

CHAPTER 2E. GUIDE SIGNS – FREEWAYS AND EXPRESSWAYS

Section 2E.08 Memorial Highway Signing

Standard:

Paragraph 1 (“Freeways and expressways...”) and Paragraph 2 (“If the installation...”) are deleted and shall not be applicable in California.

The following is added to this section:

Support:

Section 2D.49 also applies to freeways and expressways.

Section 2E.11 Pull-Through Signs

The following is added to this section:

Support:

See Figures 2E-27 (CA), 2E-28 (CA) and 2E-30 (CA) through 2E-33 (CA) for typical freeway signing and use of the Pull-Through (CA Code G24 Series) signs.

Section 2E.12 Designation of Destinations

The following is added to this section:

Guidance:

Each Department of Transportation District should determine its list of control cities in cooperation with adjacent districts and states to achieve continuity of signing for through traffic on State highways. Any given route should have the same control cities (in both directions of travel).

Section 2E.13 Size and Style of Letters and Signs

The following is added to this section:

Standard:

All capital letters shall be Standard Alphabet Series D 2000.

Support:

Standard Alphabets for traffic control devices are contained in FHWA’s “Standard Highway Signs” book. See Section 1A.11 for information regarding this publication.

Sections 2D.04, 2D.05 and 2D.06 also apply to freeways and expressways.

Section 2E.15 Sign Borders

The following is added to this section:

Support:

Sign border details are contained in FHWA’s “Standard Highway Signs” book and Department of Transportation’s “Traffic Sign Specifications”. See Section 1A.11 for information regarding these publications.

Section 2E.19 Diagrammatic Signs

The following is added to this section:

Support:

Refer to Section 3B.05 for lane drop markings.

Section 2E.20 Signing for Interchange Lane Drops

Guidance:

In Paragraph 3 (“The Exit Direction...”) first sentence, the word “shall” is changed to “should”. Separate Exit Only or Only (CA Code W61 Series) panels should be used instead of making these panels part of the sign face at the bottom as shown in Figures 2E-8 and 2E-10.

The following is added to this section:

Standard:

The Exit Only panels (CA Code W61A, B, C, D, E and H) shall be used on overhead directional signs to identify lane/lanes that enter or exit a freeway.

The Only panels (CA Code W61F, G and H) shall be used on overhead directional signs to identify lane/lanes that become a freeway to freeway connector.

Support:

Typical examples are shown in Figures 3B-8 (CA) and 3B-10 (CA).

Section 2E.21 Changeable Message Signs

The following is added to this section:

Department of Transportation's Policy regarding the use of CMS signs for child abduction (AMBER) alert messages on State Highways

Support:

A primary mission of Department of Transportation is the safe and orderly movement of traffic. It is the policy of Department of Transportation to display only real-time information that conveys current traffic safety and congestion information on highway Changeable Message Signs (CMS).

Standard:

An exception to Department of Transportation policy on the use of CMS signs shall be made only for AMBER Alerts. Only credible real-time information, where it is crucial to the safety of the victim to disseminate the information to the public in the near term, shall be displayed on these CMS signs.

Support:

Law enforcement activates an Amber Alert when circumstances meets the following criteria: the missing child is of a pre-determined age; the law enforcement agency believes the child has been kidnapped; the agency believes the missing child is under threat of serious bodily harm or death.

Standard:

The California Highway Patrol (CHP) shall consult with the investigating agency prior to requesting any CMS sign activation. The Department of Transportation shall only respond to AMBER alert requests from the CHP. The Department of Transportation's District Traffic Management Center (TMC) staff and local CHP staff shall jointly agree upon the most appropriate CMS sign message content(s). The TMC staff shall also consult with CHP staff regarding the length of time to display messages (initially 2-3 hours), and extent of roadway system to display the messages (i.e. radius and/or directions and specific routes).

Guidance:

TMC personnel should discuss with the requester the limitations on message content, the number of signs that can be deployed within a given time period, conflicts with other necessary sign messages etc.

Support:

There is a concern that messages that are too general in describing vehicles might result in inappropriate vigilantism. The preferred response is to display a radio frequency (thus referring the public elsewhere for details) - Department of Transportation's Highway Advisory Radios (HAR) or appropriate commercial radio. Alternatively, a license plate number (or partial number) might be displayed along with a vehicle description. The display of any contact phone number is discouraged.

Nothing in this policy suggests a requirement to pre-empt true motorists safety messages, e.g. unexpected "end of queue" motorist alerts, severe weather advisories (fog, smoke), road closure and detour information etc.

Option:

It may be necessary to turn off an AMBER alert sign that creates a traffic hazard.

Support:

This policy primarily applies to the use of permanently installed overhead CMS signs. Should the use of mobile CMS signs be necessary and appropriate at a specific location(s); Department of Transportation can expect CHP assistance with mobile sign deployment as needed.

Guidance:

The TMCs should notify the Department of Transportation's HQ Communications Center when responding to an AMBER alert request. The TMCs should monitor and save traffic data in order to determine if unintended consequences of displaying such a message occurred on the highway.

Standard:

A joint debriefing of Department of Transportation and CHP personnel shall follow every event. In all cases, messages shall maintain the credibility of the CMS system.

Section 2E.23 Lateral Offset**Guidance:**

In Paragraph 2 ("Where practical..."), the phrase "3 m (10 ft)" is changed to "3.7 m (12 ft)".

The following is added to this section:

Support:

Also refer to Section 2A.19 for more information on this topic.

Section 2E.27 Interchange Guide Signs**Guidance:**

In Paragraph 1 ("The signs at...") first sentence, the word "shall" is changed to "should".

The following is added to this section:

Support:

Also refer to Section 2D.29.

Guidance:

The exits should be identified on signs by street names and/or route markers.

Community names should not be included on street name exit signs. If the interchange provides more than one exit to the street, cardinal directions should be included on the sign.

Option:

The Destination and Street Name with Arrow (CA Code G8 Series) signs may be used in freeway interchange areas.

Support:

Typical use of the G8 Series (CA Code) signs in freeway interchange areas is shown in Figures 2E-27 (CA), 2E-28 (CA) and 2E-30 (CA) through 2E-33 (CA) for typical freeway signing.

Section 2E.28 Interchange Exit Numbering**Standard:**

In California, interchange exit numbering shall be reference post numbering as opposed to consecutive numbering mentioned in Paragraph 3 ("There are two...").

The following is added to this section:

Standard:

The Department of Transportation shall utilize mileage based interchange exit numbering to identify the location of each interchange exit on the California Freeway System. The following web site shall provide the statewide listing of freeway exit numbers indexed by route and direction:

<http://www.dot.ca.gov/hq/traffops/signtech/calnexus/index.htm>

The placement and location of interchange exit numbering on State highways shall conform to the database maintained by Department of Transportation's Division of Traffic Operations for reference posts. This database is different from the TASAS Highway database.

Interchange numbering shall be used in signing each freeway interchange exit. Each freeway interchange exit shall include a minimum of two numbered exit signs:

- 1. One Advance Guide (CA Code G83 Series) sign with exit number.**
- 2. One Exit Gore (E5-1 or CA Codes G84-2 or G84-3) sign with exit number and arrow or, if not available, an exit number shall be installed on an adjacent Exit Direction (CA Code G85-10 or G85-11) sign at the gore.**

To the extent practical, interchange exit numbers shall be displayed with each Advance Guide sign, Exit Direction sign, and Gore sign on freeways.

Exit numbers shall not include the cardinal initials corresponding to the directions of the cross route.

Guidance:

The exit number signs should take advantage of existing roadside and overhead signs. Where possible, add-on plaques or panels should be used. In areas where maximum wind loads or existing legends do not permit placement of an add-on plaque or panel, a new sign should be installed.

Support:

For new sign installations or if the existing sign is due for replacement, consider ordering a new sign with the exit number included as part of the sign.

Standard:

Rest areas, vista points, weigh stations, HOV facility exits or HOV to HOV system connector ramps are not considered interchange exits and shall not be signed with exit numbers.

Support:

Where one or more lanes of traffic diverge from the main line at a single exit, the exit is numbered and signed at the main line diverge as one exit. Generally, there is adequate information displayed on guide signs downstream of the main line diverge to direct a road user to the desired destination, route or street.

Option:

A multiple exit number add-on sign (such as E1-5 with message EXITS 33 A-B in Figure 2E-15) may be placed at the mainline diverge.

Guidance:

The multiple exit number add-on sign should only be placed when further clarification is needed to guide road users to the desired destination.

Standard:

If multiple exit number add-on sign is used, exit numbers with the appropriate suffix letters shall be placed on guide signs downstream of the mainline diverge.

Support:

Exit numbers are not required for exits from auxiliary lanes, connectors or collector-distributors.

Option:

The single line EXIT XX panel (CA Code G70-2) may be attached to an existing Advance Guide sign, Exit Direction sign, or Supplemental Guide sign that identifies an interchange that has been assigned a one or two digit exit number/suffix.

The single line EXIT XXXX panel (CA Code G70-3) may be attached to an existing Advance Guide sign, Exit Direction sign, or Supplemental Guide sign that identifies an interchange that has been assigned a three or four digit exit number/suffix.

The two line EXIT XX panel (CA Code G70-4) may be used as an alternate to the single line EXIT XX panel (G70-2) when an existing sign cannot accommodate the single line format. It may be attached to an existing Advance Guide sign, Exit Direction sign, or Supplemental Guide sign that identifies an interchange that has been assigned a one or two digit exit number/suffix.

