California Traffic Control Devices Committee
Agenda Item Report

Meeting Date: October 14, 2025 **Item Number:** 25-09	**From:** Mike Malyy, Caltrans
Sponsored By: Amjad Obeid, Caltrans	**Presented By:** Mike Malyy, Caltrans
Description: Request for review and recommendation to finalize CA MUTCD 2026 Part 3 titled "Markings" proposed documents that have been revised in response to 10/2/25 CTCDC Meeting comments and is being prepared to adopt Federal Highway Administration's National MUTCD 2023 (11th Edition) before the January 18, 2026, deadline.	

Recommendation:

Motion by committee, recommending Caltrans to finalize and prepare the CA MUTCD 2026 Part 3 titled "Markings" draft documents and incorporate them into CA MUTCD 2026 version that is being prepared to adopt Federal Highway Administration's National MUTCD 2023 (11th Edition) before the January 18, 2026, deadline.

Agency Making Request/Sponsor:

Mike Malyy, Caltrans / Amjad Obeid, Caltrans

Background:

For detailed background on this item, including the previously proposed revisions upon which the CTCDC provided comments shared below were based, as well as the meeting minutes of the meeting discussions, please refer to agenda item 25-09 document and its attachments, that were included in the October 2, 2025 meeting and are available at: https://dot.ca.gov/programs/safety-programs/ctcdc/meetings.

This item was discussed previously in the October 2, 2025 meeting. During the meeting, several CTCDC members, the public, and the FHWA CA Division representative shared their comments and concerns on the proposed revisions. The meeting discussions resulted in the CTCDC providing multiple comments to Caltrans and requesting Caltrans to review and address these comments, as appropriate. Caltrans was asked to revise these draft documents based on review of the CTCDC comments and provide them to CTCDC for review and discussion in a future meeting. Summary of the CTCDC comments provided on October 2, 2025, meeting and Caltrans review, response and resolution to these comments, is as follows:

1. **CTCDC Comment – Chapter , Section , Paragraph :**

   CA MUTCD 2026 Proposal includes text:

CTCDC member comment:

Caltrans with comment

1. **CTCDC Comment – Chapter 3A, Section 3A.01, Paragraph 07:**

   CA MUTCD 2026 Proposal includes text:

   Support:

   07 For faded asphalt concrete pavement, grinding out obsolete markings is the preferred method to ensure clear pavement and eliminate any potential visual confusion for drivers.

   CTCDC comment: There is a discussion about grinding out obsolete markings. There should probably be some thoughts about grinding out longitudinal markings and lines in East/West roads. That grinding should consider the effect of the Sun, whether it is rising or setting long in the horizon, and how it can confuse drivers about where lane lines actually are. And it comes to how to apply tape on a roadway, specifically in the East/West direction.

   Caltrans response: CA Paragraph 07 is written in support of Fed Paragraph 06 to emphasize that while temporary masking is permitted as an option for markings that are no longer applicable, the preferred solution is to remove obsolete markings rather than temporarily masking them. The core reason for this preference is safety and the elimination of driver confusion. Also, since the question was raised, we revised the text of Paragraph 07 to: Obliteration of obsolete markings, using one of the known permanent removal methods, such as Ultra-High-Water blasting, shot blasting, or grinding, is the preferred action rather than temporary masking, particularly on faded asphalt concrete pavement. This ensures the most visually clear pavement and eliminates the risk of confusion for road users, especially on eastbound and westbound lanes.

2. **CTCDC Comment – Chapter 3A, Section 3A.03, Paragraphs 02a and 02b:**

   CA MUTCD 2026 Proposal includes text:

   Option:

   02a If the material used for centerline marking is paint, a 3-inch-wide black line may be placed between the 4-inch-wide yellow lines

   on streets and highways under local jurisdiction.

