

Change List due to MUTCD adoption in California

Following are some of the changes that resulted from the adoption of the MUTCD 2003 and the MUTCD 2003 California Supplement on May 20, 2004, as compared to the Caltrans Traffic Manual and other traffic control device related documents.

INTRODUCTION

Except for the fourth Standard pertaining to target compliance dates and their listing, the entire MUTCD introduction is new.

The entire CA Supplement introduction is new.

Table I-1 Evolution of the MUTCD

This table is new.

Table I-101 Evolution of the Traffic Manual

This table in CA Supplement is new.

PART 1. GENERAL

CHAPTER 1A. GENERAL

Section 1A.02 Principles of Traffic Control Devices

Both Guidance topics in this section are new.

Section 1A.03 Design of Traffic Control Devices

This section is new.

Section 1A.04 Placement and Operation of Traffic Control Devices

Paragraphs 1 and 2 are new.

Section 1A.07 Responsibility for Traffic Control Devices

This section is new.

The CA Supplement section has been revised and updated.

Section 1A.08 Authority for Placement of Traffic Control Devices

The second Standard (Paragraph 4) in this section is new.

The CA Supplement section has been revised and updated.

Section 1A.09 Engineering Study and Engineering Judgment

Except for the first sentence in Paragraph 2, Paragraphs 2 and 3 are new.

Section 1A.10 Interpretations, Experimentations, Changes, and Interim Approvals

This section is new.

The CA Supplement section has been revised and updated.

Section 1A.11 Relationship to Other Publications

This section is new.

The CA Supplement section is new.

Section 1A.12 Color Code

Fluorescent Pink color (sub-heading E) for incident management is new.

Section 1A.13 Definitions of Words and Phrases in This Manual

Majority of the definitions in this section are new.

The CA Supplement section has been revised and updated.

Section 1A.14 Abbreviations Used on Traffic Control Devices

This section is new.

Figure 1A-1. Example of Process for Requesting and Conducting Experimentations for New Traffic Control Devices

This figure is new.

Figure 1A-2. Example of Process for Incorporating New Traffic Control Devices into the MUTCD

This figure is new.

Table 1A-1. Acceptable Abbreviations

This table is new.

Table 1A-2. Abbreviations That Are Acceptable Only with a Prompt Word

This table is new.

Table 1A-3. Unacceptable Abbreviations

This table is new.

PART 2. SIGNS

CHAPTER 2A. GENERAL

Section 2A.01 Function and Purpose of Signs

Under Standard (sub-heading D), definition of “Special Purpose Road” is new.

Section 2A.04 Excessive Use of Signs

In CA Supplement section, new text has been added from ITE’s TCD Handbook.

Section 2A.05 Classification of Signs

In CA Supplement section, the Traffic Manual categorical classification for Construction signs is deleted.

Section 2A.06 Design of Signs

Paragraphs 10, 11 and 12 referring to Internet addresses and phone numbers are new.

Section 2A.07 Changeable Message Signs

Paragraphs 5 through 9 (last 5 paragraphs) are new. Paragraph 5 allows the option of using mentioned colors for regulatory or warning messages. Paragraphs 6 through 9 pertain to the use of safety and transportation-related messages. The CA Supplement deletes the use of safety related messages on CMSs on the State highway system.

Section 2A.08 Retroreflectivity and Illumination

In CA Supplement, the LED option on the border of STOP or warning signs is new.

Section 2A.10 Shapes

This section and requirement is new.

Section 2A.11 Sign Colors

The Standard topic is new.
The CA Supplement text is new.

Section 2A.12 Dimensions

In the last Paragraph, the last sentence pertaining to 6 in increments is new.
The CA Supplement text is new.

Section 2A.13 Symbols

The last paragraph pertaining to mirror image option is new.
The CA Supplement text is new.

Section 2A.14 Word Messages

In Paragraph 2, the second sentence and Paragraph 3 pertaining to 1 inch per 40 ft/33ft legibility distance are new.

Section 2A.16 Standardization of Location

In Paragraph 2, the second sentence pertaining to spacing and posted or 85th-percentile speed is new.
Paragraphs 7 through 9 pertaining to the order of priority for sign installation are new.

Section 2A.18 Mounting Height

As reflected in Paragraphs 2 through 4, the Traffic Manual “should” condition has been changed to “shall”.

As shown in Paragraph 4, last sentence, the Traffic Manual “1.8 m (6ft)” criteria is changed to “2.1 m (7ft)”.

Section 2A.19 Lateral Offset

Paragraph 1 requiring minimum lateral offset of 6 ft is new.

Section 2A.21 Posts and Mountings

Paragraphs 3 and 4 referring to a strip of retroreflective material are new.

Figure 2A-1(CA). Heights and Lateral Locations of Signs for Typical Installations

This CA Supplement figure has been modified from the Traffic Manual Figure 4-1 to match the MUTCD adopted Sections 2A.18 and 2A.19.

Figure 2A-2(CA). Typical Locations for Signs at Intersections

This CA Supplement figure is new and is based on the MUTCD Figure 2A-2.

Table 2A-1(CA) Illumination of Sign Elements

The Traffic Manual Section 4-01.17 text is presented in tabular format in this CA Supplement table.

The fourth row pertaining to LEDs is new.

Table 2A-2. Retroreflection of Sign Elements

This MUTCD table matches the Traffic Manual Section 4-01.18 text.

Table 2A-3. Use of Sign Shapes

This MUTCD table matches the Traffic Manual Section 4-01.10 text.

Rows 7 and 10 pertaining to Crossbuck and Trapezoid shapes, respectively, are new.

Table 2A-4(CA) Common Uses of Sign Colors

The last column for Fluorescent Pink color is new.

Rows 16, 22 and 23 for Reference Location, Incident Management and Changeable Message Signs are new.

The asterisk note on the bottom of table is new.

Table 2A-4(CA) Common Uses of Sign Colors

The Traffic Manual Section 4-01.11 text is presented in tabular format in this CA Supplement table.

Traffic Manual Section 4-01.33 Relinquished State Highways

This section has been deleted and is not included in the CA Supplement.

Traffic Manual Section 4-01.34 Procedure for State Highways

This section has been deleted and is not included in the CA Supplement.

CHAPTER 2B. REGULATORY SIGNS

The following California regulatory signs have been deleted.

Code	Sign Title	Comments
R6-1	AUTOS WITH TRAILERS - TRUCKS 55 MAXIMUM	Replaced by CA Code R6-3 & R6-4
R6-2	TRUCKS - AUTOS WITH TRAILERS RIGHT 2 LANES ONLY	Replaced by CA Code R6-3A & R6-4A
R10	ONE WAY (Pentagon shape)	Use MUTCD R6-1 (Rectangular shape)
R16B	NO RIGHT TURN	Use MUTCD R3-1
R17B	NO LEFT TURN	Use MUTCD R3-2
R19	NO LEFT OR U TURN	Use MUTCD R3-18
R20E	SEMI OVER 38 FT KINGPIN TO REAR AXLE	Use CA Code R20-1 or SW48
R20-1	SEMI OVER 38 FT KINGPIN TO REAR AXLE with symbol	Symbol revised to show SEMI
R20-1A	NEXT EXIT	Changed to NEXT RIGHT
R34A	No U TURN	Use MUTCD R3-4
R41	RIGHT TURN ONLY	Use MUTCD R3-5R
R42	LEFT TURN ONLY	Use MUTCD R3-5L
R48	SPEED CHECKED BY RADAR	Changed to SPEED ENFORCED BY RADAR
R49	NO PED CROSSING - USE CROSSWALK	Use MUTCD R9-3a & R9-3b
R49A	NO PED CROSSING - CROSS HERE	Use MUTCD R9-3a & R9-3b
R67A	2 WAY TURN LANE	Use only the symbol sign
R82	BUS CARPOOL LANE (HOV) AHEAD	Refer Caltrans HOV Guidelines 2003 Edition
R83	(HOV) BUS CARPOOL LANE AHEAD	Refer Caltrans HOV Guidelines 2003 Edition
R83A	6AM-9AM MON-FRI	Refer Caltrans HOV Guidelines 2003 Edition
R84	BUS CARPOOL LANE (HOV) ENDS	Refer Caltrans HOV Guidelines 2003 Edition
R84A	___ MILE	Refer Caltrans HOV Guidelines 2003 Edition
R85	(HOV) BUS CARPOOL LANE ENDS	Refer Caltrans HOV Guidelines 2003 Edition
R86-1	(HOV) CENTER LANE BUSES AND CARPOOLS ONLY 6AM-9AM 3PM-6PM MON-FRI	Refer Caltrans HOV Guidelines 2003 Edition
R87	(HOV) BUSES AND CARPOOLS WITH 3 OR MORE 6AM-9AM (Down Arrow) MON-FRI	Refer Caltrans HOV Guidelines 2003 Edition
R91A	MOTORCYCLES OK	Refer Caltrans HOV Guidelines 2003 Edition
R91-2	(HOV) AUTOS WITH TRAILERS - TRUCKS - PROHIBITED	Changed to (HOV) NO TRUCKS OVER 5 TONS OR VEHICLES WITH TRAILERS
R93	CARPOOL IS 3 OR MORE PERSONS PER VEHICLE	Refer Caltrans HOV Guidelines 2003 Edition
R93-1	CARPOOL IS 3 OR MORE	Refer Caltrans HOV Guidelines 2003 Edition

	PERSONS PER VEHICLE	
R94A	MOTORCYCLES OK	Refer Caltrans HOV Guidelines 2003 Edition
R96A	NO PED XING	Use MUTCD R9-3
R96C	PEDESTRIANS PROHIBITED	Use MUTCD R9-3a
R100	SPECIAL PLACARD OR LICENSE PLATE REQUIRED	Use CA Code R100A
R100B	Disabled Tow-Away Plaque	Changed "physically Challenged" to "Disabled"
SR2-M	SPEED LIMIT 35 mph 56 km/h	1976 Metric sign never implemented
SR3-M	END 35 mph 56 km/h SPEED LIMIT	1976 Metric sign never implemented
SR4	SCHOOL SPEED LIMIT 25 WHEN CHILDREN ARE PRESENT	Use School Speed Limit Assembly C (MUTCD S4-3, R2-1 & S4-2)
SR14	SPEED ENFORCED BY AIRCRAFT (Plane symbol)	Use CA Code R48-2, no symbol
SR21-1	CAMPING PROHIBITED	
SR24-1	STOP ON RED SIGNAL	Use MUTCD R10-6
SR31	SCHOOL STOP CROSSING Paddle	Use CA Code C28A Paddle
SR36	CLOSED	Use MUTCD R11-2 sign
SR38	CARPOOL PARKING ONLY	Refer Caltrans HOV Guidelines 2003 Edition
SR50	CARPOOL VIOLATION \$____ MINIMUM FINE	Refer Caltrans HOV Guidelines 2003 Edition
SR52A	NO VEHICLES ON TRACKS	Use MUTCD R15-6a

Section 2B.02 Design of Regulatory Signs

Paragraph 3 referring to CMSs displaying red circle and slash is new.

Section 2B.03 Size of Regulatory Signs

This section is new.

Section 2B.04 STOP Sign (R1-1)

The Traffic Manual recommendation “Supplemental plaques should not be used at intersections with State highway” is deleted. The MUTCD requirement and option for supplemental plaques is adopted.

Section 2B.05 STOP Sign Applications

Paragraph 5 recommending manner of STOP sign installation to minimize vehicles having to stop, is new.

Paragraph 8 with sub-headings A through D is new.

The Traffic Manual Warrant #5 (page 4-41, safe approach speed less than 10 mph) has been deleted as it was based on MUTCD 1988. The MUTCD 2000 deleted this in its update to the MUTCD 1988.

Section 2B.06 STOP Sign Placement

In Paragraph 1, second sentence, the requirement to install Stop Ahead sign, the MUTCD “shall” is adopted as opposed to Traffic Manual (page 4-44) “should”.

In Paragraph 2, the requirement to install STOP sign as close as practical to the intersection, the MUTCD “shall” is adopted as opposed to Traffic Manual (page 4-44) “should”.

Paragraph 4 referring to DO NOT ENTER sign is new.

Paragraph 7 referring to only one STOP sign is new.
Paragraph 9 referring to marked crosswalk at the intersection is new.