The two line EXIT XXXX panel (G70-5) may be used as an alternate to the single line EXIT XXXX panel (G70-3) when an existing sign cannot accommodate the single line format. It may be attached to an

existing Advance Guide sign, Exit Direction sign, or Supplemental Guide sign that identifies an interchange that has been assigned a three or four digit exit number/suffix.

Guidance:

The EXIT panels (CA Codes G70-2, G70-3, G70-4 and G70-5) should be located toward the top left edge of the sign for a left exit and toward the top right edge for right exits.

Option:

The Exit Numbered Advance Guide (CA Code G83-4) sign with separate borders may be used for new sign installations or as an alternate to retrofitting an existing Advance Guide sign when the existing Advance Guide sign cannot accommodate an add-on plaque or panel.

The Exit Numbered Advance Guide (CA Code G83-5) sign with a single border may be used as an alternate to the G83-4 (CA Code) when the sign message requires additional space on the sign.

Standard:

If used, the G83-4 and G83-5 (CA Codes) signs shall be placed on freeways to give motorists advance notice of the exit point to the principal destination served by the next interchange that has been assigned an exit number/suffix, and the distance to that interchange.

The Exit Gore (E5-1) sign shall be used at exit ramp gores from expressways, from freeway to freeway connectors, and from collector distributors to identify the exiting point.

The EXIT XX with Arrow Gore (CA Code G84-2) sign shall be used at exit ramp gores on freeways to identify the exiting point at an interchange that has been assigned a one or two digit exit number/suffix.

The EXIT XXXX with Arrow Gore (CA Code G84-3) sign shall be used at exit ramp gores on freeways to identify the exiting point at an interchange that has been assigned a three or four digit exit number/suffix.

Guidance:

On the Exit Gore (E5-1 and CA Codes G84-2 and G84-3) signs, the arrow should be aligned to approximate the angle of departure.

Standard:

The Exit Gore (E5-1 and CA Codes G84-2 and G84-3) signs shall be placed in the area between the main roadway and the exit ramp.

Option:

The Exit Numbered Exit Direction (CA Code G85-10) sign with separate borders may be used for new sign installations or as an alternate to retrofitting an existing Exit Direction sign when the existing Exit Direction sign cannot accommodate an add-on plaque or panel.

The Exit Numbered Exit Direction (CA Code G85-11) sign with a single border may be used as an alternate to the G85-10 (CA Code) sign when the sign message requires additional space on the sign.

Standard:

If used, the G85-10 and G85-11 (CA Codes) signs shall be placed on freeways to direct motorists to the exit ramp of an interchange that has been assigned an exit number/suffix.

Guidance:

The G85-10 and G85-11 (CA Codes) signs should be placed in the area at the beginning of the deceleration lane of the exit ramp.

Option:

The Exit Numbered Supplemental Guide (CA Code G86-12) sign with separate borders may be used for new sign installations or as an alternate to retrofitting an existing Supplemental Guide sign (CA Code G86 Series) when the existing Supplemental Guide sign cannot accommodate an add-on plaque or panel.

The Exit Numbered Supplemental Guide (CA Code G86-13) sign with a single border may be used as an alternate to the G86-12 (CA Code) sign when the sign message requires additional space on the sign.

The G86-12 and G86-13 (CA Codes) signs may be placed on freeways to give motorists advance notice of the exit point to the principal destination served by the next interchange that has been assigned an exit number/suffix.

Section 2E.30 Advance Guide Signs

Standard:

In Paragraph 4 (“When used...”) the second sentence (“The legend on...”), third sentence (“If the interchange...”) and Paragraph 5 (“Where interchange...”) first sentence are deleted. Use the following instead:

Where the distance between interchanges is less than 3.2 km (2 mi), the Advance Guide (CA Code G83 Series) sign shall be placed at the first available location with the mileage adjusted to the nearest 0.4 km (1/4 mi). The word EXIT (with distance) on the bottom line shall be used if the sign is the advance notice for an interchange with distance destinations.

Guidance:

In all other cases, the word EXIT should be omitted.

For major and intermediate interchanges (see Section 2E.29), two and preferably three Advance Guide signs should be used. At minor interchanges, only one Advance Guide sign should be used.

If only one Advance Guide sign is used, it should be placed 1.6 km (1 mi) in advance of the exit.

If two Advance Guide signs are used, they should be placed 1.6 km (1 mi) and 3.2 km (2 mi) in advance of the exit.

If three Advance Guide signs are used, they should be placed 0.8 km (0.5 mi), 1.6 km (1 mi) and 3.2 km (2 mi) in advance of the exit.

Support:

See Figures 2E-27 (CA), 2E-28 (CA) and 2E-30 (CA) through 2E-33 (CA) for typical freeway signing.

Section 2E.32 Other Supplemental Guide Signs

The following is added to this section:

Support:

Section 2D.34 also applies to freeways and expressways.

Refer to Section 2D.41 for Park & Ride signs.

Option:

The Supplemental Destination (CA Code G86 Series) signs may be omitted at low traffic volume interchanges or at major interchanges that are spaced 0.8 km (0.5 mi) or less apart. They may also be omitted where interchanges are 1.6 km (1 mi) or less apart and Interchange Sequence (CA Code G23 Series) signs are used.

Section 2E.33 Exit Direction Signs

The following is added to this section:

Support:

See Figures 2E-27 (CA), 2E-28 (CA) and 2E-30 (CA) through 2E-33 (CA) for typical freeway signing.

Figure 2E-21. Exit Gore Signs

Standard:

The E5-2 sign shall not be used in California. See Section 2E.28.

Section 2E.36 Distance Signs

Standard:

In Paragraph 1 (“If used...”) second sentence (“The top line...”), the phrase “near or” is deleted.

The following is added to this section:

Guidance:

The Distance (CA Code G5 Series) signs should be placed at approximate 16 km (10 mi) intervals, unless the destinations have changed.

Section 2E.37 Interchange Sequence Signs

Standard:

The last Paragraph (“Interchange numbers...”) in this section is deleted. See Section 2E.28.

The following is added to this section:

Support:

See Figures 2E-27 (CA), 2E-28 (CA) and 2E-30 (CA) through 2E-33 (CA) for typical freeway signing.

Standard:

If a destination name is used, it shall be followed by the word EXIT (for instance, SACRAMENTO EXIT).

Option:

When two exit names are required at an interchange with a cross street named differently on opposite sides of a freeway, both names may be shown with a single distance; and, four messages may be used on the sign at these locations.

The Interchange Sequence (CA Code G23 Series) signs may include four lines where two exit names are required for a single interchange.

Section 2E.38 Community Interchanges Identification Signs

Standard:

This section is deleted. Use Interchange Sequence (Section 2E.37 and Figure 2E-24) and NEXT X EXITS (Section 2E.39 and Figure 2E-26) signs, instead.

Figure 2E-25. Community Interchanges Identification Sign

Standard:

This sign is deleted and shall not be used in California. See Section 2E.38.

Section 2E.40 Signing by Type of Interchange

Standard:

MUTCD Figures 2E-27 through 2E-38 are deleted and replaced with Figures 2E-27 (CA), 2E-28 (CA) and 2E-30 (CA) through 2E-33 (CA).

Figure 2E-27. Examples of Freeway-to-Freeway Interchange Guide Signs

Standard:

MUTCD Figure 2E-27 is deleted and replaced with Figure 2E-27 (CA).

Figure 2E-28. Examples of Guide Signs for Full Cloverleaf Interchange

Standard:

MUTCD Figure 2E-28 is deleted and replaced with Figure 2E-28 (CA).

Figure 2E-29. Examples of Guide Signs for Full Cloverleaf Interchange With Collector-Distributor Roadways

Standard:

MUTCD Figure 2E-29 is deleted. Contact Department of Transportation’s Division of Traffic Operations for further guidance regarding this figure.

Figure 2E-30. Examples of Partial Cloverleaf Interchange Guide Signs**Standard:**

MUTCD Figure 2E-30 is deleted and replaced with Figure 2E-30 (CA).

Figure 2E-31. Examples of Diamond Interchange Guide Signs**Standard:**

MUTCD Figure 2E-31 is deleted and replaced with Figure 2E-31 (CA).

Figure 2E-32. Examples of Diamond Interchange Guide Signs in an Urban Area**Standard:**

MUTCD Figure 2E-32 is deleted and replaced with Figure 2E-32 (CA).

Section 2E.43 Cloverleaf Interchange with Collector-Distributor Roadways**Standard:**

The last Paragraph (“Exits from the...”) is deleted. Refer to Sections 2E.28 and 2E.30. It is replaced with the following:

Option:

The Advance Guide signs may include two place names and their corresponding exit numbers.

Figure 2E-33. Examples of Minor Interchange Guide Signs**Standard:**

MUTCD Figure 2E-33 is deleted and replaced with Figure 2E-33 (CA).

Figure 2E-34. Example of Crossroad Signing for One-Lane Approach**Standard:**

MUTCD Figure 2E-34 is deleted. Contact Department of Transportation’s Division of Traffic Operations for further guidance regarding this figure.

Figure 2E-35. Example of Minor Interchange Crossroad Signing**Standard:**

MUTCD Figure 2E-35 is deleted. Contact Department of Transportation’s Division of Traffic Operations for further guidance regarding this figure.

Figure 2E-36. Examples of Multi-lane Crossroad Signing for Diamond Interchange**Standard:**

MUTCD Figure 2E-36 is deleted. Contact Department of Transportation’s Division of Traffic Operations for further guidance regarding this figure.