   Standard:

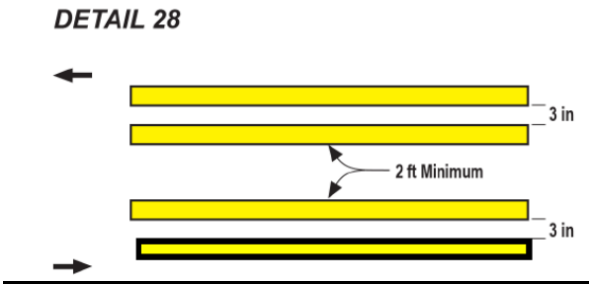
   02b If the material used for centerline marking is paint, a 3-inch-wide black line shall be placed between the 4-inch-wide yellow lines on State highways.

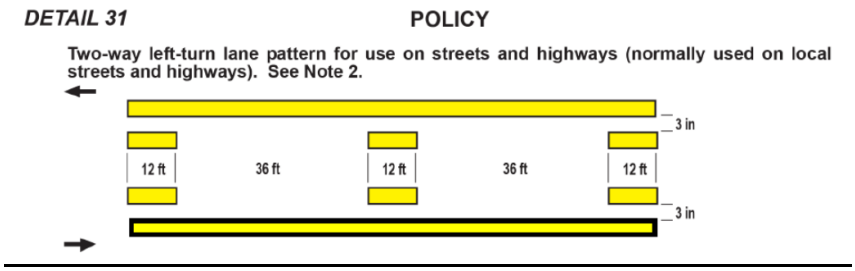
   CTCDC comment: Was there a 4-inch black stripe between two yellow stripes? But it says 3-inch. Also referred to Figure "3A-107(CA)" for the dimensioning issue.

Caltrans response: The National MUTCD does not mandate the exact spacing between double lines (see Section 3A.04, paragraph 03). On the other hand, speaking Johnny Bhullar's words: "California pavement marking details have been around for many years in our manuals, they have served a purpose and have been used as a reference by practitioners to install pavement markings on roadways when designing projects or maintaining existing markings and we are not aware of them posing any safety concerns, rather they have helped improve safety of the road users." … "In our current effort, Steve Pyburn hasn't raised this as an issue either."

3. **CTCDC Comment – Figures 3A-107(CA) and 3A-108(CA):**

CA MUTCD 2026 Proposal includes:





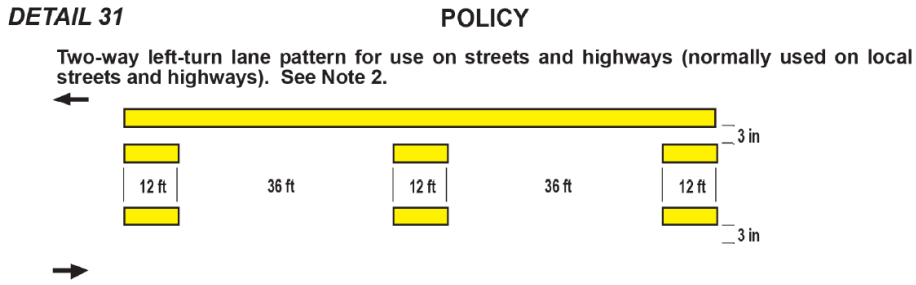
CTCDC comment: The bottom edge line appears thicker than the top edge line, as well as the dashed lines on Details 28 and 31.

Caltrans response: The visual inconsistency, such as the notably thicker bottom edge line, is due to this image being draft preparation material.

These two edge lines were omitted from the previous CA MUTCD publication (see the picture below). They were added to this existing document using Adobe Acrobat, a digital editing tool, as part of our initial revision for the forthcoming publication.

In the final product, all graphic details will be presented in a consistent style and scale, ensuring all similar lines have the appropriate, uniform thickness.

Figure 3A-108 (CA). Two-Way Left-Turn Lanes



4. **CTCDC Comment – Section 3B.02, Paragraph 07:**

   CA MUTCD 2026 Proposal includes text:

   Standard:

   07 **Raised retroreflective pavement markers shall be used to supplement the centerline markings on highways, including State highways, except in snow areas.**

   CTCDC comment: We use RPM selectively. This standard seems like a new universal requirement, which I believe may be heavy-handed.

   Caltrans response: This provision is not new. In the 2014 CA MUTCD (Rev. 9), this standard is presented in Section 3B.01, paragraph 15.