Section 2B.07 Multi-Way Stop Applications

In Paragraph 4, sub-heading C.1, the Traffic Manual Warrant #3(a) (page 4-42) which was based on MUTCD 1988 changes “must average at least 500 vehicles” to “averages at least 300 vehicles”.

In Paragraph 4, sub-heading D is new.
Paragraph 5 with sub-headings A through D is new.

Section 2B.09 YIELD Sign Applications

In Paragraph 1, sub-headings A and B are new.
Paragraph 2 requiring YIELD sign at the entrance to a roundabout is new.
The Traffic Manual Warrant #1 (page 4-43, safe approach speed on the minor road exceeds 10 mph) has been deleted as it was based on MUTCD 1988. The MUTCD 2000 deleted this in its update to the MUTCD 1988.

Section 2B.10 YIELD Sign Placement

In Paragraph 1, third sentence, the requirement to install Yield Ahead sign, the MUTCD “shall” is adopted as opposed to Traffic Manual (page 4-44) “should”.
Paragraph 4 referring to DO NOT ENTER sign is new.
Paragraphs 8 through 10 (last 3) are new.

Section 2B.11 Yield Here To Pedestrians Signs (R1-5, R1-5a)

This section is new.

Section 2B.12 In-Street Pedestrian Crossing Signs (R1-6, R1-6a)

The R1-6 sign and its policy in this section are new. The R1-6a sign is deleted for application in California.

Section 2B.13 Speed Limit Sign (R2-1)

This section is new.

Section 2B.15 Night Speed Limit Sign (R2-3)

This section is new.

Section 2B.16 Minimum Speed Limit Sign (R2-4)

This section is new.

Section 2B.17 FINES HIGHER Plaque (R2-6)

This section is new.

Section 2B.18 Location of Speed Limit Signs

Paragraphs 1 and 2 are new.

Section 2B.20 Intersection Lane Control Signs (R3-5 through R3-8)

This section is new.

Section 2B.21 Mandatory Movement Lane Control Signs (R3-5, R3-5a, and R3-7)

This section is new.

Section 2B.22 Optional Movement Lane Control Sign (R3-6)

This section is new.

In CA Supplement, new policy for the Optional Movement Lane Control (R3-5 and CA Code R60B) signs has been added.

Section 2B.23 Advanced Intersection Lane Control Signs (R3-8 Series)

Paragraphs 2 and 3 are new.

Section 2B.24 Two-Way Left Turn Only Signs (R3-9a, R3-9b)

This section is new.

Section 2B.25 Reversible Lane Control Signs (R3-9d, R3-9f through R3-9i)

This section is new.

Section 2B.29 DO NOT PASS Sign (R4-1)

Paragraph 2 pertaining to signing on the left side is new.

In CA Supplement, new policy for KEEP RIGHT EXCEPT TO PASS (CA Code SR5-1) sign has been added.

Section 2B.30 PASS WITH CARE Sign (R4-2)

This section is new.

Section 2B.32 Slow Moving Traffic Lane Signs (R4-5, R4-6)

In CA Supplement, new policy for the PASSING LANE AHEAD (CA Code R68) sign has been added.

Section 2B.33 Keep Right and Keep Left Signs (R4-7, R4-8)

The Keep Left (R4-8) symbol sign is new.

Paragraph 3 requirement where traffic must pass to the left of the sign is new.

Section 2B.36 Selective Exclusion Signs

Most of this section is new.

In CA Supplement, Paragraphs 3 and 4 pertaining to alternative routes and advance signs have been added.

Section 2B.39 Parking, Standing, and Stopping Signs (R7 and R8 Series)

Most of this section is new.

In CA Supplement, new policies have been added for the following signs:

OK TO PARK ON BRIDGE (CA Code R22) sign

NO PARKING HERE TO CORNER (CA Code R26B) sign

NO PARKING HERE TO CORNER (CA Code R26C) sign

NO PARKING ON BRIDGE (CA Code R27) sign

NO PARKING ON BRIDGE (CA Code R27A) sign

SNOW NOT REMOVED BEYOND HERE (CA Code SR20-1) sign

Section 2B.40 Design of Parking, Standing, and Stopping Signs

Paragraph 6 pertaining to snow signs is new.

Paragraph 7 pertaining to van-accessible parking is new.

Paragraph 8 pertaining to blanket regulations is new.

Paragraph 9 pertaining to an alternate to the use of arrows is new.

Paragraph 12 pertaining to the words NO PARKING is new.

Paragraph 13 pertaining to alternate designs is new.

Section 2B.42 Emergency Restriction Signs (R8-4, R8-7, R8-8)

The EMERGENCY STOPPING ONLY (R8-7) sign is new.

Paragraph 3 requirement for shape and color is new.

Section 2B.43 WALK ON LEFT FACING TRAFFIC and No Hitchhiking Signs (R9-1, R9-4, R9-4a)

This section is new.

Section 2B.44 Pedestrian Crossing Signs (R9-2, R9-3)

The Standard requiring Pedestrian Crossing signs be installed to face pedestrian approaches is new.

Paragraph 3 pertaining to the optional use of R9-2 signs is new.

The last paragraph recommending not to install the R9-3b sign with educational plaques is new.

As shown in Paragraph 4, the Traffic Manual “shall” criteria (Page 4-71, R96 sign policy) is changed to “may” for the No Pedestrian Crossing (R9-3a) symbol sign.

Section 2B.45 Traffic Signal Signs (R10-1 through R10-21)

Paragraph 2 recommending that Traffic Signal signs be located adjacent to the signal face to which they apply is new.

Paragraphs 5 through 8 (second Option topic) are new.

Paragraphs 11 and 12 pertaining to the NO TURN ON RED sign recommendations are new.

Paragraph 16 requiring EMERGENCY SIGNAL sign to be installed in conjunction with emergency-vehicle traffic control signals is new.

Section 2B.46 Photo Enforced Signs (R10-18, R10-19)

This section is new.

Section 2B.48 ROAD CLOSED Sign (R11-2) and LOCAL TRAFFIC ONLY Signs (R11-3 Series, R11-4)

Paragraph 3, first sentence, requiring horizontal shape of Road Closed signs is new.

Section 2B.50 Weigh Station Signs (R13 Series)

The MUTCD section is new.

Section 2B.51 TRUCK ROUTE Sign (R14-1)

As shown in Paragraph 1, the Traffic Manual “may” criteria (Page 4-56, R35 sign policy) is changed to “should” for the TRUCK ROUTE sign.

Section 2B.52 Hazardous Cargo Signs (R14-2, R14-3)

New policies have been added for NO EXPLOSIVES OR FLAMMABLES (CA Code SR18) and EXPLOSIVES AND CORROSIVES PROHIBITED WITHOUT PERMIT (CA Code SR19-1) signs.

Section 2B.108 NO FISHING (JUMPING) FROM BRIDGE Sign (CA Code R23)

New policies have been written for this sign, as it was included in the Traffic Sign Specifications without policy.

Section 2B.117 Bus and Truck Registration Sign (CA Code SR44)

New policies have been written for this sign, as it was included in the Traffic Sign Specifications without policy.

Section 2B.118 Double Fine Zone Signs (CA Code SR53, SR54 and SR55)

New policies have been written for these signs, as they were included in the Traffic Sign Specifications without policy.

Section 2B.119 Garbage Prohibition Signs (CA Code SR22-1 and SR23-1)

New policies have been written for these signs, as they were included in the Traffic Sign Specifications without policy.

Figure 2B-1. STOP, YIELD, Speed Limit, FINES HIGHER, and Photo Enforcement Signs

The R2-3, R2-6, R10-18 and R10-19 signs are new.

Figure 2B-2. Unsignalized Pedestrian Crosswalk Signs

The R1-5, R1-5a and R1-6 signs are new.

Figure 2B-3. Speed Limit and Turn Prohibition Signs

The R2-4 and R2-4a signs are new.

Figure 2B-5. Center and Reversible Lane Control Signs

This figure is new.

Figure 2B-6. Location of Reversible Two-Way Left-Turn Signs

This figure is new.

Figure 2B-8. Passing, Keep Right, and Truck Lane Signs

The R4-9 sign is new.

Figure 2B-9. Traffic Prohibition Signs

The R5-4, R5-5, R5-7, R5-8 and R5-10b signs are new.

Figure 2B-11. ONE WAY and Divided Highway Crossing Signs

As shown in this MUTCD figure, the rectangular shape of the ONE WAY (R6-1) sign is adopted instead of the pentagon shape of the Traffic Manual (page 4-47, R10 sign).

Figure 2B-12. Examples of Locations of ONE WAY Signs

This figure is new.

Figure 2B-13 (CA). Examples of ONE WAY Signing for Divided Highways with Medians of 9 m (30 ft) or Greater

This figure is new.

Figure 2B-14 (CA). Examples of ONE WAY Signing for Divided Highways with Medians Less Than 9 m (30 ft)

This figure is new.

Figure 2B-16. No Parking Signs (R7 Series)

Except for the VAN ACCESSIBLE (R7-8a and R7-8b) signs, all other signs are new.

Figure 2B-17. No Parking Signs (R8 Series)

Except for the R8-3a, R8-3d and R8-4 signs, all other signs are new.

Figure 2B-18. Pedestrian Signs

Except for the R9-3a, R9-3b, R10-3, R10-4 and R10-4b signs, all other signs are new.

Figure 2B-19. Traffic Signal Signs

The R10-5, R10-8, R10-10, R10-11, R10-13, R10-15, R10-20a and R10-21 signs are new.

Figure 2B-20. Road Closed and Weight Limit Signs

The R11-3b sign is new.

Figure 2B-21. Truck Signs

The R13-1 sign is new.

Figure 2B-101. California Regulatory Signs

This figure is new.

Table 2B-1. Regulatory Sign Sizes

This table is new.

Table 2B-2. Meanings of Symbols and Legends on Reversible Lane Control Signs

This table is new.

Table 2B-101. List of California Regulatory Signs

This table is new.

CHAPTER 2C. WARNING SIGNS

The following California warning signs have been deleted.

Code	Sign Title	Comments
W16	GROOVED PAVEMENT	Changed to SW45 on 6/17/87, change wasn't reflected in 1996 TM
W53	NOT A THROUGH STREET	Use MUTCD W14-1
W54	Ped Crossing Symbol w/Crosswalk Lines	Use MUTCD W11-2 & W16-7P
W65-1	END SCHOOL ZONE (Black on Yellow)	Use MUTCD S5-2 (Black on White)
W66	School Crossing Symbol w/Crosswalk Lines	Use MUTCD S1-1 & W16-7P
W66A	SCHOOL XING	Use MUTCD S1-1 & W16-7P
W73	RIGHT LANE MUST EXIT AHEAD	Changed to RIGHT LANE EXITS AHEAD on 7/15/96
W75A	(HOV) LANE ENDS MERGE RIGHT	Use CA Code W75-1
W80	XING	Use W11 series symbol signs and/or W16-7p arrow plaque.
W82A	TROLLEY XING	Use CA Code W82
W84	TURNOUT 1/4 MILE	Never approved
SW1-1	TRAFFIC FROM RIGHT(LEFT) DOES NOT STOP	Use MUTCD W4-4P with alternate message per section 2C.50.
SW1-2	OPPOSING TRAFFIC DOES NOT STOP	Use MUTCD W4-4P with alternate message per section 2C.50.
SW6-M	40 mph - 64 km/h	1976 Metric sign never implemented
SW8-1	TRUCKS CROSSING TO SCALES	
SW14-1	FLOODED DURING STORM	Use CA Code W55B
SW18-2.1	VERTICAL CLEARANCE ___ FT. ___ IN.	Use MUTCD W12-2
SW21-1	FIRE STATION WATCH FOR TRUCKS	Use MUTCD W11-8
SW21A	FIRE STATION	Use MUTCD W11-8
SW21C	FIRE STATION	Use MUTCD W11-8
SW24	School Symbol - SCHOOL	Use MUTCD S1-1
SW25	School Symbol - SCHOOL XING	Use MUTCD S1-1 & W16-7P
SW27	Skewed RR Crossing symbol with Motorcycle symbol	Use MUTCD W10-12
SW27-1	Skewed RR Crossing symbol with Motorcycle & Bike symbol	Use MUTCD W10-12
SW28	STEEL DECK with Motorcycle symbol	Changed to STEEL BRIDGE DECK
SW29	NARROW SUBWAY	
SW30	ISLANDS	
SW31	DIPS	Use MUTCD W8-2 with W7-3a NEXT X Miles plaque
SW42	Double Head Arrow (Diamond	Use MUTCD W1-7

	shape)	
SW43	Single Head Arrow (Diamond shape)	Use MUTCD W1-6
SW48-1	NEXT EXIT	Changed to NEXT RIGHT
SW53	___ WAY SIGNAL	
SW54	HOV On-Ramp Lane Assignment	Refer Caltrans HOV Guidelines 2003 Edition
SW56A	GOLF CART XING	Use MUTCD W11-11
SW72-M	EXIT 30 mph 48 km/h	1976 Metric sign never implemented

Section 2C.02 Application of Warning Signs

Paragraph 2 recommending that use of warning signs be kept to a minimum and covering or removal of warning signs for seasonal or temporary activity, is new.

