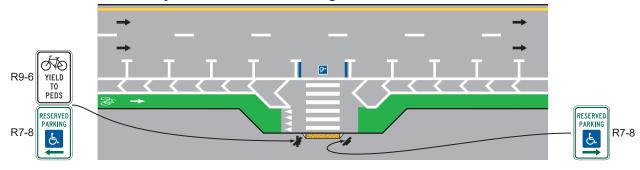
F. Contiguous Buffer on Both Sides of the Bicycle Lane



G. Transition of a buffer space between a bicycle lane and on-street parking to a buffer space where crosing is prohibited



H. Adjacent to Reserved Parking for Persons with Disabilities



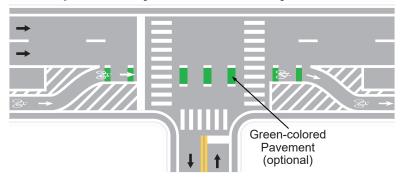
- NOTES: 1. See Figure 3B-23 for examples of parking space markings.
 - 2. Vertical elements in the buffer are an important separation feature of the Separated Bikeway. These may include grade separation, flexible posts, inflexible physical barriers, or on-street parking. See DIB 89 for more information.
 - 3. See DIB 89 for separated bikeway width and buffer width.

(DRAFT - For review purposes only)

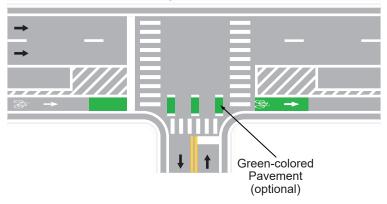
- 4. Optional green-colored pavement shown.

Figure 9E-106(CA). Examples of Markings for Separated Bikeways (Sheet 4 of 4)

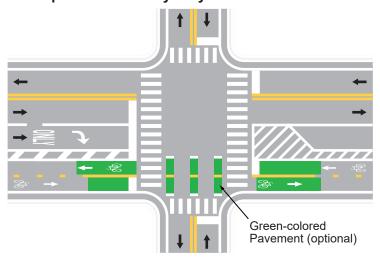
I. Separated Bicycle Lane Shift Away from Curb



J. Separated Bicycle Lane at Intersection



K. Separated Two-Way Bicycle Lane at Intersection



NOTES:

- 1. See Figure 3B-23 for examples of parking space markings.
- 2. Vertical elements in the buffer are an important separation feature of the Separated Bikeway. These may include grade separation, flexible posts, inflexible physical barriers, or on-street parking. See DIB 89 for more information.
- 3. See DIB 89 for separated bikeway width and buffer width.

Figure 9E-107(CA). Example of Intersection Pavement Markings and Signs— Bicycle Traveling Straight From Left Turn and Right Turn Only Lanes - One Way

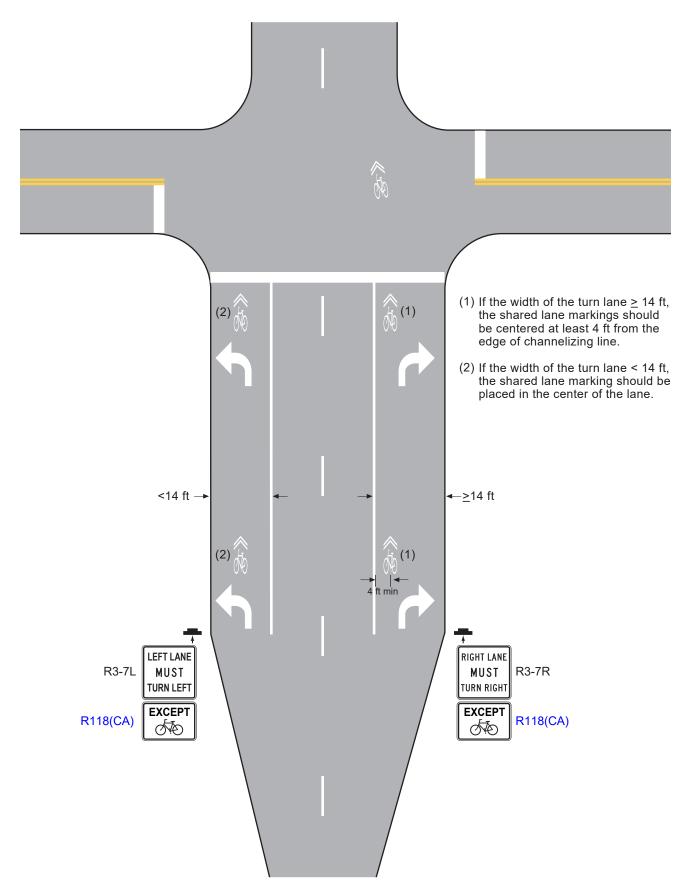


Figure 9E-108(CA). Example of Intersection Pavement Markings and Signs— Bicycle Traveling Straight From Right Turn Only Lanes

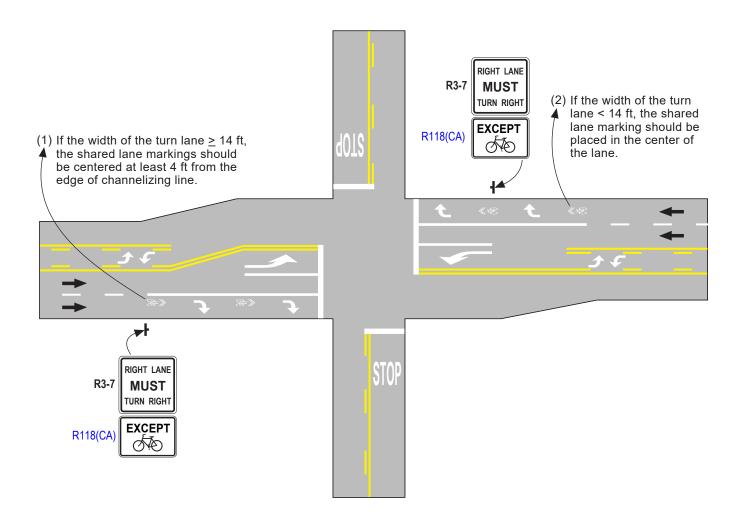


Figure 9E-109(CA). Examples of Optional Green-Colored Pavement Applications