5. **CTCDC Comment – Section 3B.02, Paragraph 08:**

   CA MUTCD 2026 Proposal includes text:

   Support:

   08 On horizontal curves with radii less than 3280 feet and without street lighting, Detail 22 instead of Detail 21 can be helpful in improving the delineation for centerline markings, as it includes retroreflective raised pavement markers. Detail 22 can be applied in advance of the approach to the curve per Table 2C-3 and continued throughout the length of the curve.

   CTCDC comment: Suggest using the word "may" instead of "can".

   Another comment that the suggestion would violate the MUTCD terminology rules since "may" applies to an Option.

   Caltrans response: Agree with the second comment that "may" only applies to Options.

6. **CTCDC Comment – Section 3B.02, Paragraph 15:**

   CA MUTCD 2026 Proposal includes text:

   Option:

   [15] Passing in both directions may be provided by alternating the direction of the middle lane at about 1 mile intervals.

   CTCDC comment: 1 mile seems like such a short distance.

   Caltrans response: Traffic studies indicate that the optimal length of passing lanes is closely tied to hourly traffic volume.

   - For volumes less than 400 vehicles per hour (vph), effective passing lane lengths range from 0.5 to 0.75 miles.
   - For 400 to 700 vph, optimal lengths increase to 0.75 to 1.0 miles.
   - For volumes greater than 700 vph, lanes may extend to 1.0 to 2.0 miles, depending on terrain and overtaking demand.

   For most moderate-to-high traffic flows (≤700 vph), a 1-mile passing lane is typically sufficient. Longer lanes tend to be less effective, particularly during low-volume periods, as they exceed the functional need for overtaking and may encourage unsafe merging behavior. The primary goal remains to allow faster vehicles to separate from slower-moving platoons safely.

   References:

   - CT Highway Design Manual, Chapter 300 – Geometric Design.
   - FHWA Technical Advisory T5040.30 – Passing Lane Guidelines.
   - NCHRP Report 512 – Capacity and Operational Effects of Passing Lanes on Two-Lane Highways.

7. **CTCDC Comment – Section 3B.06, Paragraph 14:**

   CA MUTCD 2026 Proposal includes text:

   Standard:

   [14] When a climbing lane is provided on an upgrade and it is necessary to prohibit trucks from passing slower-moving vehicles, an 8-inch solid white line shall be used in place of the standard lane line stripe. See Section 2B.38 for truck lane control signs

   CTCDC comment: Concerned that the statement in this paragraph is incorrect.

   Caltrans response: The statement is correct. Both the CA MUTCD and the National MUTCD support the use of solid white lines to restrict lane changes in climbing lanes, especially for trucks. California's 8-inch solid white line standard for truck

restrictions in climbing lanes is more stringent than the National MUTCD, which does not specify an exact width for this application. It aligns in purpose but exceeds the federal minimum in visibility and enforcement.

CTCDC comment: "When a climbing lane," perhaps should read "When a truck climbing lane,".

Caltrans response: The MUTCD generally uses the term "Climbing Lane" rather than the specific term "Truck Climbing Lane." The term "Climbing Lane" inherently implies its primary use by slow-moving vehicles, especially trucks, on upgrades.

8. **CTCDC Comment – Section 3B.07, Paragraph 15:**

CA MUTCD 2026 Proposal includes text:

Standard:

[15] Left-turn or right-turn lanes shall be separated from the through lanes by a single solid 8-inch-wide white line as shown in Figure 3A-112(CA) except as provided in paragraph 18.

CTCDC comment: This paragraph refers to paragraph 18 but is supposed to refer to paragraph 16.

Caltrans response: This reference has been updated.

9. **CTCDC Comment – Section 3B.11, Paragraph 10:**

CA MUTCD 2026 Proposal includes text:

Option:

[10] Dotted edge line extensions may be placed through intersections. Support:

CTCDC comment: Editorial comment about the paragraph break for Support.

Caltrans response: The necessary paragraph break has been added.

10. **CTCDC Comment – Section 3B.14, Paragraph 10:**

CA MUTCD 2026 Proposal includes text:

Support:

[10] Raised pavement markers are not normally placed where snow plows would damage the markers and require an unusual

amount of replacement.