Paragraph 5 option to develop word messages other than those specified, is new.

Section 2C.03 Design of Warning Signs

Paragraph 1, second sentence, requiring warning signs to be designed in accordance with the Standard Highway Signs book, is new.

Section 2C.04 Size of Warning Signs

Paragraph 1 requiring size of warning signs per Table 2C-2, is new.

Paragraph 6 requiring minimum size for supplemental plaques per Table 2C-3, is new.

Paragraph 7 option to use larger sizes is new.

Section 2C.05 Placement of Warning Signs

Paragraph 4 and 5 recommending that warning signs be placed to provide adequate PIEV time, are new.

Paragraph 7 option for installing warning signs at appropriate location for conditions not related to a specific location, is new.

Section 2C.06 Horizontal Alignment Signs (W1-1 through W1-5, W1-11, W1-15)

Paragraph 2 option for the Hairpin Curve (W1-11) sign is new.

Paragraph 3 option for the 270-degree Loop (W1-15) sign is new.

Paragraph 5 recommending the use of One-Direction Large Arrow or Chevron Alignment sign in conjunction with the Hairpin Curve or 270-degree Loop sign, is new.

Paragraph 7 requiring the use of one of the horizontal alignment signs, is new.

Paragraph 8 option pertaining to reduction in speed is new.

Section 2C.08 Combination Horizontal Alignment/Intersection Sign (W1-10)

This section is new.

Section 2C.09 One-Direction Large Arrow Sign (W1-6)

Paragraphs 2 through 4 requiring the horizontal rectangle shape, installation on the outside of a curve and prohibiting the use when there is no alignment change, are new.

Paragraph 5 recommending adequate visibility is new.

Section 2C.10 Chevron Alignment Sign (W1-8)

Paragraph 2, second sentence, prohibiting the use of border is new.

Paragraphs 3 requiring the installation on the outside of a curve, is new.

Paragraph 4 option to use on the far side of an intersection is new.

Section 2C.11 Truck Rollover Warning Sign (W1-13)

This section is new.

Section 2C.12 Hill Signs (W7-1, W7-1a, W7-1b)

Paragraph 2 recommending the use of Hill signs, Condition A is new.

Paragraph 6 option to use word message HILL instead of the symbol sign and to include percent grade message is new.

Section 2C.13 Truck Escape Ramp Signs (W7-4 Series)

Paragraph 2 requiring at least one of the W7-4 signs is new.

Section 2C.14 HILL BLOCKS VIEW Sign (W7-6)

This section is new.

Section 2C.15 ROAD NARROWS Sign (W5-1)

As shown in Paragraph 1, the Traffic Manual “may” criteria (Page 4-20, W15 sign policy) is changed to “should” for the ROAD NARROWS sign.

Section 2C.17 ONE LANE BRIDGE Sign (W5-3)

As shown in Paragraph 1, the Traffic Manual “shall” criteria (Page 4-25, W36 sign policy) is changed to “should” for the ONE LANE BRIDGE sign.

Section 2C.18 Divided Highway (Road) Sign (W6-1)

As shown in Paragraph 1, the Traffic Manual “may” criteria (Page 4-22, W25 sign policy) is changed to “should” for the Divided Highway sign.

Section 2C.19 Divided Highway (Road) Ends Sign (W6-2)

As shown in Paragraph 1, the Traffic Manual “shall” criteria (Page 4-22, W26 sign policy) is changed to “should” for the Divided Highway Ends sign.

Section 2C.21 DEAD END/NO OUTLET Signs (W14-1, W14-1a, W14-2, W14-2a)

The DEAD END (W14-1) sign is new.

Paragraph 4 requiring the location of posting the DEAD END or NO OUTLET signs, is new.

Paragraph 5 requirement pertaining to W14-1a and W14-2a signs is new.

Section 2C.24 SPEED HUMP Sign (W17-1)

This section is new.

Section 2C.26 Shoulder Signs (W8-4, W8-9, and W8-9a)

Most of this section is new.

Section 2C.28 BRIDGE ICES BEFORE ROAD Sign (W8-13)

This section is new.

Section 2C.29 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4)

As shown in Paragraph 1, the Traffic Manual “should” criteria (W17, W28 & W41 sign policies on pages 4-21, 4-22 & 4-26) is changed to “shall” for the Advance Traffic Control symbol signs. Paragraph 1, third sentence, the visibility requirement is new.

Paragraph 3 recommending the use of engineering judgement is new.

Paragraph 4 option to use Advance Traffic Control signs for additional emphasis is new.

Paragraph 6 option to use supplemental street name plaques is new.

Paragraph 8 option to use the BE PREPARED TO STOP sign is new.
Paragraph 9 requiring that when used, the BE PREPARED TO STOP sign would be in addition to the Signal Ahead sign is new.
The BE PREPARED TO STOP (W3-4) sign and policy are new for California.

Section 2C.30 Speed Reduction Signs (W3-5, W3-5a)

This section is new.

Section 2C.31 Merge Signs (W4-1, W4-5)

Paragraph 4 recommending the use of Merge sign on each roadway that is of equal importance, is new.

Paragraph 5 recommendation pertaining to the Entering Roadway Merge (W4-5) sign is new.

Section 2C.32 Added Lane Signs (W4-3, W4-6)

Paragraph 2 recommendation pertaining to the Entering Roadway Added Lane (W4-6) sign is new.

Section 2C.34 Two-Way Traffic Sign (W6-3)

Paragraph 2 recommending the W6-3 sign with an AHEAD plaque to warn of a transition, is new.

Section 2C.36 Advisory Exit, Ramp, and Curve Speed Signs (W13-2, W13-3, W13-5)

As shown in Paragraph 5 of the CA Supplement, the Traffic Manual “shall” criteria (Page 4-36, W72A sign policy) is changed to “should” for the Advisory Ramp Speed (W3-3) sign to be consistent with the Advisory Exit Speed (W13-2) sign (Page 4-36, W72 sign policy).

Section 2C.37 Intersection Warning Signs (W2-1 through W2-6)

Paragraph 1, second sentence, the option pertaining to Circular Intersection (W2-6) symbol sign and the TRAFFIC CIRCLE educational plaque are new.

Paragraph 2 option to show different widths of lines is new.

Section 2C.38 Two-Direction Large Arrow Sign (W1-7)

Paragraphs 1 through 3 requiring the horizontal rectangle shape, installation on the far side of a T-intersection and prohibiting the use when there is no change in the direction of travel, are new.

Paragraph 4 recommending adequate visibility is new.

Section 2C.40 Vehicular Traffic Signs (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12P, W11-14)

Paragraph 6 requiring Emergency Vehicle sign with EMERGENCY SIGNAL AHEAD plaque in advance of emergency-vehicle traffic control signals, is new.

The Farm Vehicle (W11-5a), Truck (W11-10), EMERGENCY SIGNAL AHEAD (W11-12p) and Horse-drawn Cart (W11-4) signs are new.

Section 2C.41 Nonvehicular Signs (W11-1, W11-2, W11-3, W11-4, W16-7P)

As shown in Paragraph 1, the Traffic Manual “should” criteria (Page 4-35, W68 sign policy) is changed to “may” for the Deer symbol sign for consistency with other crossing signs.

As shown in Paragraph 3, the Traffic Manual “should” criteria (Page 4-36, W71 sign policy) is changed to “may” for NEXT ___ MILES supplemental plaque.

Paragraph 4 requiring that Nonvehicular signs be supplemented with a diagonal pointing arrow at the crossing is new. This requirement is different from the Traffic Manual (crosswalk lines shown on the CA Code W54 sign, page 4-30). This new MUTCD requirement is being adopted. The Pedestrian Crossing symbol (MUTCD Code W11A-2) sign (CA Code W54) is deleted.

Paragraph 7 recommending a systematic approach for FYG or Y background color is new.
Paragraph 8 recommending the use of Nonvehicular signs only at unexpected or not readily apparent locations of crossing activity, is new.
The W11-9 sign is new.

Section 2C.42 Playground Sign (W15-1)

New MUTCD sign and section.

Section 2C.43 Use of Supplemental Plaques

This section is new.

Section 2C.44 Design of Supplemental Plaques

This section is new.

Section 2C.45 Distance Plaques (W16-2 series, W16-3 series, W16-4, W7-3a)

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 4-36, W71 sign policy) is changed to “may” for NEXT ___ MILES supplemental plaque.

The W34A (CA Code) policy has been revised to make it applicable for wider application with other warning signs.

Section 2C.46 Advisory Speed Plaque (W13-1)

Paragraph 5 recommending periodic evaluation of the Advisory speed plaque is new.

Paragraph 6 option that advisory speed be based on 85th-percentile, 16-degree ball-bank indicator or engineering study, is new.

Paragraph 7 changing the 10-degree ball-bank criteria to 16-degree is new. The Traffic Manual used the 10-degree ball-bank criteria; the new MUTCD 16-degree is adopted and reflected in the CA Supplement section and figures.

Section 2C.47 Supplemental Arrow Plaques (W16-5p, W16-6p, W16-7p)

This section and plaques are new.

Section 2C.52 High-Occupancy Vehicle (HOV) Plaque (W16-11)

This section is new.

Section 2C.53 PHOTO ENFORCED Plaque (W16-10)

This section is new.

Figure 2C-1. Horizontal Alignment Signs

The W1-10, W1-11, W1-13 and W1-15 signs are new.

Figure 2C-2. Vertical Grade Signs

The W7-1a, W7-2, W7-4c, W7-4d, W7-4e, W7-4f and W7-6 signs are new.

Figure 2C-3. Miscellaneous Warning Signs

The W14-1, W14-1a and W14-2a signs are new.

Figure 2C-4. Roadway Condition and Advance Traffic Control Signs

The W3-4, W8-7, W8-9a, W8-12, W8-13, W17-1 signs are new.

Figure 2C-5. Advisory Speed and Speed Reduction Signs

The W3-5 and W3-5a signs are new.

Figure 2C-6. Merging and Passing Signs

The W4-5, W4-6, W9-1 and W16-9p signs are new.

Figure 2C-7. Example of Advisory Speed Signing for an Exit Ramp

This figure is new.

Figure 2C-8. Intersection Warning Signs

The W2-3, W2-6 and W16-12p signs are new.

Figure 2C-9. Vehicular Traffic Signs

The W11-5a, W11-10, W11-12p and W11-4 signs are new.

Figure 2C-10. Nonvehicular Traffic Signs

The W11-9 and W15-1 signs are new.

Figure 2C-11. Supplemental Warning Plaques

Except for the W16-1 sign, all other signs are new.

Figure 2C-101. California Warning Signs

This figure is new.

Figure 2C-102. Determination of Comfortable Speed From Ball Bank Indicator Readings

The Traffic Manual Figure 4-2 has been modified to show the new MUTCD 16-degree ball-bank criteria.

Figure 2C-103. Comfortable Speed on Horizontal Curves

The Traffic Manual Figure 4-3 has been modified to show the new MUTCD 16-degree ball-bank criteria.

Table 2C-1. Categories of Warning Signs

This table is new.

Table 2C-2. Warning Sign Sizes

This table is new.

Table 2C-3. Minimum Size of Supplemental Warning Plaques

This table is new.