Figure 2E-37. Examples of Multi-lane Crossroad Signing for Partial Cloverleaf Interchange**Standard:**

MUTCD Figure 2E-37 is deleted. Contact Department of Transportation’s Division of Traffic Operations for further guidance regarding this figure.

Figure 2E-38. Examples of Multi-lane Crossroad Signing for Cloverleaf Interchange**Standard:**

MUTCD Figure 2E-38 is deleted. Contact Department of Transportation’s Division of Traffic Operations for further guidance regarding this figure.

Figure 2E-28 (CA). Examples of Guide Signs for Full Cloverleaf Interchanges

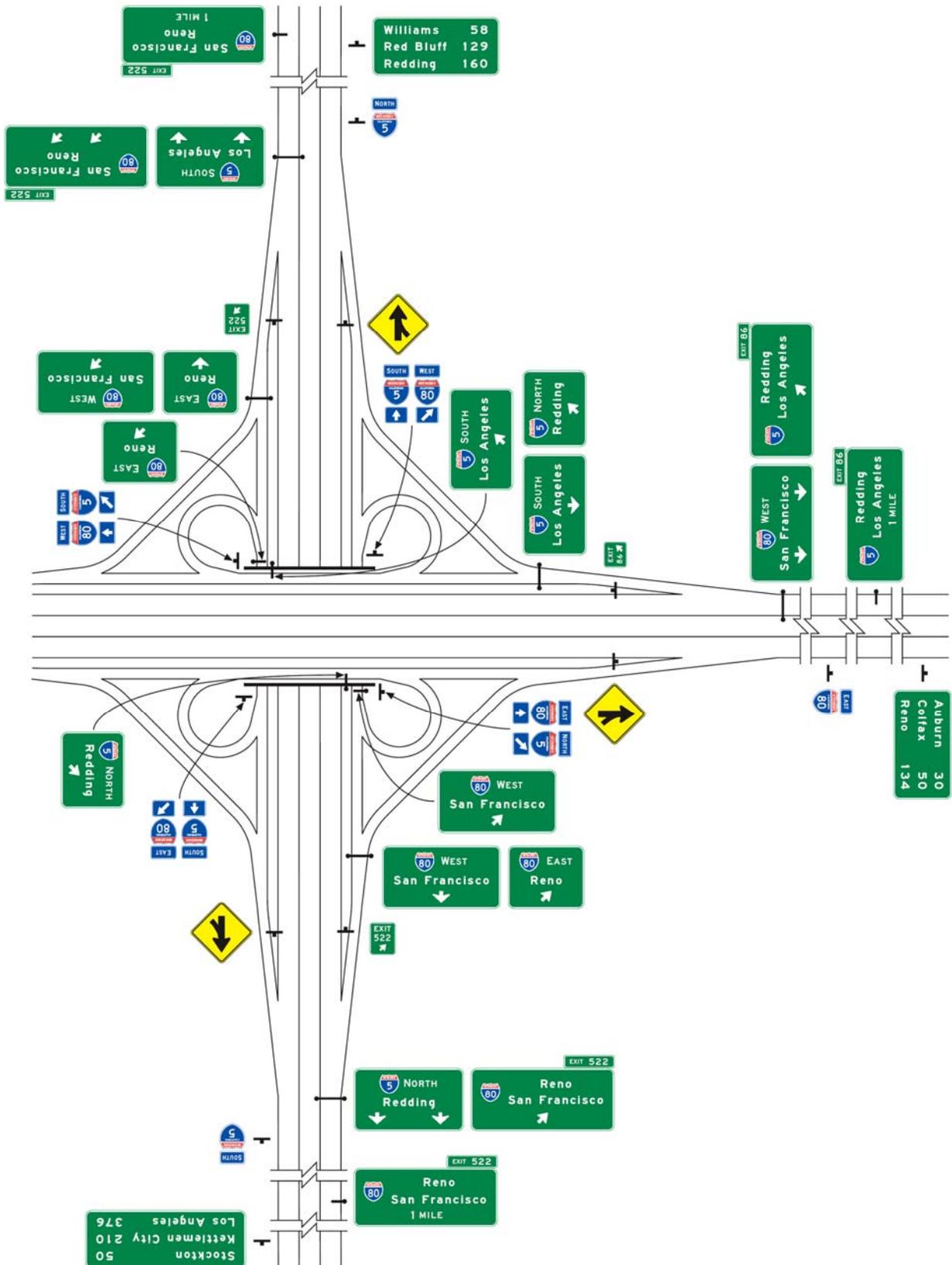


Figure 2E-30 (CA). Examples of Partial Cloverleaf Interchange Guide Signs

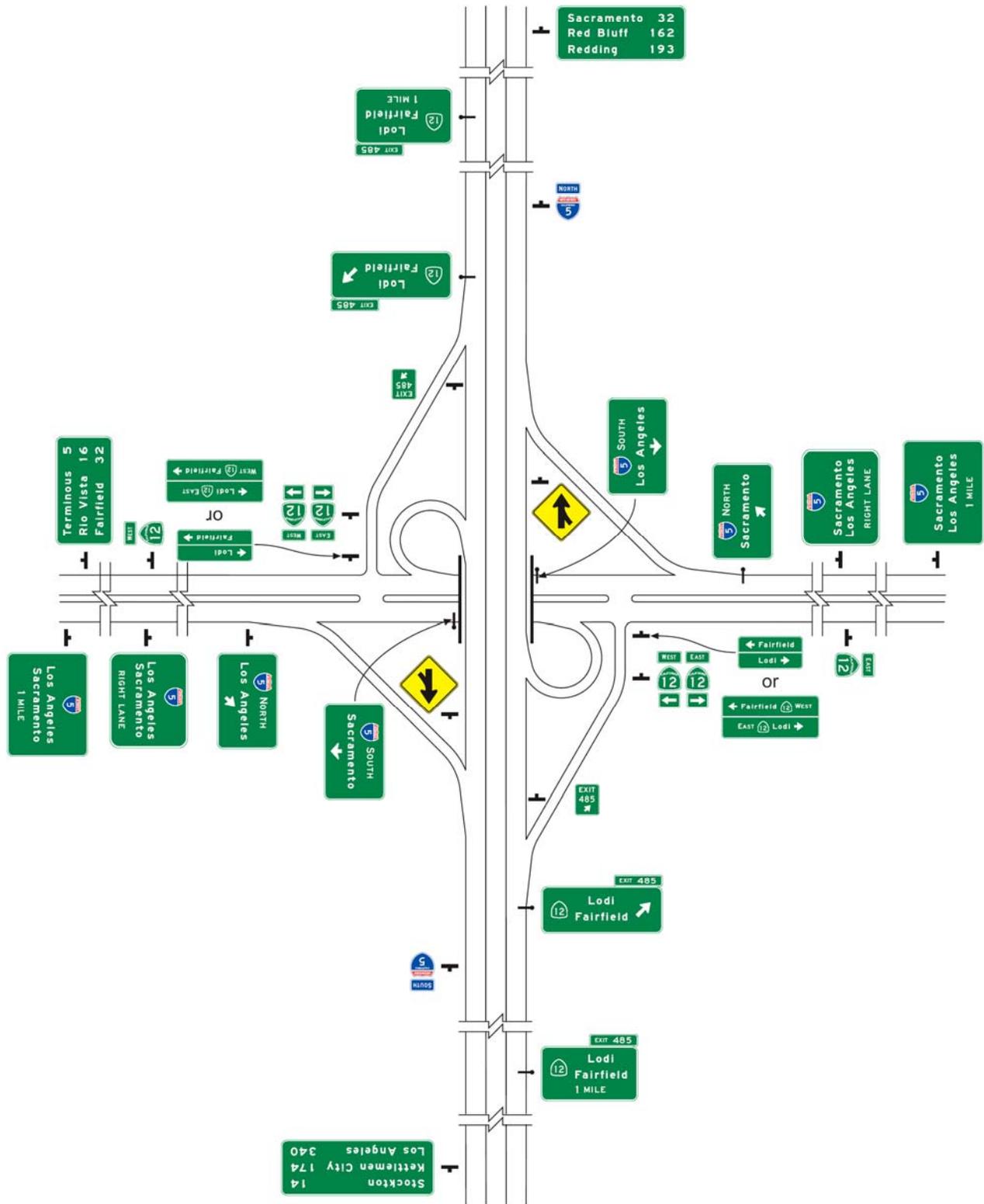


Figure 2E-32 (CA). Examples of Diamond Interchange Guide Signs in an Urban Area

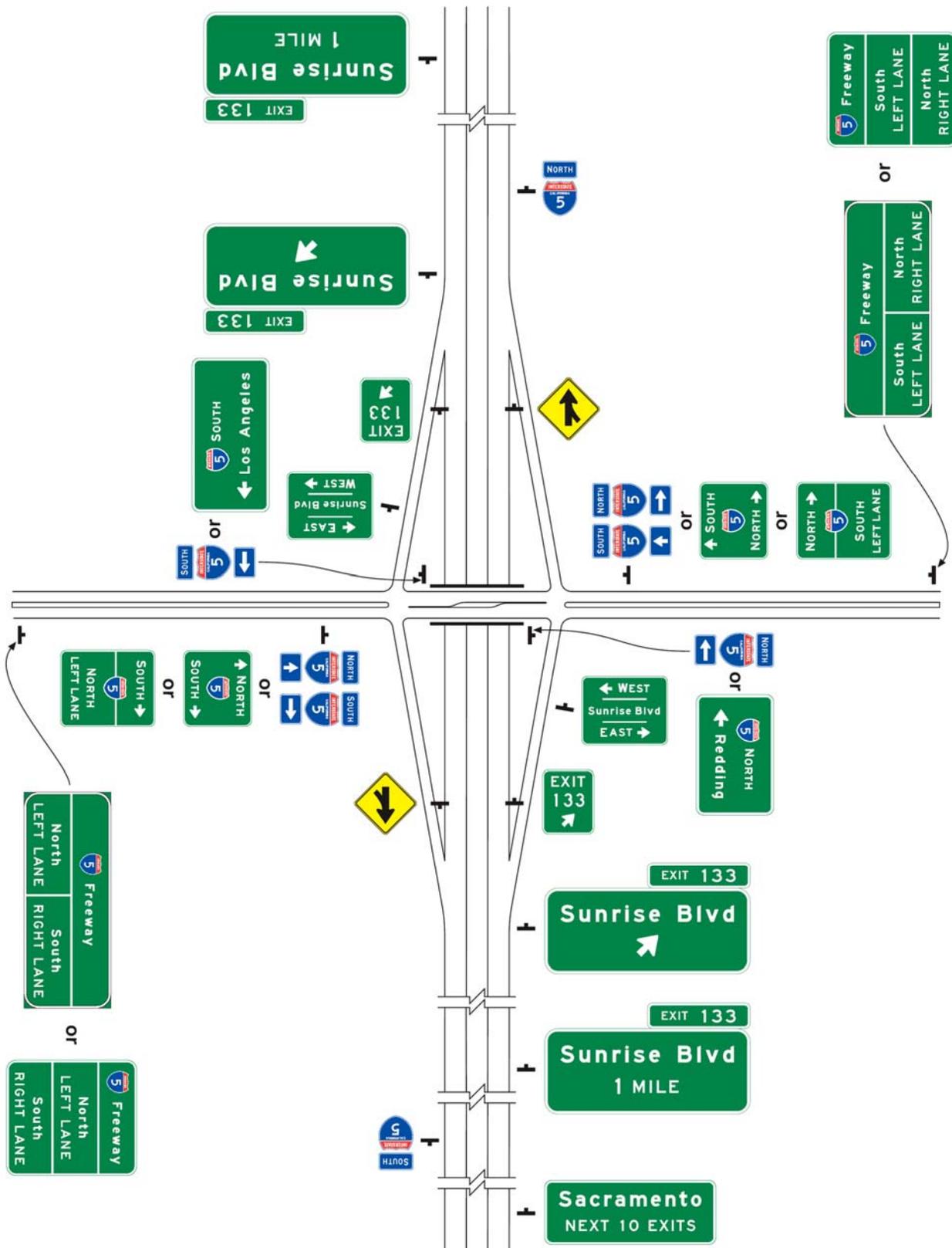
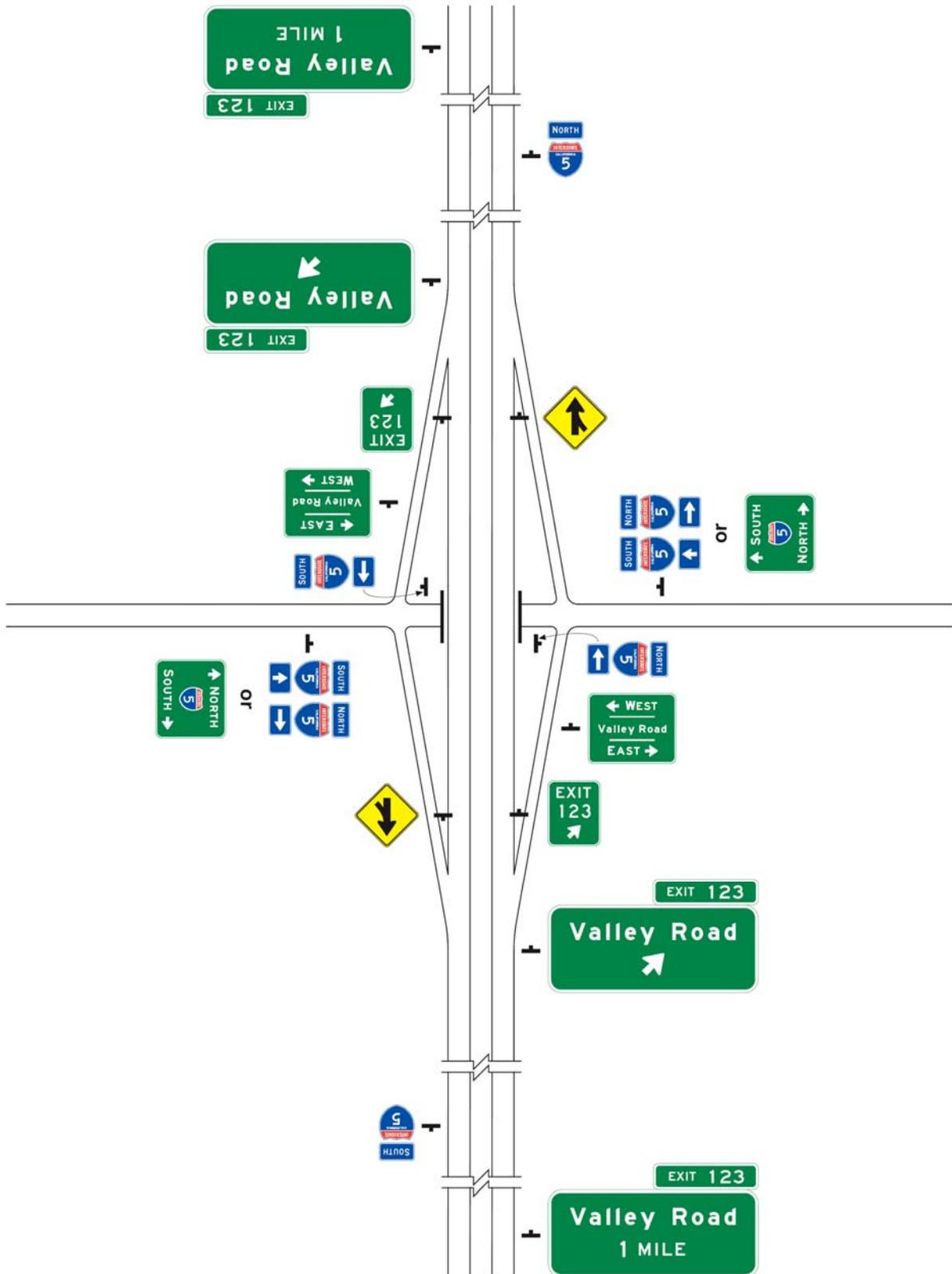


Figure 2E-33 (CA). Examples of Minor Interchange Guide Signs



Section 2E.50 Wrong-Way Traffic Control At Interchange Ramps**Standard:**

This section is deleted and replaced with the following:

Support:

Ramp terminal signing serves two important functions:

1. A link in the guidance system for traffic moving from the conventional roadway to the freeway.
2. Information to prevent a driver from getting into a wrong-way driving situation.

Freeway Entrance package is a vertical arrangement of FREEWAY ENTRANCE (CA Code G92) sign, route shield, cardinal direction, and arrow signs on a single post in which the G92 (CA Code) sign is on top and the arrow is on the bottom.

Do Not Enter package is a DO NOT ENTER (R5-1) sign with a WRONG WAY (R5-1a) sign directly beneath it on a single post.

Guidance:

Ramp terminal signs should be placed within the area normally illuminated by automobile headlights. Ambient lighting in the vicinity of the signs should also be considered.