CTCDC comment: Propose to add at the end of the paragraph, "unless recessed."

Caltrans response: Adding "unless recessed" makes the statement more accurate and comprehensive in the context of traffic engineering. The statement has been revised to read: Raised pavement markers are generally not placed where

snowplows would damage the markers and require an unusual amount of replacement, unless recessed.

11. CTCDC Comment – Section 3B.17, Paragraph 05:

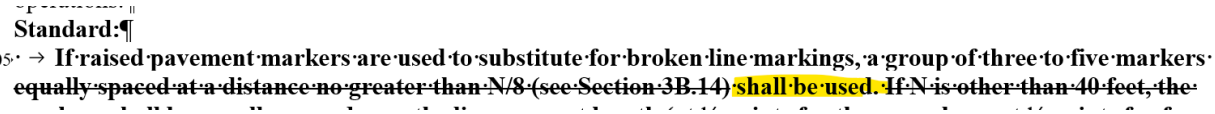
CA MUTCD 2026 Proposal includes text:

Standard:

05 If raised pavement markers are used to substitute for broken line markings, a group of three to five markers ~~equally spaced at a distance no greater than N/8 (see Section 3B.14) shall be used. If N is other than 40 feet, the markers shall be equally spaced over the line segment length (at ½ points for three markers, at ⅓ points for four markers, and at ¼ points for five markers).~~ At least one retroreflective or internally illuminated marker per group shall be used or a retroreflective or internally illuminated marker shall be installed midway in each gap between successive groups of non- retroreflective markers.

CTCDC comment: "The first sentences without a strikeout seem to me incomplete thoughts."

Caltrans response: The "shall be used" was mistakenly struck out. The strikeout has been undone.


Standard:¶
05 → If raised pavement markers are used to substitute for broken line markings, a group of three to five markers equally spaced at a distance no greater than N/8 (see Section 3B.14) shall be used. If N is other than 40 feet, the

12. CTCDC Comment – Section 3B.22, Paragraph 09a:

CA MUTCD 2026 Proposal includes text:

Standard:

09a If used, new construction of accessible off-street parking spaces, and loading and unloading areas shall include pavement marking details shown on Figure 3B-19, or as shown on Caltrans' Standard Plan A90A. The loading and unloading area shall be marked by a border and hatched lines. The border shall be painted blue, and the hatched lines shall be painted a suitable contrasting color to the parking space (blue or white paint is preferred).

CTCDC comment: The paragraph refers to the CT Standard Plans, and the concerns are whether they meet both Federal ADA and CT accessibility standards, as well as the State of California accessibility standards. Additional comment that the design details, such as those provided in CR Standard Plans, should not be mentioned in the Manual at all.

Caltrans response: The note in the CT Standard Plans, which Bob referred to, says: "Parking spaces and access aisles shall be level with surface slopes not exceeding

1.5% in all directions." The statement strongly aligns with both the Federal Americans with Disability Act (ADA) standards and California accessibility standards. The 1.5% falls well below the ADA standard of 2.0%. By being more restrictive, it fully complies with the federal requirement. California's accessibility codes, governed by the California Building Code (CBC) and the California Access Compliance Standards, are known for often being more stringent than the federal minimums. The 1.5% maximum slope is either a direct requirement or a common practical design limit used by California engineers to ensure compliance with the state's stringent accessibility goals. Since the state can adopt standards that provide a higher level of accessibility than the federal ADA, this lower maximum slope is entirely consistent with California's approach.

If the CA MUTCD refers to specific design details, these details are essential for meeting California's particular safety needs. The CA MUTCD tends to include design details because its primary function is to enforce uniformity, safety, and legal compliance.

13. CTCDC Comment – Section 3B.27, Paragraph 02:

CA MUTCD 2026 Proposal includes text:

Support:

02 Examples of on-street parking space markings are shown in Figure 3B-23. Option:

CTCDC comment: Editorial comment about the paragraph break for Option.

Caltrans response: The necessary paragraph break has been added.

14. CTCDC Comment – Section 3B.27, Paragraph 08:

CA MUTCD 2026 Proposal includes text:

Support:

08 The District Directors have been delegated the authority to approve such ordinances.

CTCDC comment: The statement should mention State highways.