Table 2C-4. Guidelines for Advance Placement of Warning Signs

This table is new.

Table 2C-5. Horizontal Alignment Sign Usage

This table is new.

Table 2C-101. List of California Warning Signs

This table is new.

CHAPTER 2D. GUIDE SIGNS – CONVENTIONAL ROADS

The following California guide signs have been deleted.

Code	Sign Title	Comments
G7-3	Street Name (FAIR OAKS BLVD)	Use MUTCD D3-1
G18	MT. WHITNEY FISH HATCHERY	
G22	SALINAS TURNOFF 1/4 MILE	Changed to SALINAS RIGHT TURN 1/4 MILE
G32-1	3-Head Arrow	Use MUTCD M6 Series
G62	SPEEDOMETER CHECK AHEAD	
G63	MILE 0	
G64	END CHECK	
G66-14A	EMERGENCY MEDICAL CARE	Use MUTCD D9-13c
G66-16	Hospital symbol - HOSPITAL	Use MUTCD D9-2
G66-20	NATURAL GAS	Use CA Code G66-22A, G66-22B or G81-52
G66-21B	NEXT EXIT	Use CA Code G58
G70	PASSING LANE AHEAD	Use CA Code G69 with AHEAD option
G70-1	445A	Use CA Code G70 series only
G70-2.2	EXIT 444	Use CA Code G70-2
G70-3.2	EXIT 445A	Use CA Code G70-3
G77A	NORTH (Route No.) SOUTH - LEFT LANE	Deleted inadvertently, will be included in Supplement
G81-1	HIGHWAY PATROL	Use CA Code G66-57
G81-4	PHONE WATER	Use MUTCD D9-1 and RG-050
G81-7	HOSPITAL PHONE with Arrows	Use MUTCD D9-1 & D9-2 with M6 series
G81-9	HOSPITAL WATER PHONE with Arrows	Use MUTCD D9-1, D9-2 & RG-050 with M6 series
G81-11	HOSPITAL WATER PHONE with Arrows	Use MUTCD D9-1, D9-2 & RG-050 with M6 series
G81-13	HOSPITAL WATER PHONE with Arrows	Use MUTCD D9-1, D9-2 & RG-050 with M6 series
G81-15	HOSPITAL WATER PHONE with Arrows	Use MUTCD D9-1, D9-2 & RG-050 with M6 series
G81-17	HIGHWAY PATROL NEXT RIGHT	Use CA Code G66-57 & G58
G81-27	CARPOOL VANPOOL INFO CALL ...	Use CA Code SG19 or SG20
G81-58	HOSPITAL	Use MUTCD D9-2
G91-1	SKIING	Use MUTCD RS-030, RS-040 or RS-050
G91-4	CAMPING BOATING	Use MUTCD RM-010, RM-020, RW-070, RW-080, RW-090 or RW-100
G91-7	CAMPING SKIING with Arrows	Use MUTCD RS-030, RS-040, RS-050, RM-010 or RM-020 with M6 series
G91-9	CAMPING PICNICKING BOATING with Arrow	Use MUTCD RM-010, RM-020, RM-120, RW-070, RW-080, RW-090 or RW-100 with M6 series
G91-11	SKIING BOATING CAMPING with Arrows	Use MUTCD RW-110, RM-010, RM-020, RW-070, RW-080, RW-090 or RW-100 with M6 series

G91-13	PICNICKING BOATING CAMPING with Arrow	Use MUTCD RM-010, RM-020, RM-120, RW-070, RW-080, RW-090 or RW-100 with M6 series
G91-15	BOATING SKIING PICNICKING with Arrows	Use MUTCD RW-110, RM-120, RW-070, RW-080, RW-090 or RW-100 with M6 series
G91-17	PICNICKING NEXT RIGHT	Use MUTCD RM-120 with CA Code G58
G91-19	CAMPGROUND 1/4 MILE	Use MUTCD RM-010 with Distance plaque
G94-3	AIRPORT	Use MUTCD I-5 or CA Code G94-1
G95	PARK & RIDE with symbol and Arrow	Use CA Code G95A with MUTCD M6 series or CA Code G95B
G95A	PARK & RIDE with symbol	Symbol modified to match MUTCD symbol
G95B	PARK & RIDE NEXT RIGHT with symbol	Symbol modified to match MUTCD symbol
G95E	PARK & RIDE with symbol	Symbol modified to match MUTCD symbol
G97A-2	CALTRAIN	Use CA Code G97A with CALTRAIN option
SG11	STATE FIRE STATION	Use CA Code SG38
SG12	STATE RANGER HDQTRS	Use MUTCD RG-170
SG13	INTERMOUNTAIN CONSERVATION CAMP	
SG19	RIDESHARING INFO CALL 1- 800-COMMUTE with symbol	Symbol modified to match MUTCD symbol
SG20	RIDESHARING INFO CALL 1- 800-COMMUTE with symbol THIS SPACE...	Symbol modified to match MUTCD symbol
SG36	BUCKLE UP with symbol	Use MUTCD seat belt symbol
SG37	HIGHWAY MAINTENANCE COURTESY OF ---	Use CA Code S32 series
SG40	CALL BOX ___ MILE SPACING NEXT ___ MILES	
SG46	MOTORIST AID CALL BOX AHEAD	
SG49	CALL 511 TRAVEL INFO	Use MUTCD D12-5
S4-1.1	THIS FOUNTAIN HAS BEEN CONSTRUCTED...	
S11-1	LITTER REMOVAL NEXT 2 MILES (with Plaque)	Use CA Code S32 series
S11-2	WILDFLOWERS (with Plaque)	Use CA Code S32 series
S11-3	TREE PLANTING (with Plaque)	Use CA Code S32 series
S11A	ADOPT-A-HIGHWAY	Use CA Code S32 series
S13	CARE FOR CALIFORNIA with Symbol	
S14	CARE FOR CALIFORNIA with Symbol	
S15	CARE FOR CALIFORNIA with Symbol	
S31	HIGHWAY WORKERS - GIVE 'EM A BRAKE	

Section 2D.01 Scope of Conventional Road Guide Sign Standards

This section and Standard is new.

Section 2D.03 Color, Retroreflection, and Illumination

Paragraphs 3, 4, 5 and 6 pertaining to color coding of destinations on signs are new.

Section 2D.04 Size of Signs

Paragraph 3 recommending not to use reduced spacing between letters or words, is new.

Section 2D.05 Lettering Style

This section and Standard is new.

Section 2D.06 Size of Lettering

This section is new. The minimum letter and numeral sizes requirement is new.

Section 2D.08 Arrows

As shown in Paragraph 3, the Traffic Manual “should” criteria (Page 4-95, paragraph 3 second sentence) is changed to “shall” for the up arrow.

Section 2D.09 Numbered Highway Systems

This MUTCD section is new.

New text for Business Routes has been added in CA Supplement from HDM.

Section 2D.10 Route Signs and Auxiliary Signs

Paragraph 2 requirement for signs on each system of numbered highways, is new.

Paragraph 4 option for proportionally larger sizes is new.

Section 2D.11 Design of Route Signs

Most of this section is new.

Section 2D.12 Design of Route Sign Auxiliaries

Most of this section is new.

Section 2D.14 Combination Junction Sign (M2-2)

This section is new.

Section 2D.15 Cardinal Direction Auxiliary Signs (M3-1 through M3-4)

As shown in Paragraph 1, the Traffic Manual “may” criteria (Page 4-113, G47 thru G50 sign policies, second sentence) is changed to “should” for the use of the Cardinal Direction auxiliary sign.

Paragraph 2 requiring first letter to be ten percent larger, is new.

As shown in Paragraph 3, the Traffic Manual “should” criteria (Page 4-113, G47 thru G50 sign policies, second sentence) is changed to “shall” for the mounting of the Cardinal Direction auxiliary sign.

Section 2D.16 Auxiliary Signs for Alternative Routes (M4 Series)

Paragraph 2 requirement for mounting of the auxiliary sign is new.

Section 2D.18 BY-PASS Auxiliary Sign (M4-2)

This section is new.

Section 2D.19 BUSINESS Auxiliary Sign (M4-3)

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 4-113, G55 sign policy, second paragraph) is changed to “shall” for the mounting of the BUSINESS auxiliary sign.

Section 2D.20 TRUCK Auxiliary Sign (M4-4)

This section is new.

Section 2D.21 TO Auxiliary Sign (M4-5)

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 4-114, G59 sign policy, second paragraph) is changed to “shall” for the mounting of the TO auxiliary sign.

Section 2D.22 END Auxiliary Sign (M4-6)

As shown in Paragraph 1, the Traffic Manual “may” criteria (Page 4-114, G57 sign policy, first paragraph) is changed to “should” for the use of the END auxiliary sign.

Section 2D.23 TEMPORARY Auxiliary Sign (M4-7)

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 4-113, G51 sign policy, second paragraph) is changed to “shall” for the mounting of the TEMPORARY auxiliary sign.

Section 2D.24 Temporary Detour and Auxiliary Signs

This section is new.

Section 2D.25 Advance Turn Arrow Auxiliary Signs (M5-1, M5-2)

As shown in Paragraph 1, the Traffic Manual “should” criteria (Page 4-113, Route Shield Arrow Plates policy, second paragraph) is changed to “shall” for the mounting of the Advance Turn Arrow auxiliary sign.

Section 2D.26 Directional Arrow Auxiliary Signs (M6 Series)

As shown in Paragraph 1, the Traffic Manual “should” criteria (Page 4-113, Route Shield Arrow Plates policy, second paragraph) is changed to “shall” for the mounting of the Directional Arrow auxiliary sign.

Section 2D.27 Route Sign Assemblies

This section is new.

Section 2D.28 Junction Assembly

This section is new.

Section 2D.29 Advance Route Turn Assembly

As shown in Paragraph 3 of the CA Supplement Section, the Traffic Manual “should” (Page 4-109, G21 and page 4-118, G77A sign policies) conditions are changed to “shall” as stated in Traffic Manual (Page 4-109, G20 sign policy) to be consistent with G20, G21 and G77 series of signs.

Section 2D.30 Directional Assembly

Paragraph 1 requiring the use of Directional assemblies is new.

Section 2D.31 Confirming or Reassurance Assemblies

This section is new.

Section 2D.32 Trailblazer Assembly

As shown in Paragraph 2, the Traffic Manual “will be adequate” criteria (Page 4-79, Section 4-04.7.1, right column, third paragraph) is changed to “shall” for the assembly components.

Section 2D.36 Distance Signs

As shown in Paragraph 1, the Traffic Manual “should” criteria (Page 4-103, G5 sign policy, first sentence) is changed to “If used” for the Distance sign.

Section 2D.38 Street Name Sign (D3)

As shown in this section, the Traffic Manual “shall 4 in upper case and 3 in lower case” criteria (Page 4-104, G7 sign policy) is changed to MUTCD “should 6 in. (8 in. for multi-lane streets) upper case and 4.5 in. (6 in. for multi-lane streets) lower case”. Also, the Traffic Manual “2 in. for supplementary lettering (St., Ave., Blvd.)” criteria is changed to MUTCD “3 in. minimum”.

Section 2D.39 Advance Street Name Signs (D3-2)

This section is new.

Section 2D.41 PARK & RIDE Sign (D4-2)

Most of the MUTCD section is new.

Section 2D.44 Weigh Station Signing (D8 Series)

This section is new.

Section 2D.45 General Service Signs (D9 Series)

As shown in Paragraph 9, the Traffic Manual “should” criteria (Page 4-119, G81 Series sign policy, third paragraph) is changed to “shall” prohibiting intermixing of symbols and words. The TRAVEL INFO CALL 511 (D12-5) sign and policy are new.

In the CA Supplement Section, STAA Truck Service and Terminal Access Signs (CA Codes G66-55 and G66-56) policies have been revised and enhanced.

Section 2D.46 Reference Location Signs (D10-1 through D10-3) and Intermediate Reference Location Signs (D10-1a through D10-3a)

This section is new.

Section 2D.48 General Information Signs (I Series)

As shown in Paragraph 4, the Traffic Manual “4.8 Km” criteria (Page 4-122, G94 sign policy, first paragraph) is changed to “25 km” for the distance to airports for signing.