In order to be most responsive to headlights, the Do Not Enter and Freeway Entrance packages should be mounted with the bottom of the lower sign 0.6 m (2 ft) above the edge of the pavement. The ONE WAY (R6-1) signs should be mounted at 0.45 m (1.5 ft) above the edge of pavement.

Support:

This will generally ensure that these arrows are low enough that they will not be a sight restriction to the right-way traffic.

Standard:

Standard mounting height for all other signs in the ramp terminal area shall remain at 1.5 m (5 ft).

Option:

In locations subject to deep snow, sign heights may be adjusted in accordance with engineering judgement.

Guidance:

If installed, the pedestrian prohibition (R5-10a and R5-10c) signs should be placed far enough up the ramp to avoid conflict with signs near the terminal.

Support:

The sign locations shown in Figure 2E-39 (CA), are approximate.

Guidance:

All ramp terminals should be reviewed under both day and night conditions by experienced signing personnel to determine exact locations.

Standard:

At least two large painted pavement arrows shall be placed and maintained in the center of each lane of each exit ramp. At least one Type I arrow, not less than 5.49 m (18 ft) in length, shall be positioned in the center of each freeway entrance ramp. Refer to Section 3B.19.

On-Ramp Terminal Signing**Support:**

Lead-in signing directing motorists to on-ramps is important. Care should be taken to ensure that arrows on direction signs couldn't be interpreted as pointing into inappropriate roadways, especially off-ramp terminals.

Partial interchanges may need special attention with respect to lead-in signing. Trailblazing a route from a partial interchange to another interchange may be necessary to ensure proper traffic movements.

Guidance:

Freeway Entrance packages should be placed as near the diverge point between the on-ramp and the intersecting roadway as practicable. The down diagonal arrow should always point toward the onramp pavement.

Large Freeway Entrance signs should be used with the Freeway Entrance package unless proper placement requires the smaller Freeway Entrance signs.