Caltrans response: The statement in paragraph 07 already covers both local "streets" and state "highways" in the initial premise. The purpose of Support (paragraph 08) is to state who, at the state level (Caltrans/District Directors), has the final say on the local ordinances that affect State highways. Since a local authority needs state approval to place parking meters on a state highway that runs through their jurisdiction, the current wording of Paragraph 08 is correct and does not need to explicitly list the affected State highways since it's concerned with the delegation of approval authority, not the list of roads.

15. CTCDC Comment – Section 3B.27, Paragraph 09:

CA MUTCD 2026 Proposal includes text:

Support:

09 The desirable dimensions of parking meter stalls are 8 feet by 24 feet with a minimum length of 20 feet.

CTCDC comment: Suggest reducing the minimum length from 20 feet to 18 feet.

Caltrans response: The minimum length of 20 feet for parking meter stalls is a desirable dimension outlined in the Manual, rather than a rigid standard, which provides practitioners with some flexibility. On the other hand, it is best practice to meet or exceed the 20-foot minimum to ensure full compliance with the manual's guidance.

16. CTCDC Comment – Section 3B.27, Paragraph 13:

CA MUTCD 2026 Proposal includes text:

Standard:

13 Stopping, standing, or parking of a vehicle within 20 feet of the vehicle's approach side of any unmarked or marked crosswalk, or 15 feet of any crosswalk where a curb extension is present, is prohibited. Refer to AB 413.

CTCDC comment: Suggest referring to CVC rather than the Assembly Bill, such as AB 413.

Caltrans response: Agree. The AB 413 implemented the "Daylighting" safety measure, which prohibits stopping, standing, or parking within 20 feet and so on, by adding the subsection (n)(1)(A) to CVC 22500. The reference to AB 413 has been replaced with the reference to CVC 22500.

17. CTCDC Comment – All Figures:

CA MUTCD 2026 Proposal includes:

CTCDC comment: Is it essential to have the north arrow on figures, because it may be confusing?

Caltrans response: The north arrow is used in the National Standard. We understand that users might assume the figures only apply to north-south

roadways, which is incorrect. MUTCD figures are meant to be direction-neutral and apply to any roadway orientation. The inclusion of the north arrow has been criticized for being misleading and is now proposed for removal. The proposal to remove North arrows (25A-RR-01 – Remove North Arrow from January 8, 2025) is under review and may be included in the future MUTCD revisions via FHWA rulemaking.

18. CTCDC Comment – Figure 3B-19(CA):

CA MUTCD 2026 Proposal includes:

Figure 3B-19. International Symbol of Accessibility Parking Space Marking

Notes:
1. See the "Standard Highway Signs" publication for sizes and details
2. The blue-colored background with white border is optional

CTCDC comment: Suggest adding one more note to refer practitioners to also see CVC Chapter 11, and the prevalence must comply with both federal and state accessibility requirements.