As shown in the CA Supplement section, the “shall” (CA Code G81-61 and G81-62 sign policy in Traffic Sign Specifications) condition is being corrected to “may” (based on the Streets and Highways Code, Section 101.1).

The Recycling Collection Center symbol sign is new.

Section 2D.51 Crossover Signs (D13 Series)

This section is new.

Section 2D.52 National Scenic Byways Signs (D6-4, D6-4a)

This section is new.

Section 2D.103 Advance Turn Sign (CA Code G22)

This sign is being revised to exclude “TURNOFF” and use “RIGHT TURN” or “LEFT TURN” only to be consistent with MUTCD.

Section 2D.105 NEXT RIGHT/LEFT Auxiliary Sign (CA Code G58)

The Traffic Manual (Page 4-82, Section 4-04.12.2 first paragraph third sentence) states “A Next Exit sign should be used on freeways. A Next Right/Left sign, as appropriate, should be used on expressways.” The Traffic Manual (Page 4-114, G58 sign policy second paragraph) states “The Next Exit version of the sign may be used on freeways...”. The Traffic Manual (Page 4-115, G66 sign policy third paragraph second sentence) states “..the Next Exit sign should be used on freeway installations...”. The Traffic Manual (Page 4-117, G76 sign policy first paragraph last sentence) states “A Next Exit message may be used on freeways”. The Traffic Manual (Page 4-121, G86 sign policy first paragraph second sentence) states “The Next Exit sign may be used on freeways”. Further, the Traffic Manual (in the above references) uses the NEXT RIGHT/LEFT for expressways and conventional highways.

The MUTCD Section 2E.32 and elsewhere, uses only the NEXT RIGHT/LEFT on freeways, expressways and conventional highways. Hence, the Traffic Manual special treatment of freeways is being deleted.

Figure 2D-1. Examples of Color-Coded Destination Guide Signs

This figure is new.

Figure 2D-3. Route Signs

M1-7 marker is new.

Figure 2D-4. Route Sign Auxiliaries

M2-2, M4-1a, M4-2 and M4-4 signs are new.

Figure 2D-5. Directional Arrow Auxiliary Signs

M6-5 and M6-7 signs are new.

Figure 2D-6. Illustration of Directional Assemblies and Other Route Signs

This figure is new.

Figure 2D-7. Destination and Distance Signs

This figure is new.

Figure 2D-8. Street Name and Parking Signs

This figure is new.

Figure 2D-9. Rest Area and Scenic Overlook Signs

Except for the D5-1 sign, all other signs are new.

Figure 2D-10. Example of Weigh Station Signing

This figure is new.

Figure 2D-11. General Service Signs

The D9-3, D9-4, D9-6, D9-10, D9-11a, D9-11b, D9-13a, D9-13b, D9-13c, D9-12, D9-15 and D9-16 signs are new.

Figure 2D-12. General Information Signs

The I1-2, I-6, I-8, I-11, D9-4, D12-1, D12-2, D12-3, D12-4, D12-5, D13-1 and D13-2 signs are new.

Figure 2D-13. Reference Location Signs

This figure and signs are new.

Figure 2D-14. Examples of Use of the National Scenic Byways Sign

This figure and signs are new.

Figure 2D-101. California Guide Signs

This figure is new.

Traffic Manual Figure 4-6: Trail-Blazing to Freeways - Typical Freeway Corridor

This figure is deleted.

Traffic Manual Figure 4-7: Typical Directional Signing

This figure is deleted. Use MUTCD Figure 2D-6.

Traffic Manual Figure 4-8: Sign Route Markers

This figure is deleted. Use MUTCD Figure 2D-6.

Traffic Manual Figure 4-9: Typical Overhead Signs

This figure is being incorporated into the Traffic Sign Specifications publication.

Table 2D-101. List of California Guide Signs

This table is new.

Table 2D-103. Criteria for Supplemental Destination Signs

New rows have been added for National Guard Armory, California Welcome Centers, Airports, Rail and Light Rail Stations. New note #7 for California Welcome Centers has been added.

Traffic Manual Tables 4-2 through 4-11

These Tables are being incorporated into the Traffic Sign Specifications publication.

CHAPTER 2E. GUIDE SIGNS – FREEWAYS AND EXPRESSWAYS

Section 2E.01 Scope of Freeway and Expressway Guide Sign Standards

This section is new.

Section 2E.02 Freeway and Expressway Signing Principles

This section is new.

Section 2E.03 General

Paragraph 2 requiring standard shapes and colors is new.

Section 2E.05 Retroreflection or Illumination

Paragraph 4 recommending illumination for overhead signs is new.

Section 2E.06 Characteristics of Urban Signing

This section is new.

Section 2E.07 Characteristics of Rural Signing

This section is new.

Section 2E.09 Amount of Legend on Guide Signs

As shown in Paragraph 1 first sentence, the Traffic Manual “shall” criteria (Page 4-82, Section 4-04.12.2, first paragraph, first sentence) is changed to “should” for the number of destinations shown on Advance Guide sign or Exit Direction sign.

Paragraph 2 option to include symbols, route numbers, arrows, cardinal directions, and exit instructions is new.

Section 2E.10 Number of Signs at an Overhead Installation and Sign Spreading

This section is new.

Section 2E.11 Pull-Through Signs

As shown in Paragraph 2 second sentence, the Traffic Manual “may” criteria (Page 4-110, G24 sign policy, second paragraph, first sentence) is changed to “should” for Pull-Through signs with down arrows.

Section 2E.12 Designation of Destinations

As shown in Paragraph 1 second sentence, the Traffic Manual “should be consistent” criteria (Page 4-82, Section 4-04.11, first sentence) is changed to “shall provide ...consistency” for successive freeway guide signs.

As shown in Paragraph 2 first sentence, the Traffic Manual “are used” criteria (Page 4-82, Section 4-04.11, paragraph 1, last sentence) is changed to “should be used” for control city legends.

Paragraph 2, sub-headings B and D recommendation for control city legends are new.

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

This section is new.

Paragraph 1 requires minimum letter sizes, use of MUTCD Tables 2E-1 through 2E-4, conditions for use of lower-case and upper-case letters and interline edge spacing.

Paragraph 2 requires similar treatment for rural and urban conditions.

Paragraph 5 recommends the initial upper-case letter be 1.33 times the “loop” height of the lower-case letters.

Section 2E.14 Interline and Edge Spacing

This section is new.

Section 2E.15 Sign Borders

This section is new.

Paragraph 1 requires border of the same color as the legend.

Paragraph 2 recommends 1.25 in. and 2 in. width for borders.

Paragraph 3 recommends corner radii for borders to be one-eighth of the minimum sign dimension.

Section 2E.16 Abbreviations

Paragraph 2 recommending not to use periods is new

Paragraph 3 prohibiting the abbreviating of NORTH, SOUTH, EAST and WEST is new.

Section 2E.17 Symbols

This section is new.

Paragraph 1 requires that symbols be similar to the Standard Highway Signs book.

Section 2E.18 Arrows for Interchange Guide Signs

Paragraph 2 requiring the use of downward pointing arrows is new.

Paragraph 3 option to tilt the downward arrows is new.

Section 2E.19 Diagrammatic Signs

Paragraph 2 sub-headings B, C and D requiring the criteria for design of diagrammatic signs are new.

As shown in Paragraph 3 (MUTCD page 2E-13, additional criteria), the Traffic Manual “shall” criteria (Page 4-98, Section 4-04.21.5, third paragraph as it applies to a through g) is changed to “should” for additional criteria for diagrammatic signs.

Section 2E.20 Signing for Interchange Lane Drops

As shown in Paragraph 5 first sentence, the Traffic Manual “should” criteria (Page 4-98, Section 4-04.21.6, second paragraph second sentence) is changed to “shall” for placement of EXIT ONLY panels on either side of a white down arrow.

Section 2E.21 Changeable Message Signs

In the CA Supplement Section, the use of CMSs for child abduction (AMBER) alert messages is new.

Section 2E.22 Overhead Sign Installations

This section is new.

Section 2E.23 Lateral Offset

Paragraph 1 requiring minimum lateral clearance of 6 ft. is new.

As shown in Paragraph 5, the Traffic Manual “should” criteria (Page 4-95, Section 4-04.19, third paragraph) is changed to “shall” prohibiting the use of butterfly-type sign supports in gores or other unprotected locations.

Section 2E.24 Guide Sign Classification

This section is new.

Section 2E.25 Route Signs and Trailblazer Assemblies

This section is new.

Section 2E.26 Signs for Intersections At Grade

This section is new.

Section 2E.27 Interchange Guide Signs

This section is new.

Section 2E.28 Interchange Exit Numbering

This section is new for California.

The CA Supplement Section is also new.

Section 2E.29 Interchange Classification

This section is new.

Section 2E.30 Advance Guide Signs

As shown in Paragraph 2 first sentence, the Traffic Manual “shall” criteria (Page 4-120, G83 sign policy, first paragraph, first sentence) is changed to “should” for the use of Advance Guide signs.

Paragraph 3 recommending diagrammatic signs for left exit, is new.

Paragraph 5 option for closer spacing of and duplicate Advance Guide signs is new.

Paragraph 6 recommending Interchange Sequence signs if interchanges are less than 800 ft apart, is new.

Section 2E.31 Next Exit Supplemental Signs

Paragraph 2 recommending not to use Next Exit signs if distance between interchanges is more than 5 mi. is new.

Paragraph 3 requirement is new.

Paragraph 4 option to display Next Exit on one or two lines, is new.

Section 2E.32 Other Supplemental Guide Signs

As shown in Paragraph 2, the Traffic Manual “shall” criteria (Page 4-82, Section 4-04.12.2, first paragraph, fifth sentence) is changed to “should” for use of Supplemental Guide sign.

As shown in Paragraph 3 first sentence, the Traffic Manual “shall” criteria (Page 4-82, Section 4-04.12.2, first paragraph, fifth sentence) is changed to “should” for number of destinations on Supplemental Guide sign.

Paragraph 5 recommending States to adopt policy for Supplemental Guide signs, is new.

Paragraph 6 requiring park and ride signs to be Supplemental Guide signs, is new.

Section 2E.33 Exit Direction Signs

Paragraph 2, second sentence, prohibiting the use of population figures on Exit Direction signs is new.

As shown in Paragraph 5 first sentence, the Traffic Manual “should” criteria (Page 4-97, Section 4-04.21.2, second paragraph, last sentence) is changed to “shall” for overhead placement of the Exit Direction sign.

Paragraph 6 provision requirements (sub-headings A, B and C) for design and application of Exit Direction signs, is new.

Paragraph 7 recommending placement of exit number plaques is new.

Paragraph 9 recommending location of Exit Direction signs is new.

Paragraph 10 option to use the Exit Direction sign on the face of the overhead structure is new.

Section 2E.34 Exit Gore Signs

As shown in Paragraph 2 second sentence, the Traffic Manual “should” criteria (Page 4-120, G84 sign policy, fifth sentence) is changed to “shall” for location of the Exit Gore sign.
Paragraph 3 second sentence, recommending similar treatment for each gore, is new.

Section 2E.35 Post-Interchange Signs

This section is new.

Section 2E.36 Distance Signs

This section is new.

Section 2E.37 Interchange Sequence Signs

As shown in Paragraph 1 first sentence, the Traffic Manual “may” criteria (Page 4-86, Section 4-04.14.2, first sentence) is changed to “should” for use of Interchange Sequence signs.

As shown in Paragraph 1, second sentence, the Traffic Manual “preferable” criteria (Page 4-87, Section 4-04.14.2, second paragraph first sentence) is changed to “should” for use of Interchange Sequence signs over the entire length of a route.

Paragraph 5 requirement is new.

As shown in Paragraph 6, the Traffic Manual “may” criteria (Page 4-87, Section 4-04.14.2, third paragraph first sentence) is changed to “shall” requiring LEFT or LEFT EXIT in black/yellow color for left exits.

Paragraph 9 requiring overhead sign height for Interchange Sequence signs is new.

The fourth paragraph for G23 sign policy in the Traffic Manual (Page 4-110) is deleted as it conflicts with the MUTCD recommendation in paragraph 8 and also with the actual practice of this sign in California.

Section 2E.39 NEXT X EXITS Signs

Paragraph 3 recommending identification of region or area is new.