Off-Ramp Terminal Signing

Standard:

The Turn Prohibition signs (See Section 2B.19) shall be placed in suitable locations on the crossing street in advance of the off-ramp.

Guidance:

The Do Not Enter packages should be placed at off-ramp terminals to meet the following criteria:

1. At least one package should be visible to a driver (within the scope of his headlights) at his decision point on each potential approach.
2. At least one package should be in the head-on position for the driver turning into the off-ramp from each potential approach.

A field decision should be made on whether to use three Do Not Enter packages or four if the off-ramp is split by a traffic island.

Support:

Generally, curbed islands larger than 93 m² (1000 ft²) in area indicate the use of four packages. Painted islands can be somewhat larger and still be adequately signed with three packages. Refer to Figure 2E-39 (CA) Sheets 3, 4 and 5.

Guidance:

The ONE WAY (R6-1) signs should be placed as close to the crossing street as possible. If there are sidewalks immediately adjacent to the cross street, these signs should be located behind the sidewalk to avoid conflicting with pedestrians.

Support:

A less desirable alternate is relocating the signs above the pedestrian level.

Guidance:

At skewed ramp intersections, where the angle approaches 90°, a second ONE WAY (R6-1) sign should be added on the obtuse side when it would be visible to approaching traffic. Refer to Figure 2E-39 (CA) Sheet 1.

Figure 2E-39. Examples of Regulatory Signing and Pavement Markings at Exit Ramp Termination to Deter Wrong-Way Entry

Standard:

MUTCD Figure 2E-39 is deleted and replaced with Figure 2E-39 (CA).

Figure 2E-40. Examples of Regulatory Signing and Pavement Markings at Entrance Ramp Terminal Where Design Does Not Clearly Indicate the Direction of Flow

Standard:

MUTCD Figure 2E-40 is deleted and replaced with Figure 2E-39 (CA).

Figure 2E-39 (CA). Examples of Regulatory Signing and Pavement Markings at Ramp Terminations to Deter Wrong-Way Entry (Sheet 1 of 5)

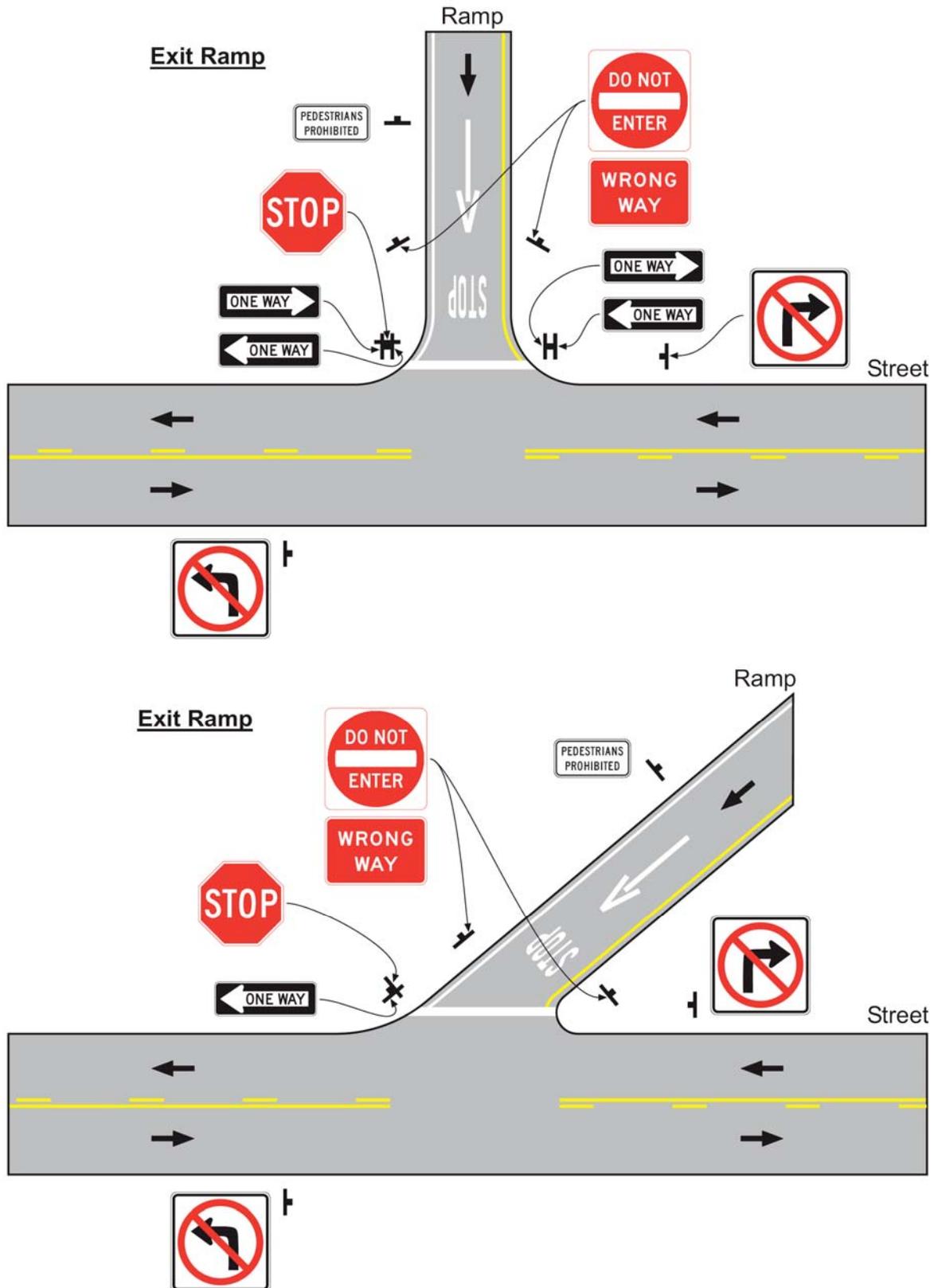


Figure 2E-39 (CA). Examples of Regulatory Signing and Pavement Markings at Ramp Terminations to Deter Wrong-Way Entry (Sheet 2 of 5)

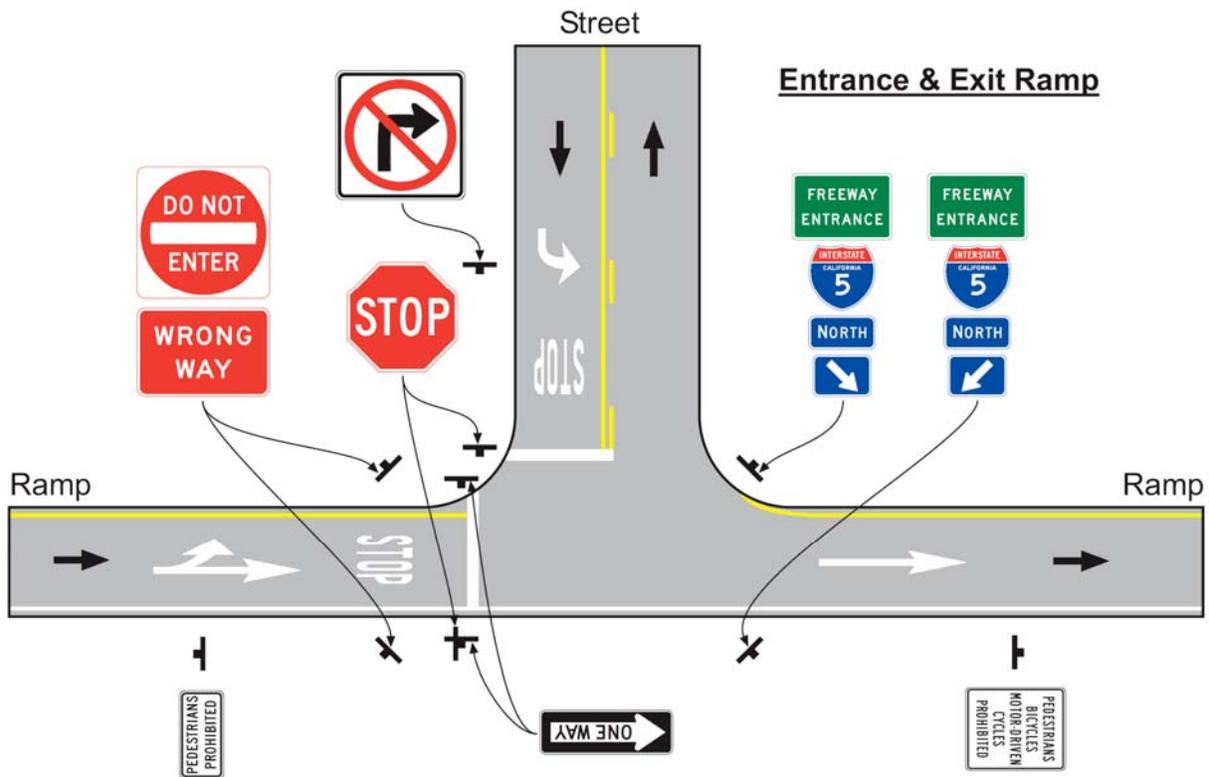
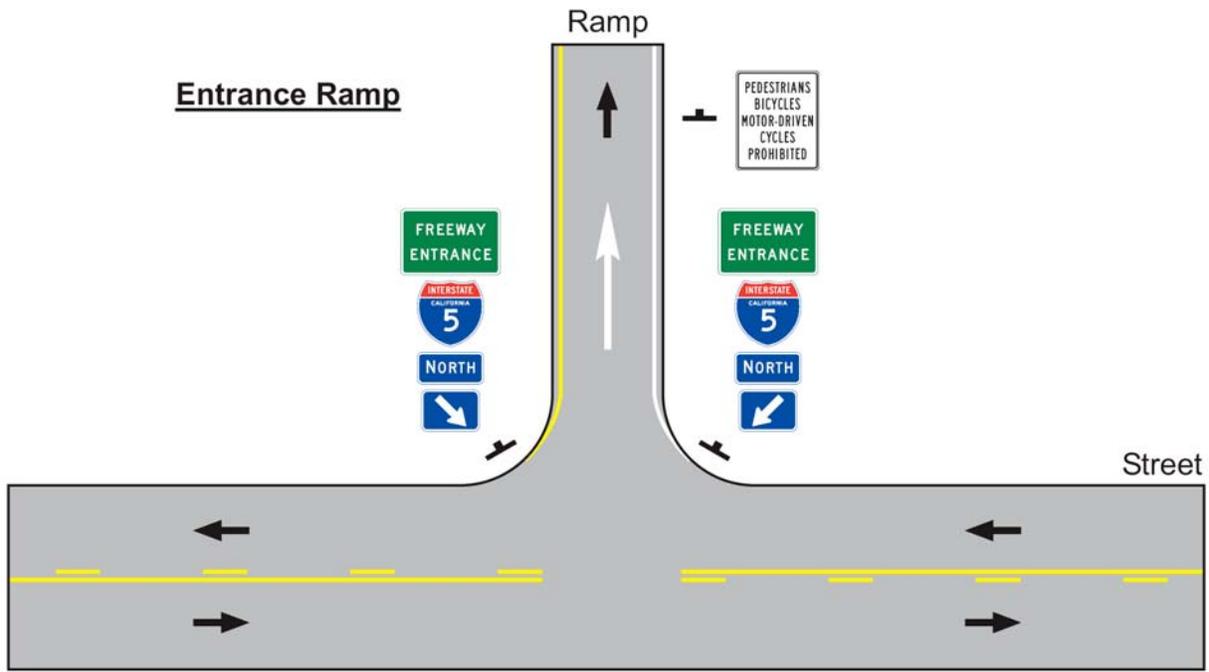