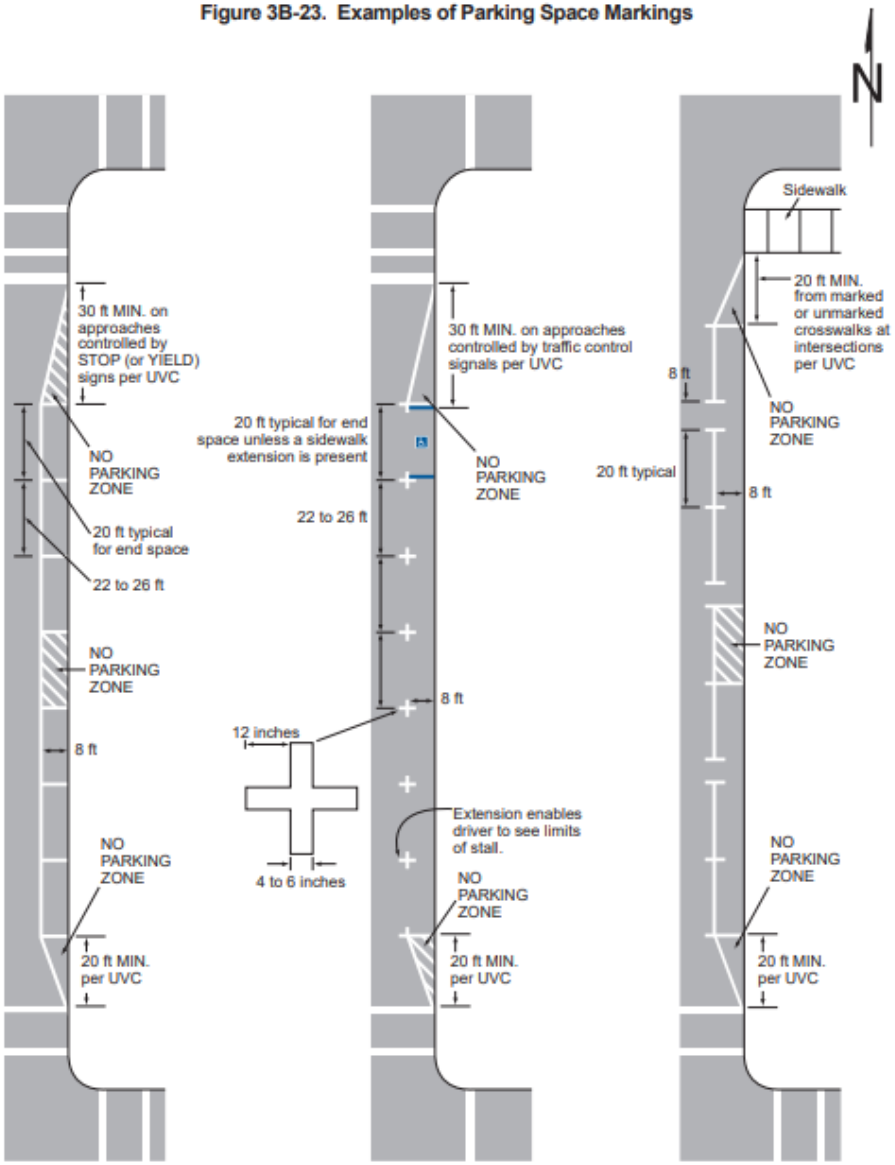
Caltrans response: On-street accessible parking regulation is covered in CVC Division 11, specifically Chapter 9 (sections 22500 through 22562).

The following note may be added: "Accessible on-street parking shall comply with CA MUTCD standards and applicable provisions of CVC 22500 through 22526."

19. CTCDC Comment – Figure 3B-23(CA):

CA MUTCD 2026 Proposal includes:

Figure 3B-23. Examples of Parking Space Markings



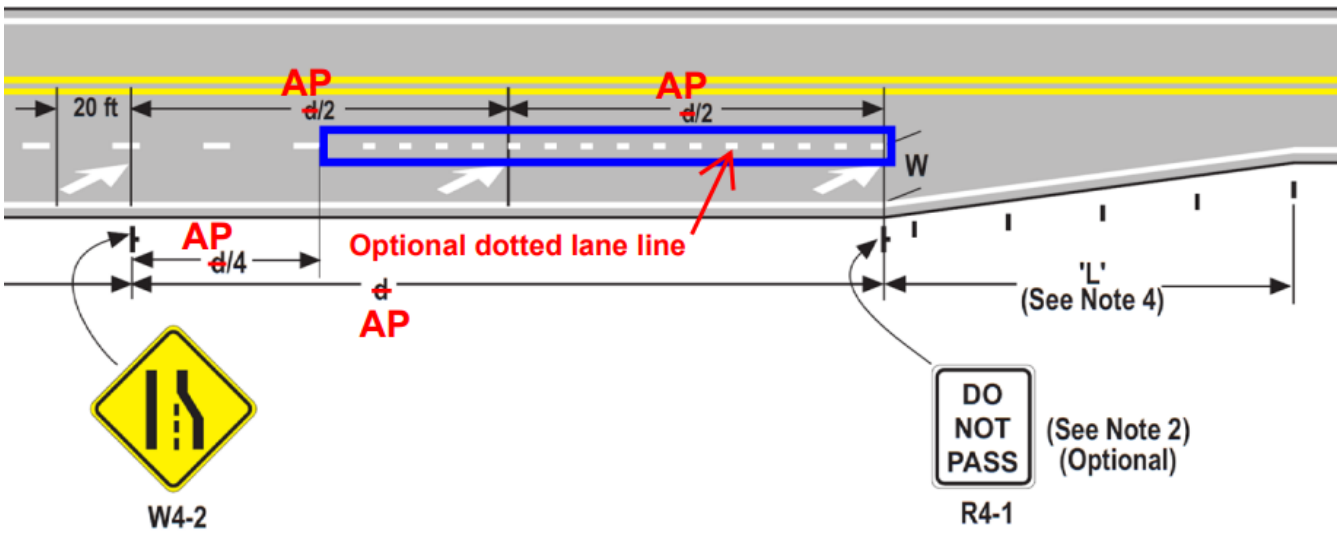
CTCDC comment: This Figure still refers to the Uniform Vehicle Code (UVC) and doesn't correspond with the CA "Daylighting" safety measure.