Section 2E.40 Signing by Type of Interchange

This section is new.

Section 2E.41 Freeway-to-Freeway Interchange

Most of this section is new.

As shown in Paragraphs 4 and 5, the Traffic Manual criteria for a “should” for Overhead (OH) sign at the gore, 0.3 mile in advance and a cantilever sign 1.0 mile in advance (Page 4-97, Section 4-04.21.4, first paragraph) is changed to MUTCD criteria for a “shall” condition for OH sign at the gore, “may” condition for OH signs at 0.5 mile in advance and 2.0 mile in advance.

Section 2E.42 Cloverleaf Interchange

Paragraph 4 requiring suffix for interchanges with more than one exit, is new.

Paragraph 6 recommending overhead mounting on the structure for the Exit Direction sign, is new.

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

As shown in Paragraph 1, the Traffic Manual “shall” criteria (Page 4-99, Section 4-04.21.6.b, first sentence) is changed to “should” for signing on collector-distributor roadways.

Section 2E.45 Diamond Interchange

This section is new.

Section 2E.47 Closely-Spaced Interchanges

This section is new.

Section 2E.48 Minor Interchange

This section is new.

Section 2E.49 Approaches and Connecting Roadways

This section is new.

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

The CA Supplement section has been reworded from the Traffic Manual Section 4-05.

Section 2E.51 General Service Signs

Paragraph 2 option to use NEXT RIGHT or SECOND RIGHT is new.

Paragraph 9 recommending use of interchange number is new.

As shown in Paragraph 10, the Traffic Manual “24 km” criteria (Page 4-121, G90 sign policy, first paragraph) is changed to “16 km” for NEXT SERVICES XX MILES sign.

Paragraph 11 through 13 requirement to conform to General Service signs, qualified services and leaving blank sign space are new.

Paragraph 14 recommending standard display of word messages is new.

Paragraph 15 option to substitute fuel services and use of Handicapped sign are new.

Paragraph 16 recommending display of symbols, is new.

Paragraph 17 option to substitute other services is new.

Paragraphs 20 through 22 option to use the Telephone , Recreational Vehicle Sanitary Station and TRUCK PARKING signs are new.

Section 2E.52 Rest and Scenic Area Signs

Paragraphs 1 through 3 recommendations are new.

Section 2E.53 Tourist Information and Welcome Centers

This section of the MUTCD and the CA Supplement is new.

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

This section is new.

Section 2E.55 Miscellaneous Guide Signs

This section is new.

Section 2E.56 Radio Information Signing

This section of the MUTCD and the CA Supplement is new.

Section 2E.57 Carpool Information Signing

Paragraph 2 option to include Internet addresses or telephone numbers is new.

Paragraph 4 requiring the maximum dimension of the local transit logo or carpool symbol, is new.

Section 2E.58 Weigh Station Signing

This section is new.

Section 2E.59 Preferential Only Lane Signs

This section is new.

Figure 2E-1. Example of Guide Sign Spreading

This figure is new.

Figure 2E-2. Pull-Through Signs

This figure is new.

Figure 2E-3. Diagrammatic Sign for a Single-Lane Left Exit

This figure is new.

Figure 2E-4. Diagrammatic Signs for Split with Dedicated Lanes

This figure is new.

Figure 2E-5. Diagrammatic Signs for Split with Optional Lane

This figure is new.

Figure 2E-6. Diagrammatic Signs for Two-Lane Exit with Optional Lane

This figure is new.

Figure 2E-7. Diagrammatic Signs for Two-Lane Exit with Optional Lane

This figure is new.

Figure 2E-8. EXIT ONLY on Left with Diagrammatic Sign for Left Lane Dropped at an Interchange

This figure is new.

Figure 2E-10. EXIT ONLY Panels for Right Lane Dropped at an Interchange

This figure is new.

Figure 2E-11. Interstate and U.S. Route Signs

This figure is new.

Figure 2E-12. Example of Interchange Numbering for Mainline and Circumferential Routes

This figure is new.

Figure 2E-13. Example of Interchange Numbering for Mainline, Loop, and Spur Routes

This figure is new.

Figure 2E-14. Example of Interchange Numbering If Routes Overlap

This figure is new.

Figure 2E-15. Examples of Interchange Advance Guide Signs

This figure is new.

Figure 2E-16. Next Exit Supplemental Advance Guide Signs

The E2-1 sign is new.

Figure 2E-17. Supplemental Guide Signs for Multi-exit Interchanges

This figure is new.

Figure 2E-18. Supplemental Guide Sign for a Park and Ride Facility (Route without Exit Numbering)

This figure is new.

Figure 2E-19. Supplemental Guide Sign for a Park and Ride Facility (Route with Exit Numbering)

This figure is new.

Figure 2E-20. Interchange Exit Direction Sign

This figure is new.

Figure 2E-23. Signing of Closely Spaced Interchanges Using Interchange Sequence Signs

This figure is new.

Figure 2E-41. Examples of General Service Signs (without Exit Numbering)

The D9-18e sign is new.

Figure 2E-42. Examples of General Service Signs (with Exit Numbering)

The D9-18a sign is new.

Figure 2E-44. Examples of Rest Area, Scenic Overlook, and Welcome Center Signs

This figure is new.

Figure 2E-45. Enhanced Reference Location Signs

This figure is new.

Figure 2E-46. Example of Signing for the Entrance to Barrier-Separated HOV Lanes

This figure is new.

Figure 2E-47. Example of Signing for the Intermediate Entry to and Exit from Barrier- or Buffer-Separated HOV Lanes

This figure is new.

Figure 2E-48. Example of Signing for the Entrance to and Exit from an Added HOV Lane

This figure is new.

Figure 2E-49. Example of Signing for the Entrance to and Exit from a General Purpose Lane that Becomes an HOV Lane

This figure is new.

Figure 2E-50. Example of Signing for a Direct Access Ramp to an HOV Lane from a Park & Ride Facility

This figure is new.

Figure 2E-51. Example of Signing for a Direct Access Ramp to an HOV Lane from a Local Street

This figure is new.

Figure 2E-52. Example of Signing for a Direct Access Ramp between HOV Lanes on Separate Freeways

This figure is new.

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

This figure is new.

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

This figure is new.

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

This figure is new.

Figure 2E-31 (CA). Examples of Diamond Interchange Guide Signs

This figure is new.

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

This figure is new.

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

This figure is new.

Table 2E-1. Minimum Letter and Numeral Sizes for Expressway Guide Signs According to Interchange Classification

This figure is new.

Table 2E-2. Minimum Letter and Numeral Sizes for Expressway Guide Signs According to Sign Type

This figure is new.

Table 2E-3. Minimum Letter and Numeral Sizes for Freeway Guide Signs According to Interchange Classification

This figure is new.

Table 2E-4. Minimum Letter and Numeral Sizes for Freeway Guide Signs According to Sign Type

This figure is new.

CHAPTER 2F. SPECIFIC SERVICE SIGNS

Section 2F.02 Application

Paragraph 3 recommendation for Specific Service signs to take advantage of natural terrain, least impact on scenic environment and avoid visual conflict, is new.

Section 2F.03 Logos and Logo Panels

As shown in Paragraph 1 first sentence, the Traffic Manual “may” criteria (Page 4-93, Section 4-04.16, third paragraph, first sentence) is changed to “shall” for the logo.

Section 2F.04 Number and Size of Logos and Signs

Paragraph 1 recommending determination of sign size is new.

The CA Supplement Paragraph 2 requiring no more than three logo panels is new.

Section 2F.05 Size of Lettering

As shown in Paragraph 1, the Traffic Sign Specifications “8 in.” criteria (SG42 Series signs) is changed to “10 in.” for the minimum height of letters and numerals.

Section 2F.06 Signs at Interchanges

This section is new.

Section 2F.07 Single-Exit Interchanges

Most of this section is new.

Figure 2F-1. Examples of Specific Service Signs

This figure is new.

Figure 2F-2. Examples of Specific Service Sign Locations

This figure is new.

CHAPTER 2G. TOURIST-ORIENTED DIRECTIONAL SIGNS

Section 2G.01 Purpose and Application

Paragraph 7 option that TOD signs may be used in conjunction with General Service signs is new.

Section 2G.02 Design

Paragraph 6 option to use General Service sign symbols and symbols for recreational and cultural interest area signs is new.

Paragraph 8 requiring symbols and logos to be of appropriate size and prohibiting them resembling other official TCDs is new.

Section 2G.03 Style and Size of Lettering

As shown in Paragraph 1, the Traffic Sign Specifications “4 in.” criteria (SG44 Series signs) is changed to “6 in.” for the minimum height of letters and numerals.

Paragraph 2 requiring design standards per Standard Highway Signs book is new.

Section 2G.06 Sign Locations

This section is new.

Figure 2G-1 (CA). Examples of Tourist-Oriented Directional Signs

This figure is new.

CHAPTER 2H. RECREATIONAL AND CULTURAL INTEREST AREA SIGNS

Most of this MUTCD chapter is new.

CHAPTER 2I. EMERGENCY MANAGEMENT SIGNING

Most of this MUTCD chapter is new. The overall theme for this chapter has been changed from Civil Defense to Emergency Management.

PART 3. MARKINGS

CHAPTER 3A. GENERAL

Section 3A.02 Standardization of Application

Paragraph 4 option for temporary masking of markings with tape is new. The CA Supplement section adds a recommendation and support to accept this new option.

Section 3A.03 Materials

Paragraphs 3 and 4 recommending pedestrian and bicycle considerations are new.

Section 3A.03 Colors

Paragraph 3, sub-heading C requiring yellow markings for two-way left turn lanes and reversible lanes, is new.

Paragraph 4 pertaining to use of red markers for roadways that shall not be entered or used, is new.

Paragraph 5 pertaining to use of blue markings for parking spaces for persons with disabilities and blue markers to indicate location of fire hydrants is new.

CHAPTER 3B. PAVEMENT AND CURB MARKINGS

Section 3B.01 Yellow Centerline Pavement Markings and Warrants

As shown in this section, the MUTCD centerline markings criteria based on width and ADT is adopted over the Traffic Manual criteria (Page 6-5, Section 6-02.1, second paragraph and sub-headings) which is based on width and speeds.

Section 3B.02 No-Passing Zone Pavement Markings and Warrants

Most of this section is new.

Section 3B.03 Other Yellow Longitudinal Pavement Markings

Paragraph 1 and 2 requirement for reversible lanes is new.

Paragraph 4 option to use pavement marking arrows for TWLTLs is new.

Paragraph 6 requiring double solid yellow lines for median islands is new.

Section 3B.04 White Lane Line Pavement Markings and Warrants

As shown in Paragraph 4, the Traffic Manual “may” criteria (Page 6-5, Section 6-02.2, second paragraph, first sentence) is changed to “shall” for the use of solid white line to discourage crossing.

Section 3B.05 Other White Longitudinal Pavement Markings

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 6-4, Section 6-01.9, last paragraph) is changed to “may” for the use of channelizing lines to form channelizing islands.

As shown in Paragraph 7 first sentence, the Traffic Manual “should” criteria (Page 6-9, Section 6-02.8, second paragraph, first sentence) is changed to “shall” for the use of channelizing lines along the sides of neutral area.

Section 3B.06 Edge Line Pavement Markings

As shown in Paragraph 2, the Traffic Manual “are generally” criteria (Page 6-7, Section 6-02.4, first paragraph, last sentence) is changed to “shall”, prohibiting the extension of edge lines through intersections or major driveways except for dotted edge line extensions.

Paragraph 7 option to use wide solid edge line markings is new.

Section 3B.07 Warrants for Use of Edge Lines

Paragraph 1 requiring edge lines on streets and highways with particular characteristics, is new.
Paragraph 2 recommending edge lines on streets and highways with particular characteristics, is new.

Paragraph 3 recommending not to use edge line when engineering study or judgment indicate decrease in safety is new.

Paragraph 4 option to use edge line markings with or without centerline markings is new.

Section 3B.08 Extensions Through Intersections or Interchanges

Paragraph 2 option to use normal line to extend a wide line through an intersection, is new.

As shown in Paragraph 3, the Traffic Manual “may” criteria (Page 6-8, Section 6-02.5, first paragraph, first sentence) is changed to “should” for the use of dotted line markings.