Figure 2E-39 (CA). Examples of Regulatory Signing and Pavement Markings at Ramp Terminations to Deter Wrong-Way Entry (Sheet 3 of 5)

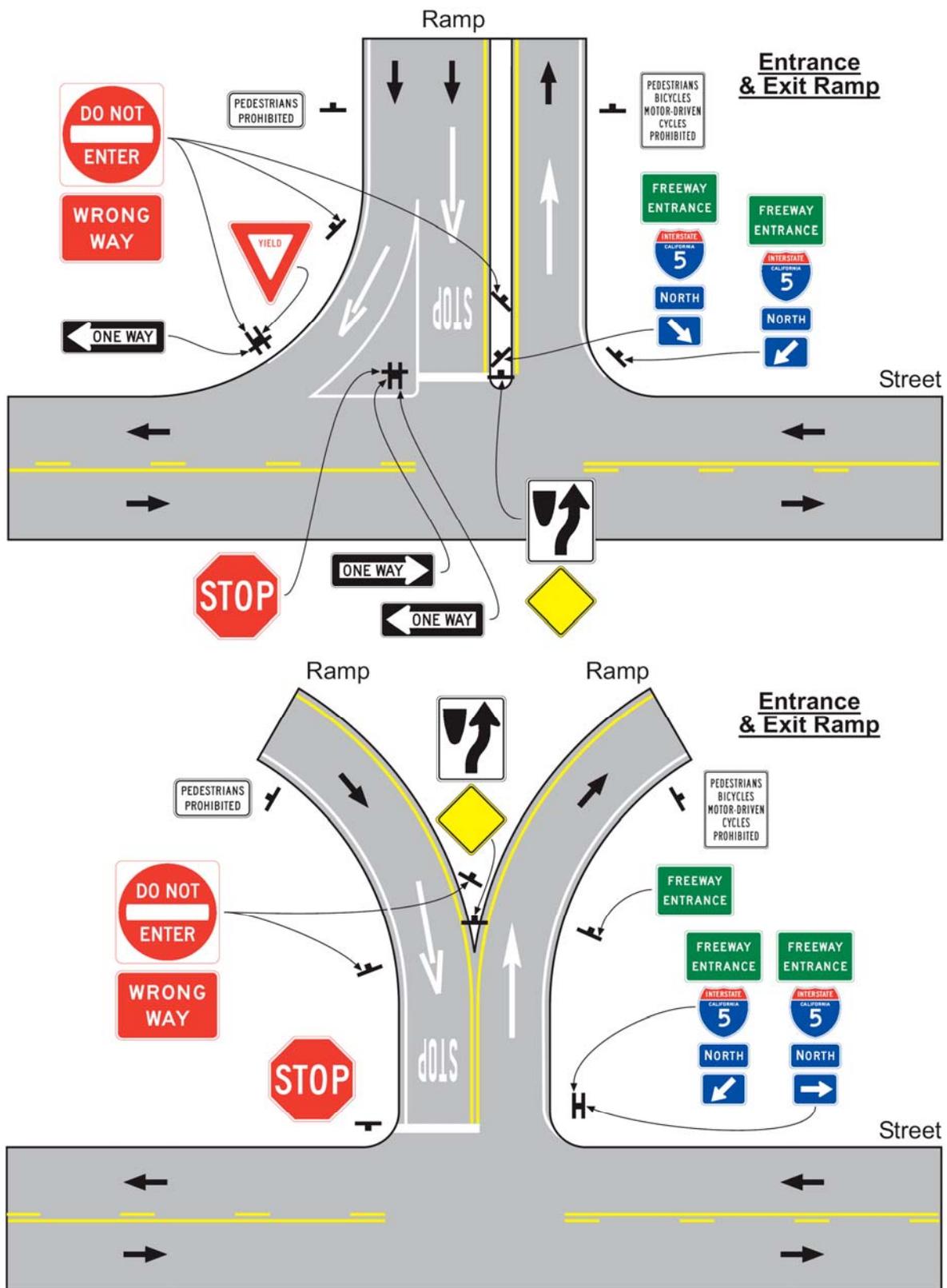


Figure 2E-39 (CA). Examples of Regulatory Signing and Pavement Markings at Ramp Terminations to Deter Wrong-Way Entry (Sheet 4 of 5)