Caltrans response: The 30-foot minimum for parking restrictions at controlled intersections is set as the default design standard. While CA law (CVC 22500, per AB 413) sets the legal minimum at 20 ft from a crosswalk, the 30-foot standard provides a necessary higher margin of safety and superior sight distance.

However, in situations where Right-of-Way constraints are severe or where a thorough Engineering Study conclusively demonstrates that the legal is sufficient to meet sight distance requirements and accessible route connectivity without compromising safety, then Engineering Judgment may be applied to use the reduced distance.

20. CTCDC Comment – Figure 3B-104(CA):

CA MUTCD 2026 Proposal includes:



CTCDC comment: The optional dotted line, and the reason that was shown there, instead of just going with the federal standard.

Caltrans response: The optional line is included in corresponding Federal Figure 3B-14.

21. CTCDC Comment – Section 3C.07, Paragraph 04:

CA MUTCD 2026 Proposal includes the text:

Standard:

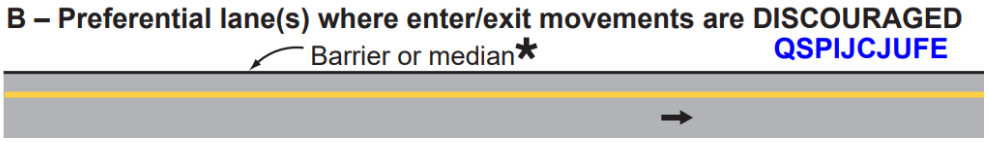
04 The transverse lines used to establish the limits of the ladder crosswalk shall not be less than 6 inches or greater than 24 inches in width.

CTCDC comment: Does the minimum transverse line limit need to be changed from "6 inches" to "12 inches"?

Caltrans response: The statement should not be changed. The 6-inch minimum applies correctly to the transverse lines. The 12-inch minimum applies to the individual interior longitudinal bars.

22. CTCDC Comment – Figure 3E-2 (Sheet 1 of 2):

CA MUTCD 2026 Proposal includes:



CTCDC comment: Question about the origin of the blue text was raised.

Caltrans response: This is a common issue known as a font substitution error. This occurs when the computer or software attempts to display the document but cannot locate the specific font that the document's creator used for that text.

23. CTCDC Comment – Section 3G.03, Paragraph 21:

CA MUTCD 2026 Proposal includes the text:

Support:

21 Bikeway separator posts are a type of delineator used as vertical elements to define Class IV bikeways. Refer to FHWA "Separated Bike Lane Planning and Design Guide" for information on design of bikeway separator posts. See Section 9E.102(CA) Class IV Bikeways for more details.

CTCDC comment: Notice an incorrect reference.

Caltrans response: The reference has been revised.

24. CTCDC Comment – Section 3G.101(CA), Paragraph 05:

CA MUTCD 2026 Proposal includes the text:

Standard:

05 Culvert markers shall not be retroreflective, or contain kilometer post marker information.

CTCDC comment: Recommend adding post-mile markers to help identify culverts, particularly when they may not be readily visible while driving down the road.