Paragraph 4 option to use dotted edge line extensions, is new.

As shown in Paragraph 5 first sentence, the Traffic Manual “may” criteria (Page 6-8, Section 6-02.5, second paragraph) is changed to “should” for extending solid lines.

Paragraph 5 second sentence recommending not to extend edge lines as solid lines, is new.

Paragraph 6 recommending single line of equal width to one of the double lines, is new.

Paragraph 7 recommending the design of extensions in a manner to minimize potential confusion is new.

Section 3B.09 Lane Reduction Transition Markings

Paragraph 4 option to use design for new construction is new.

Section 3B.10 Approach Markings for Obstructions

Paragraph 5 option to use longer tapers is new.

Paragraph 7 option to use yellow diagonal approach markings is new.

As shown in Paragraph 8 first sentence, the Traffic Manual “may” criteria (Page 6-8, Section 6-02.7, second paragraph, first sentence) is changed to “shall” for the use of channelizing lines.

Section 3B.11 Raised Pavement Markers

Except for the N criteria, this section is new.

Section 3B.12 Raised Pavement Markers as Vehicle Positioning Guides with Other Longitudinal Markings

Except for the N criteria, this section is new.

Section 3B.13 Raised Pavement Markers Supplementing Other Markings

Except for the N criteria, this section is new.

Section 3B.14 Raised Pavement Markers Substituting for Pavement Markings

Except for the N criteria, this section is new.

Section 3B.15 Transverse Markings

As shown in Paragraph 4, the Traffic Manual “should” criteria (Page 6-3, Section 6-01.8, second paragraph, last sentence) is changed to “shall” requiring pavement marking letters, numerals and symbols to be in accordance with Standard Highway Signs book.

Section 3B.16 Stop and Yield Lines

As shown in various paragraphs of this section, the optional use of yield lines and other requirements, recommendations and options pertaining to yield lines are new.

Paragraph 9 recommendation for 40 ft advance placement of stop lines at midblock signalized locations is new.

Section 3B.17 Crosswalk Markings

Paragraph 6 recommendation for crosswalk lines, if used on both sides of the crosswalk, is new.

Paragraph 7 recommending marking of crosswalks where there is substantial conflict is new.

Paragraph 9 recommending not to use crosswalk lines indiscriminately is new.

Paragraph 14 second sentence, recommending to avoid wheel paths is new.

Paragraph 15 option to use diagonal crossing markings is new.

Section 3B.18 Parking Space Markings

Paragraph 3 option to use blue line markings for parking spaces for persons with disabilities, is new.

Section 3B.19 Pavement Word and Symbol Markings

Paragraph 12 option to use smaller words and symbols is new.

Paragraph 15 requiring pavement arrow designs is new.

Paragraph 17 option to use arrow markings to convey guidance or mandatory message is new.

Paragraph 18 option to supplement arrow markings with ONLY word marking is new.

Paragraph 19 option to use lane reduction arrow markings is new.

Paragraph 20 recommending use of arrow markings at exit ramps to deter wrong-way movement is new.

Paragraph 21 option to use arrow markings at exit ramps to deter wrong-way movement is new.

Paragraph 22 option to use yield-ahead triangle symbol or YIELD AHEAD word marking is new.

Paragraph 24 option (sub-headings A through C) for word and symbol markings under certain conditions, is new.

Paragraph 26 prohibiting the use of STOP in advance of a stop line unless every vehicle is required to stop at all times, is new.

Paragraph 27 prohibiting use of yield-ahead triangle symbol or YIELD AHEAD word marking unless the Yield sign is in place, is new.

Section 3B.20 Speed Measurement Markings

This section is new.

Section 3B.21 Curb Markings

Paragraph 2 requiring signs where curb markings are frequently obliterated by snow and ice, is new.

Paragraph 4 recommending word markings on curbs if signs are not used, is new.

Section 3B.23 Preferential Lane Longitudinal Markings for Motor Vehicles

Most of this section is new.

Section 3B.24 Markings for Roundabout Intersections

This section is new.

Section 3B.25 Markings for Other Circular Intersections

This section is new.

Section 3B.26 Speed Hump Markings

This section is new.

Section 3B.27 Advance Speed Hump Markings

This section is new.

Section 3B.106 Rumble Strips

This CA Supplement section has been revised.

Figure 3B-1. Examples of Two-Lane, Two-Way Marking Applications

This figure is new.

Figure 3B-2. Examples of Four-or-More Lane, Two-Way Marking Applications

This figure is new.

Figure 3B-3. Examples of Three-Lane, Two-Way Marking Applications

This figure is new.

Figure 3B-4. Example of Three-Lane, Two-Way Marking for Changing Direction of the Center Lane

This figure is new.

Figure 3B-6. Example of Reversible Lane Marking Application

This figure is new.

Figure 3B-7. Example of Two-Way Left-Turn Lane Marking Applications

This figure is new.

Figure 3B-11. Examples of Extensions through Intersections

Figures a, b and d are new.

Figure 3B-15. Examples of Yield Lines at Unsignalized Midblock Crosswalks

This figure is new.

Figure 3B-16. Examples of Crosswalk Markings

This figure is new.

Figure 3B-17. Example of Crosswalk Markings for Exclusive Pedestrian Phase That Permits Diagonal Crossing

This figure is new.

Figure 3B-22. Examples of Lane Use Control Word and Symbol Markings

This figure is new.

Figure 3B-25. Yield Ahead Triangle Symbols

This figure is new.

Figure 3B-26. Examples of Markings for Preferential Lanes

This figure is new.

Figure 3B-27. Examples of Markings for Roundabout Intersections with One-Lane Approaches

This figure is new.

Figure 3B-28. Examples of Markings for Roundabout Intersections with Two-Lane Approaches

This figure is new.

Figure 3B-29. Examples of Pavement Markings for Speed Humps Without Crosswalks

This figure is new.

Figure 3B-30. Examples of Pavement Markings for Speed Tables or Speed Humps with Crosswalks

This figure is new.

Figure 3B-31. Examples of Advance Warning Markings for Speed Humps

This figure is new.

Figure 3B-8 (CA). Examples of Signing and Channelizing Line Applications for Exit Ramp Markings (Sheet 3 of 3)

This figure has been revised from the Traffic Manual Figure 6-25 (Page 6-49). The onramp detail (Detail 36A) for weaving lane (top figure in Traffic Manual) has been changed to match the parallel acceleration lane (lower figure) detail and the MUTCD Figure 3B-8.

Figure 3B-12 (CA). Examples of Signs and Lane Reduction Markings

These figures have been revised from the Traffic Manual Figures 6-15 through 6-17 (Pages 6-39 through 6-41). The pavement arrow markings and sign placement criteria is specified in more details.

Figure 3B-14 (CA). Example of Yield Line Layout

This figure is new.

Figure 3B-18 (CA). Examples of Parking Space Markings

This figure has been revised from the Traffic Manual Figure 6-35 (Page 6-59).

Figure 3B-20 (CA). Examples of Elongated Letters for Word Pavement Markings

The NO, FWY, CAR, POOL, KEEP, CLEAR, 25, 35 and 40 words have been added to this Traffic Manual Figure 6-36 (Page 6-60).

Figure 3B-101. Examples of Left-Turn Channelization Markings

This figure has been revised from the Traffic Manual Figure 6-20 (Page 6-44). It now includes separate figures for 2-lane and 4-lane configurations.

Figure 3B-107. Passing Lanes

This figure has been revised from the Traffic Manual Figure 6-18 (Page 6-42). The pavement arrow markings and sign placement criteria is specified in more details.

Table 3B-2 CA). Standard Edge Line Lane Markings for Preferential Lanes

This table is new.

CHAPTER 3C. OBJECT MARKERS

As shown in this chapter of the MUTCD and the CA Supplement, the various Traffic Manual “is used” and “are marked” criteria (Pages 6-21 & 6-22, Section 6-05 and Pages 6-75 & 6-76, Figures 6-51 & 6-52) are changed to “shall”, “should” and “may” for the object markers.

Section 3C.02 Markings for Objects in the Roadway

Paragraph 4 option to use signs instead of object markers, is new.

Figure 3C-1. Object Markers and End-of-Roadway Markers

The OM1-1, OM1-2, OM2-1V, OM2-1H, OM4-1 and OM4-2 object markers are new.

Figure 3C-101. Examples of Object Markers and End-of-Roadway Markers

The CA Type K-1, K-2, L-1 and L-2 configurations for OM2-1V and OM2-1H object markers have been added to the figures. Previously they were only described in text.

Table 3C-101. Cross-Reference of Object Markers

This table is new.

CHAPTER 3D. DELINEATORS

Section 3D.02 Delineator Design

Paragraph 3 option to use elongated retroreflective units, is new.

Section 3D.03 Delineator Application

Paragraph 2 conditional requirement to provide single delineators on the right side of freeways, expressways and one side of interchange ramps, is new.

Paragraph 3 option to provide single delineators on other classes of roads and on left side of roadways, is new.

Paragraph 11 recommending to carry delineators through transitions, is new.

Paragraph 12 option for closer spacing of delineators, is new.

Section 3D.04 Delineator Placement and Spacing

As shown in Paragraph 1, the Traffic Manual “shall” criteria (Page 6-18, Section 6-04.4, first paragraph, first sentence) is changed to “should” for mounting of delineators on suitable supports.

CHAPTER 3E. COLORED PAVEMENTS

This Chapter and Section is new.

CHAPTER 3F. BARRICADES AND CHANNELIZING DEVICES

Section 3F.01 Barricades

This section is new.

Section 3F.02 Channelizing Devices

Paragraph 10 recommending that channelizing devices be kept clean, is new.

CHAPTER 3G. ISLANDS

Section 3G.03 Island Marking Application

Paragraphs 1 and 2 pertaining to type of markings for islands, is new.

Section 3G.04 Island Marking Colors

This section is new.

Section 3G.05 Island Object Markers

This section is new.

Section 3G.06 Island Delineators

This section (as modified in the CA Supplement) is new.

PART 4. HIGHWAY TRAFFIC SIGNALS

CHAPTER 4A. GENERAL

Section 4A.02 Definitions Relating to Highway Traffic Signals

This section is new for California.

CHAPTER 4B. TRAFFIC CONTROL SIGNALS - GENERAL

Section 4B.01 General

Under Standard, the second paragraph is new for California.

Section 4B.04 Alternatives to Traffic Control Signals

This section is new for California.

Section 4B.05 Adequate Roadway Capacity

The Guidance topic is new for California.

CHAPTER 4C. TRAFFIC CONTROL SIGNAL NEEDS STUDIES

Section 4C.01 Studies and Factors for Justifying Traffic Control Signals

This section replaces Traffic Manual Section 9-01 and completely re-arranges traffic signal warrants as follows:

- MUTCD “Warrant 1, Eight Hour Vehicular Volume” combines previous Traffic Manual “Warrant 1-Minimum Vehicle Volume,” Warrant 2-Interruption of Continuous Traffic,” and “Warrant 8-Combination of Warrants.”
- MUTCD “Warrant 2, Four-Hour Vehicular Volume” replaces Traffic Manual “Warrant 9-Four Hour Volume Warrant.”
- MUTCD “Warrant 3, Peak Hour” combines previous Traffic Manual “Warrant 10-Peak Hour Delay Warrant” and “Warrant 11, Peak Hour Volume Warrant.”
- MUTCD “Warrant 4, Pedestrian Volume” replaces Traffic Manual “Warrant 3-Minimum Pedestrian Volume”
- MUTCD “Warrant 5, School Crossing” replaces Traffic Manual “Warrant 4-School Areas.”
- MUTCD “Warrant 6, Coordinated Signal System” replaces Traffic Manual “Warrant 5-Progressive Movement.”
- MUTCD “Warrant 7, Crash Experience” replaces Traffic Manual “Warrant 6-Accident Experience.”
- MUTCD “Warrant 8, Roadway Network” replaces Traffic Manual “Warrant 7-Systems Warrant.”

Section 4C.02 Warrant 1, Eight-Hour Vehicular Volume

The major traffic street critical speed criterion is changed from 64km/h to 70km/h for Rural locations.

Section 4C.06 Warrant 5, School Crossing

This section introduces the study of gaps in vehicular traffic streams to determine the need for traffic control signals.