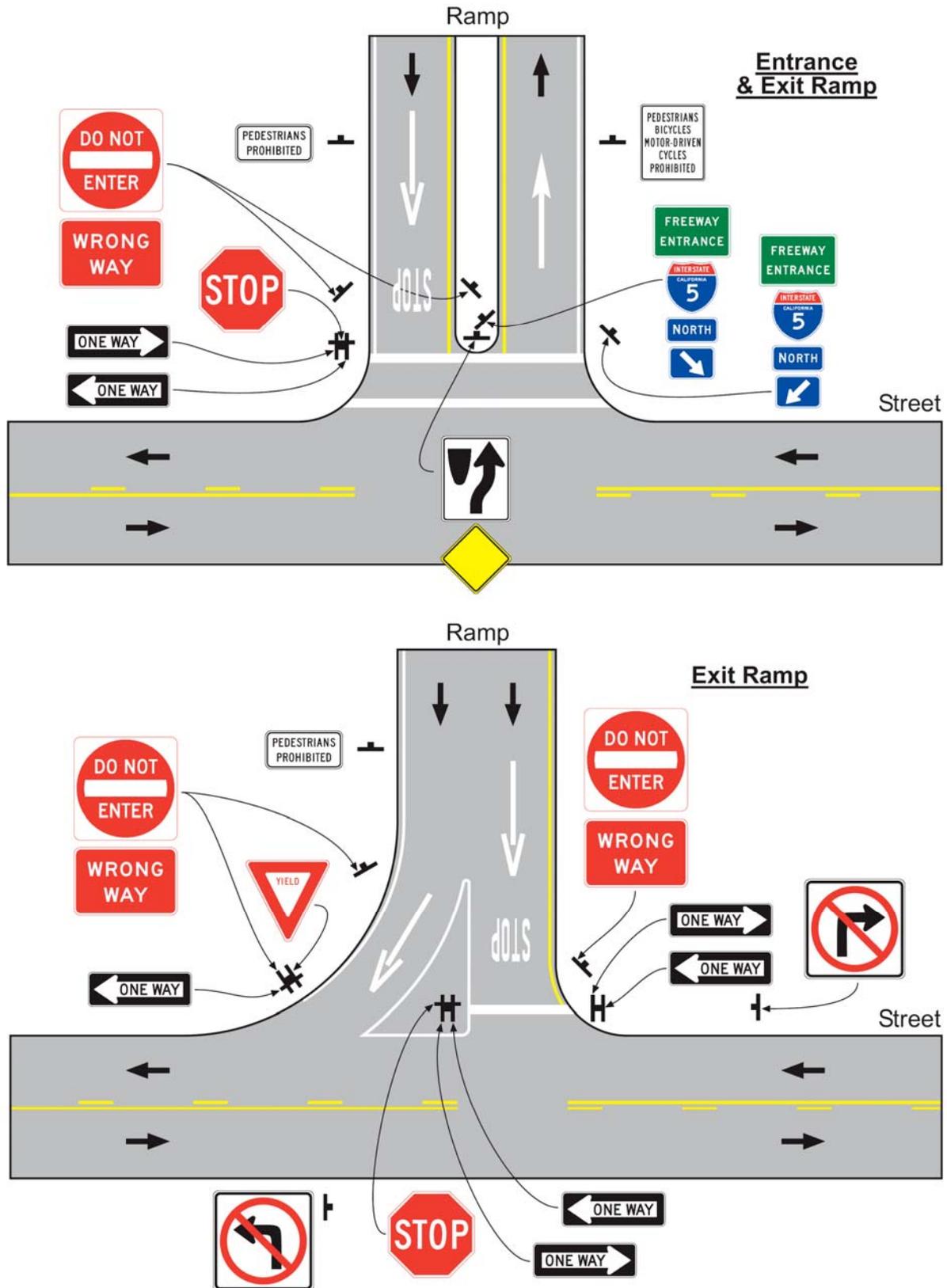
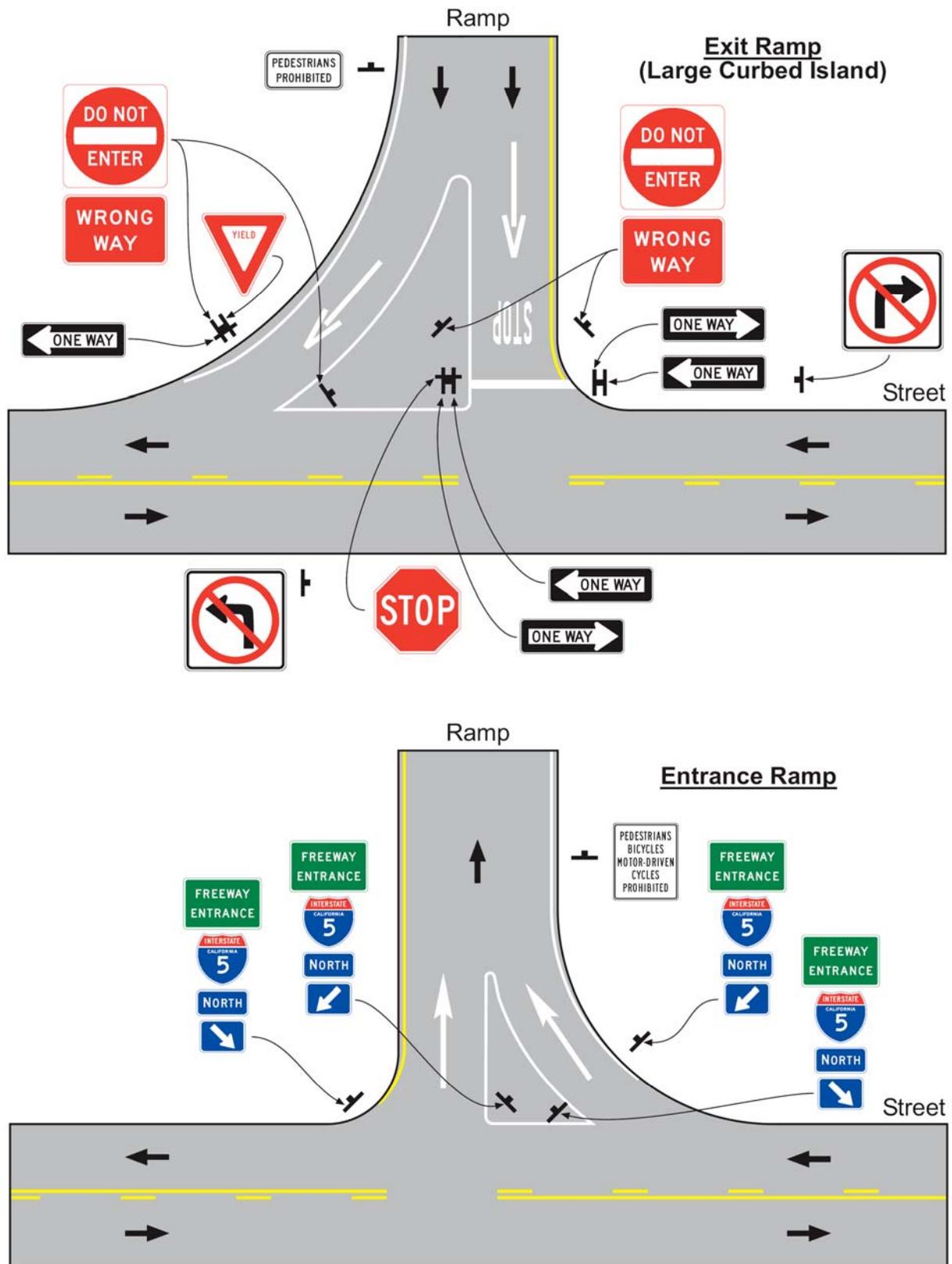


Figure 2E-39 (CA). Examples of Regulatory Signing and Pavement Markings at Ramp Terminations to Deter Wrong-Way Entry (Sheet 5 of 5)



Section 2E.51 General Service Signs**Standard:**

Throughout this section, the word “Gas” is changed to “Fuel”. In California, the generic term FUEL is used for GAS.

Guidance:

In Paragraph 4 (“Distances to services...”), the phrase “2 km or 1 mile” is changed to “0.8 km (0.5 mi)”. See Section 2D.45 for more details.

In Paragraph 18 (“At rural interchange...”), the word “may” is changed to “should”.

Option:

Paragraph 8 (“The General Service signs...”) is deleted and replaced with the following:

The General Service signs may be located between the Advance Guide sign and the Exit Direction sign, in advance of the exit leading to the available services.

In Paragraph 10 (“If the distance...”), the phrase “Exit Direction sign” is changed to “Advance Guide sign”. See Section 2D.45 for more details.

Standard:

Paragraph 19 (“If more than...”) is deleted and replaced with the following:

If more than four services become available, any appended sign panel shall be removed and replaced with an independently mounted General Service sign as described in this Section.

The following is added to this section:

Support:

Section 2D.45 also applies to freeways and expressways.

Section 2E.52 Rest and Scenic Area Signs

The following is added to this section:

Support:

Sections 2D.42 and 2D.43 also apply to freeways and expressways.

Section 2E.53 Tourist Information and Welcome Center Signs

The following is added to this section:

Tourist Information Signs (CA Codes G81-21 and G81-24)**Option:**

The TOURIST INFORMATION (CA Codes G81-21 and G81-24) signs may be placed directing to off-highway facilities.

Standard:

These signed facilities shall have a principal function of providing local tourist information. Those facilities provided by local chamber of commerce (or other official body) representing a group of people or businesses shall be given initial priority for signing.

Guidance:

The G81-21 or G81-24 (CA Codes) signs should be placed on State highways only where privately-owned off-highway signs would not reasonably provide adequate directions to motorists. These signs should be restricted to those facilities which are spaced no closer than 24 km (15 mi) apart in each direction along any highway. An excessive number of supplemental panels should not be installed with Tourist Information or Welcome Center signs so as not to overload the road user.

Standard:

The TOURIST INFORMATION (CA Codes G81-21 and G81-24) signs shall have a white legend and border on a blue background.

Guidance:

These signs should be placed beneath another primary guide sign.

Option:

If no guide signs are available, the G81-21 or G81-24 (CA Codes) signs may be placed as separate installations.

Guidance:

Facilities should be within 0.8 km (0.5 mi) of the highway and have reasonably direct access from, and return to, the highway.

Facilities should provide lighting, telephone and information on a 24-hour basis and cover the entire area served. Information should include area and regional maps, and 24-hour service information including, but not limited to medical, police, fire, restrooms, auto repair service and fuel. Outside maps and displays must be provided at all manned centers for use during periods when the facility is not manned.

Facilities should have adequate on premise and off right-of-way signing, where necessary, denoting "Tourist Information". Displays should be professionally designed and constructed and provide resistance to fading, chipping and vandalism.

Standard:

If operated only on a seasonal basis, where criteria cannot be met during closed periods, these signs shall be covered or removed.

Guidance:

For freeway or expressway rest area locations that also serve as tourist information centers, the following signing criteria should be used:

- A. The locations for the Advance Guide (CA Code G83 Series), Exit Direction (CA Code G85 Series), and Exit Gore (E5-1) signs should meet the General Service signing requirements described in Section 2D.45.
- B. The TOURIST INFORMATION (CA Code G81-21 and G81-24) signs should be placed beneath the REST AREA (D5-2) sign or other primary guide sign. If no guide signs are available, they may be placed as a separate installation.
- C. The gore sign should contain only the legend REST AREA with the arrow and should not be supplemented with any legend pertaining to the tourist information.

Option:

As an alternative, the Information Symbol (D9-10) sign may be appended to the guide signs for the exit providing access to the tourist information center. As a second alternative, the D9-10 sign may be combined with General Service signing.

California Welcome Center Signs (CA Code SG47 Series)**Option:**

The CALIFORNIA WELCOME CENTER (CA Code SG47 Series) signs may be placed directing to a statewide network of visitor information centers as designated by the California Office of Tourism to encourage tourism in California and provide benefits to the State economy.

Standard:

The facilities signed shall have a principal function of providing statewide tourist information. Centers that can be so designated shall include, but not be limited to, centers operated by convention centers and visitor bureaus, chambers of commerce, federal, state or local governments, or private entities.

Designation of an entity as a California Welcome Center shall be based on conditions established by the Office of Tourism through written agreement with the entity.

The SG47 Series (CA Code) signs shall have a yellow welcome center logo, and a white legend and border on a blue background.