CTCDC comment: Pointed out that there is a word that says "kilometer".

Caltrans response: Post-mile markers and culvert markers are not intended to be collocated because they serve different primary functions. The post-mile marker provides a continuous linear location reference, while the culvert marker serves as a specific asset identifier. To identify the post-mile for a particular culvert, the highway inventory data or asset management records should be used.

The culvert marker standard specifies that the markers should NOT contain. The Standard has been revised to align with the National MUTCD standard, which utilizes Milepost Markers as the primary method for linear referencing on highways in the United States.

CTCDC comment: "Is the culvert marker intended to be a traffic control device?" Perhaps it does not need to be mentioned in the CA MUTCD and can be handled in the maintenance manual.

Caltrans response: Culvert Markers are not strictly traffic control devices (TCDs) because they don't regulate, warn, or guide traffic. However, they were included in the CA MUTCD because they are roadside objects that must be managed to protect and support the function of actual traffic control devices.

25. CTCDC Comment – Section 3I.01, Paragraph 11:

CA MUTCD 2026 Proposal includes the text:

Standard:

[11] The retroreflective unit used on channelizers shall be a minimum of 3 x 12 inch. The 3 x 24 inch minimum retroreflective unit shall be visible at 1000 feet at night under illumination of legal high beam headlights, by persons with vision of or corrected to 20/20.

CTCDC comment: Concerned that there is a dimension conflict.

Caltrans response: The standard specifies the minimum size of the retroreflective unit, which must be 3 inches by 12 inches or 3 inches by 24 inches. This minimum size of 3 x 24 inches ensures that the specialized retroreflective material for channelizers is bright enough and large enough to be clearly seen at a distance of 1,000 feet at night under illumination of legal high beam headlights. This visibility requirement assumes the person viewing it has standard, functional eyesight (vision of or corrected to 20/20).

26. CTCDC Comment – Section 3J.01, Paragraph 05:

CA MUTCD 2026 Proposal includes the text:

Support:

05 Raised channelization with sloping (mountable) curbed medians are used instead of channelization accomplished through the use of pavement markings (flush), for the following operating conditions:

A. Left- and right-turn lane treatments at intersections on all roadways with operating speeds of less than 40 mph.

B. Right-turn treatments on roadways with operating speeds equal to or greater than 40 mph.

CTCDC comment: Concerned that it may be a design issue.

Caltrans response: This support provision simplifies a nuanced design decision. Raised channelization and mountable curbed medians are conditionally recommended based on speed and turning movement, but not strictly required.

Caltrans has prepared the finalized proposal on CA MUTCD 2026 Part 3, incorporating CTCDC recommendation and Caltrans decisions, and it is attached to this agenda item. It is being provided for review to the CTCDC members and the public to share Caltrans decision on the CTCDC comments that were provided. Upon receiving formal CTCDC recommendation to finalize CA MUTCD 2026 Part 3 proposal, it will be revised as per the CTCDC passing motion details and then submitted to FHWA CA Division for review and determination of "substantial conformance" finding with the National MUTCD 2023 (11th Edition).

Attachments:

Due to the number of individual chapters in CA MUTCD 2026 Part 3, and each chapter further separated for text, figure and table contents, to facilitate review and allow for ease in referencing these attachments, instead of providing them in the listing format, they are being provided in the tabular format below.

Ch. #	Chapter Title Description	Attachment #s		
		Text	Figure	Table
3A	General	**1**	**2**	NA
3B	Pavement and Curb Markings	**3**	**4**	**5**
3C	Crosswalk Markings	**6**	**7**	NA
3D	Circular Intersection Markings	**8**	**9**	NA
3E	Preferential Lane Markings for Motor Vehicles	**10**	**11**	**12**
3F	Markings for Toll Plazas	**13**	NA	NA
3G	Delineators	**14**	**15**	**16**
3H	Colored Pavement	**17**	**18**	NA
3I	Channelizing Devices Used for Emphasis of Pavement Marking Patterns	**19**	**20**	NA
3J	Marking and Delineation of Islands and Sidewalk Extensions	**21**	**22**	NA
3K	Rumble Strip Markings	**23**	**24**	NA