Guidance:

The SG47 Series (CA Code) signs should be placed as separate installations with the individual welcome centers being charged directly for the initial and ongoing cost and fees related production, maintenance and permitting of the signs.

Facilities should be within 4.8 km (3 mi) in urban areas and 8.0 km (5 mi) of a State highway and have reasonably direct access from, and return to, the highway.

Standard:

Follow-up signing, if necessary, shall be placed by local jurisdictions before these signs are placed on the State highway.

If operated only on a seasonal basis, where criteria cannot be met during closed periods, signs shall be covered or removed as directed by the Office of Tourism.

Option:

The CALIFORNIA WELCOME CENTER X MILES (CA Code SG47A) sign may be placed on the nearest freeway approximately 3.2 km (2 mi), or more as appropriate, in advance of the exit to a California Welcome Center that has been established under the authority of the California Office of Tourism.

The CALIFORNIA WELCOME CENTER NEXT RIGHT (CA Code SG47B) sign may be placed on the nearest freeway, at the appropriate exit to a California Welcome Center that has been established under the authority of the California Office of Tourism.

The CALIFORNIA WELCOME CENTER with Arrow (CA Code SG47C) sign may be placed at a freeway ramp terminal, conventional highway or local road to provide direction to a California Welcome Center that has been established under the authority of the California Office of Tourism.

The CALIFORNIA WELCOME CENTER X MILES with Arrow (CA Code SG47D) sign may be placed at a freeway ramp terminal to provide direction and distance to a California Welcome Center that has been established under the authority of the California Office of Tourism.

Guidance:

The distance on the SG47D (CA Code) sign should be no more than 4.8 km (3 mi) from the State highway.

Support:

The Welcome Center will be charged directly for the initial and ongoing cost and fees related to production, maintenance and permitting of the SG47A, SG47B, SG47C and SG47D (CA Codes) signs.

Section 2E.54 Reference Location Signs and Enhanced Reference Location Signs (D10-4, D10-5)

Option:

In Paragraph 3 (“Except as provided...”), the word “shall” is changed to “may”. See Section 2D.46 for more details.

Standard:

Reference Location signs shall not be in kilometers. No sign shall have a metric unit or message, except per CVC 21351.3. Hence, the reference posts shall not be used in California with metric messages unless specifically allowed per CVC 21351.3.

The following is added to this section:

Support:

Section 2D.46 also applies to freeways and expressways.

Section 2E.55 Miscellaneous Guide Signs

The following is added to this section:

Support:

Section 2D.48 also applies to freeways and expressways.

Section 2E.56 Radio Information Signing

The following is added to this section:

Support:

There are three types of radio information signs:

1. Radio – Weather Information (D12-1)

2. Radio – Traffic Information (D12-1)
3. Radio – Recreational Information (CA Code G81-65)

Standard:

Stations shall broadcast on AM or FM frequencies licensed by the Federal Communications Commission (FCC) for traveler information stations.

Radio – Weather Information (D12-1)**Option:**

The D12-1 sign with alternate “Weather” message may be used on rural highways where weather conditions result in driving conditions less than optimum or to inform motorists of road or traffic conditions for highways and public inter-modal transportation facilities.

The criteria for D12-1 sign is as follows:

Standard:

- 1 Only the numerical indication of the radio frequency shall be used to identify the broadcasting stations.**
- 2 If a station to be considered operates only on a seasonal basis, its signs shall be removed or covered during the off-season.**

Guidance:

- 3 The radio stations should have signal strength to adequately serve 110 km (70 mi) along the roadway.
- 4 Signs should be spaced according to need, but ordinarily not closer than 50 km (30 mi) apart for each direction of travel.
- 5 Only radio stations whose signal will be of value to the traveler and who agree to carry the two items below should be identified on this sign:
 - a. Periodic weather warnings at no more than 15-minute intervals during periods of adverse weather.
 - b. Road condition information affecting the roadway being traveled, broadcasted once every half-hour when required, to be supplied by an official agency having jurisdiction.
- 6 The stations to be included on the signs should be selected in cooperation with the association(s) representing major broadcasting stations in the area to provide:
 - a. Maximum coverage to all motorists on both AM and FM frequencies, and
 - b. Consideration of 24 hours a day, 7 days a week broadcast capabilities.

Option:

- 7 A maximum of three frequencies may be shown on each sign.
- 8 A particular radio frequency may be shown a maximum of twice in one direction along the mainline.

The WHEN FLASHING (CA Code G81-64A) sign may be used with the D12-1 sign when messages are not broadcast full time and to accommodate “real-time” usage.

Guidance:

The G81-64A (CA Code) sign should be placed with flashing yellow beacons, above and on the same posts with the D12-1 sign.

Radio – Traffic Information (D12-1)**Option:**

The D12-1 sign with alternate “Traffic” message may be used to inform motorists of broadcasts about traffic conditions for highways and public inter-modal transportation facilities.

Standard:

The radio station shall be operated by the public agency having jurisdiction over the transportation facility. The agency operating the station shall be responsible for monitoring and maintaining the system and changing the message content as situations warrant.

Radio – Recreation Information (CA Code G81-65)

Option:

The G81-65 (CA Code) sign may be used on rural highways to inform travelers of broadcasts about State or federal parks and recreational facilities.

Standard:

The G81-65 (CA Code) sign shall have a white legend and border on a brown background. The sign and sign structure shall be free of extraneous messages or logos, and must stand alone with no external lights or flashing beacons. Only the numerical indication of the radio frequency shall be used to identify a station. No more than three frequencies shall be shown on each sign. Only radio stations whose signal will be of value to the road user and who agree to broadcast in accordance with the items below shall be identified on this sign:

1. Provides information about State or federal recreational facilities located in rural areas.
2. Message content is devoted to public highway purposes.
3. Broadcasts operate 24 hours per day and 7 days per week.
4. Broadcasts contain no commercial messages.

For installation of G81-65 (CA Code) sign on State highways, the sign shall be installed by the permittee through the Department of Transportation's encroachment permit process. The costs, conditions of operation, and specific message content shall be clearly specified in the encroachment permit subject to the following terms and conditions:

1. The permittee is the State or federal agency that owns and/or operates the recreational facility.
2. The permittee possesses a valid FCC license to operate the radio station as a traveler information station.
3. The permittee is responsible for the accuracy of the message and message content.
4. The permittee bears all costs, including but not limited to, FCC approval and licensing; fabrication and installation of signs; and the installation, operation and maintenance of appurtenant radio equipment and facilities.

Section 2E.57 Carpool and Ridesharing Signing

The following is added to this section:

Option:

The Carpool Information (CA Code SG19) sign may be placed at selected locations for incoming traffic in urban areas.

Guidance:

For freeways and expressways, the SG19 (CA Code) sign locations should be no closer than 16 km (10 mi) apart.

Also refer to Section 2D.41.

Section 2E.59 Preferential Only Lane Signs

The following is added to this section:

Guidance:

The HOV Advance Lane Assignment (CA Code G20-9) sign should be used on a multilane cross street approaching an HOV drop ramp to indicate the proper lane to directly enter the HOV facility from the cross street. The G20-9 (CA Code) sign should be placed far enough in advance of the HOV drop ramp to permit a motorist to get into the proper lane.

The HOV Advance Guide (CA Code G83-3) sign should be used at a freeway off-ramp or freeway to freeway direct connector that can be accessed only from a HOV lane where an auxiliary lane is installed.

Standard:

The HOV EXIT with Arrow (CA Code G84-1) sign shall be used at exit ramp gores on HOV drop ramps to identify the exiting point for High Occupancy Vehicles.

Guidance:

The arrow on the G84-1 (CA Code) sign should be aligned to approximately the angle of departure. As much as possible, the G84-1 (CA Code) sign should be positioned to avoid confusion that the exit may also serve mixed flow traffic.

Standard:

The HOV Exit Direction (CA Code G85-7 and G85-8) signs shall be used for exiting traffic for buffered and barriered HOV facilities and are generally located near the beginning of the egress locations.

Support:

The G85-7 and G85-8 (CA Codes) signs repeat the destination shown on the Supplemental Destination (CA Code G86 Series) signs and are generally located downstream from them.

Standard:

The HOV Exit Direction (CA Code G85-9) sign shall be used at a freeway off-ramp or freeway to freeway direct connector that can be accessed only from an HOV lane.

Guidance:

The HOV Supplemental Destination (CA Code G86-8 and G86-9) signs should be used to give advance notice of egress locations for buffered and barriered HOV facilities and are located upstream from the HOV Exit Direction (CA Code G85-7, G85-8 and G85-9) signs.

The HOV Supplemental Destination (CA Code G86-10) sign should be used in advance of an HOV drop ramp that can be accessed only from an HOV lane.

Standard:

The CARPOOL LANE ENTRANCE (CA Code G92-1) sign shall be used at the entrance to an HOV drop ramp. The G92-1 (CA Code) sign is similar to the FREEWAY ENTRANCE (CA Code G92) sign and shall be installed similarly. Refer to Section 2E.50.

Section 2E.101 Extinguishable Message Signs**Support:**

Extinguishable message signs are designed to have one or more messages that can be displayed or deleted as required. Such a sign can be changed manually, by remote control, or by automatic controls that can “sense” the conditions that require special sign messages.

It is recognized that due to technological limitations, many extinguishable message signs cannot conform to the exact sign shape, color, and dimensions specified in these standards. Nevertheless, it is essential that extinguishable message signs ascribe to the principles established in this Supplement, and to the extent practicable, with the design and applications prescribed herein.