CHAPTER 4D. TRAFFIC CONTROL SIGNAL FEATURES

This chapter expands on Traffic Manual Section 9-03 for Traffic Signal Design with application standards.

CHAPTER 4E. PEDESTRIAN CONTROL FEATURES

Section 4E.06 Accessible Pedestrian Signals

This section adds standards for audible sounds, verbal messages and vibro-tactile pedestrian devices.

Section 4E.07 Pedestrian Detectors

This section adds standards for pedestrian detectors.

Section 4E.08 Accessible Pedestrian Signal Detectors

This section adds standards for placing detectors and the operation of locator tones.

Section 4E.09 Pedestrian Intervals and Signal Phases

This section adds standards for the operation of pedestrian signals.

CHAPTER 4F. TRAFFIC CONTROL SIGNALS FOR EMERGENCY VEHICLE ACCESS

This chapter adds standards for emergency-vehicle traffic control signals.

CHAPTER 4G. TRAFFIC CONTROL SIGNALS FOR ONE-LANE, TWO-WAY FACILITIES

This chapter is new for California.

CHAPTER 4H. TRAFFIC CONTROL SIGNALS FOR FREEWAY ENTRANCE RAMPS

This chapter adds design standards for freeway entrance ramp control signals.

CHAPTER 4I. TRAFFIC CONTROL FOR MOVABLE BRIDGES

This chapter adds standards for the design of movable bridge signals and gates.

CHAPTER 4J. LANE-USE CONTROL SIGNALS

This chapter adds standards for the design of lane-use control signals.

CHAPTER 4L. IN-ROADWAY LIGHTS

This chapter is new for California.

PART 5. TRAFFIC CONTROL DEVICES FOR LOW-VOLUME ROADS

This entire part is new.

By definition (Section 5A.01), this part does not apply to the State highway system.

This part applies to rural (outside of built-up areas of Cities, towns, and communities) low-volume (less than 400 AADT) paved or unpaved roads.

The low-volume roads topic was not addressed in the Traffic Manual but is being adopted for California with some minor changes as outlined in the Supplement.

PART 6. TEMPORARY TRAFFIC CONTROL

CHAPTER 6A. GENERAL

Section 6A.01 General

Paragraph 2 requirement to include the needs and control of all road users (motorists, bicyclists, pedestrians and pedestrians with disabilities) through a TTC (Temporary Traffic Control) zone, is new.

Paragraph 9 establishing responsibility and authority for TTC plans and devices, is new.

Paragraph 12 option to deviate from the typical applications, is new.

CHAPTER 6B. FUNDAMENTAL PRINCIPLES

Section 6B.01 Fundamental Principles of Temporary Traffic Control

Paragraph 2 requirement to include the needs and control of all road users (motorists, bicyclists, pedestrians and pedestrians with disabilities) through a TTC (Temporary Traffic Control) zone, is new.

Paragraph 11, sub-heading A last sentence, recommendation pertaining to pedestrians with visual disabilities, is new.

Paragraph 11, sub-heading B last sentence, recommendation pertaining to pedestrians with disabilities, is new.

Paragraph 15, sub-heading A, recommendation pertaining to all road users, is new.

Paragraph 15, sub-heading F, recommendation pertaining to operators of commercial vehicles, is new.

Paragraph 16 requiring all signs to be in place before opening of a new detour or temporary route, is new.

As shown in Paragraph 17, the Traffic Manual “should” criteria (Page 5-4, Section 5-01.2.D.5, first sentence) is changed to “shall” regarding removal of TTC devices when no longer needed.

In the CA Supplement, Paragraph 3 requirement pertaining to sign covers on State highways per Standard Specifications, is new.

CHAPTER 6C. TEMPORARY TRAFFIC CONTROL ELEMENTS

Section 6C.01 Temporary Traffic Control Plans

Paragraph 2 requirement to include the needs and control of all road users (motorists, bicyclists, pedestrians and pedestrians with disabilities) through a TTC (Temporary Traffic Control) zone, is new.

As shown in Paragraph 6, the Traffic Manual “must” criteria (Page 5-5, Section 5-02.1, third paragraph last sentence) is changed to “should” regarding coordination between adjacent or overlapping projects, is new.

Paragraph 13 recommending continuity of railroad service and access to abutting property owners and businesses, is new.

Paragraphs 14 through 17 recommendations for reduced speed limits are new.

The CA Supplement section regarding construction speed zones, is new. This text previously was included in Caltrans internal documents.

Section 6C.04 Advance Warning Area

The MUTCD and Traffic Manual (Page 5-5, Section 5-02.2.A) criteria are different. The MUTCD criteria is adopted. Some of these changes included are as follows:

As shown in Paragraph 4 first sentence, the Traffic Manual “1 to 2 times” criteria (Page 5-6, Section 5-02.2.A.1, first sentence) is changed to “0.75 to 1.5 times” for placement of first warning sign, on urban streets.

As shown in Paragraph 5 second sentence, the Traffic Manual “300 m” criteria (Page 5-6, Section 5-02.2.A.2, second sentence) is changed to “450 m” for advance warning area.

Section 6C.06 Activity Area

Paragraph 4 recommending each work space be adequately signed, is new.

Section 6C.07 Termination Area

As shown in Paragraph 1 first sentence, the Traffic Manual “is” criteria (Page 5-7, Section 5-02.2.D, first sentence) is changed to “shall be” for the use of termination area.

Paragraph 2 option to use END ROAD WORK sign, is new.

Paragraph 3 option to use longitudinal buffer space between the work space and the beginning of the downstream taper, is new.

Section 6C.08 Tapers

As shown in Paragraph 4, the Traffic Manual “are presented in” criteria (Page 5-11, Section 5-02.3, first paragraph) is changed to “should be” for the use of Tables 6C-3 and 6C-4.

As shown in Paragraph 13, the Traffic Manual “maximum” criteria (Page 5-11, Section 5-02.3.D, second sentence) is deleted for the 30 m length of downstream taper.

Section 6C.11 Flagger Method of One-Lane, Two-Way Traffic Control

As shown in Paragraph 2 second sentence, the Traffic Manual “may” criteria (Page 5-13, Section 5-02.5.A, “When good visibility...traffic may be controlled by a flagger at each end of the section”) is changed to “should” for the control of traffic by a flagger.

Section 6C.13 Pilot Car Method of One-Lane, Two-Way Traffic Control

As shown in Paragraph 1, the Traffic Manual “is normally” criteria (Page 5-14, Section 5-02.5.C, first paragraph first sentence) is changed to “may be” for the use of pilot car.

As shown in Paragraph 2 first sentence, the Traffic Manual “must” criteria (Page 5-14, Section 5-02.5.C, first paragraph second sentence) is changed to “should” for the coordination of the operation of the pilot vehicle.

Table 6C-1. Suggested Advance Warning Sign Spacing

As shown in Row 2 (Urban (low speed)), the Traffic Manual “60 m” criteria (Page 5-31, Table 5-3) is changed to “30 m”.

As shown in Row 5 (Expressway/Freeway), the Traffic Manual “300 m” criteria (Page 5-31, Table 5-3) is changed to “450 m” for dimension B and “800 m” for dimension C.

Table 6C-2. Stopping Sight Distance as a Function of Speed

This table is new.

Table 6C-3 (CA). Taper Length Criteria for Temporary Traffic Control Zones

This table is new in the CA Supplement and is based on the MUTCD Tables 6C-3 and 6C-4. It is created for ease of use in field conditions.

CHAPTER 6D. PEDESTRIAN AND WORKER SAFETY

Section 6D.01 Pedestrian Considerations

Paragraph 2 requirement to include the needs and control of all road users (motorists, bicyclists, pedestrians and pedestrians with disabilities) through a TTC (Temporary Traffic Control) zone, is new.

Paragraph 5 recommending the push button (if used) be equipped with a locator tone, is new.

Paragraph 6 requiring knowledgeable persons to apply TTC provisions, is new.

Paragraph 7 requiring a detectable barrier (where pedestrians with visual disabilities normally use the closed sidewalk) along the sidewalk, is new. As shown in Paragraph 7 first sentence, the Traffic Manual “is critically important” criteria (Page 5-15, Section 5-03.1, third paragraph second last sentence) is changed to “shall be” to provide advance notification of sidewalk closures.

Paragraph 9 second sentence recommending sign, signal and delineation information be provided by audible devices, accessible pedestrian signals and detectable barriers and channelizing devices, is new.

Paragraph 10 sub-heading C second and third sentence, recommending audible information devices and accessible pedestrian signals, is new.

Paragraph 11 recommending not to severe and/or move pedestrian route for nonconstruction activities, is new.

Paragraph 14 recommending accessible footpath, no abrupt changes in grade or terrain and detectable devices, is new.

Paragraph 18 recommending not to use wooden railing, fencing as substitutes for crashworthy barriers, is new.

Paragraph 26 recommending the barrier used to shield pedestrians be designed to accommodate site conditions, is new.

As shown in Paragraph 28 last sentence, the Traffic Manual “it is very important” criteria (Page 5-16, Section 5-03.1, seventh paragraph last sentence) is changed to “shall be” for connecting adjacent temporary traffic barrier segments.

As shown in Paragraph 29, the Traffic Manual “is not a satisfactory substitute” criteria (Page 5-16, Section 5-03.1, eighth paragraph) is changed to “shall not be used as a substitute” for the use of normal vertical curbing.

Paragraph 34 recommending not to use tape, rope or plastic chain between devices, is new.

Paragraph 35 recommending the preservation of pedestrian routes and discouraging alternative routes, is new.

Section 6D.02 Accessibility Considerations

This section is new.

Section 6D.03 Worker Safety Considerations

Paragraph 3 sub-heading E recommending minimizing of backing-up maneuvers, is new.

Paragraph 3 sub-heading F recommending a competent person to conduct hazard assessment per OSHA, is new.

Paragraph 4 sub-heading A option to use a shadow vehicle, is new.

CHAPTER 6E. FLAGGER CONTROL

Section 6E.01 Qualifications of Flaggers

Paragraph 3 sub-headings A through E have been revised and reworded, as compared to the Traffic Manual Section 5-04.2 (Page 5-180).

Section 6E.02 High-Visibility Safety Apparel

Paragraph 1 requiring safety apparel per ISEA requirements and labeled as meeting ANSI standards for daytime and nighttime activity, is new.

Paragraph 2 recommending safety apparel per ISEA requirements and labeled as meeting ANSI standards for nighttime activity, is new.

Section 6E.03 Hand-Signaling Devices

Paragraph 4 option to incorporate flashing lights on the STOP/SLOW paddle and the specific patterns in sub-headings A through E, is new.

Paragraphs 5 through 7 requiring flashing light colors, flash rates and preserving the octagon and diamond shapes, are new.

Section 6E.04 Flagger Procedures

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 5-19, Section 5-04.5, first paragraph, second sentence) is changed to “shall” for the signaling method with paddles.

As shown in Paragraph 4, the Traffic Manual “should” criteria (Page 5-20, Section 5-04.5, fifth paragraph) is changed to “shall” for the signaling method with a flag.

Table 6E-1. Stopping Sight Distance as a Function of Speed

This table replaces the Traffic Manual Table 5-1 (Page 5-10). It provides for longer distances for the location of flagger stations.

Table 6E-101. Longitudinal Buffer Space on Downgrades

This table is new in the CA Supplement and is based on the MUTCD Table 6E-1 with increase for downgrades based on the AASHTO Policy on Geometric Design of Highways and Streets. It is created for ease of use in field conditions.

CHAPTER 6F. TEMPORARY TRAFFIC CONTROL ZONE DEVICES

The following California construction signs have been deleted.

Code	Sign Title	Comments
C10	SLIDE AHEAD	Use MUTCD W20 series or CA Code C12, C30, SC10, SC11, etc instead of identifying condition.
C11	ROAD CONSTRUCTION NEXT MILES	Use MUTCD G20-1
C13	END CONSTRUCTION	Use MUTCD G20-2
C18	ROAD CONSTRUCTION AHEAD	Use MUTCD W20-1
C21	SINGLE LANE AHEAD	Use MUTCD W20-5 or W20-5a
C23A	ROAD WORK AHEAD (Square shape)	Use MUTCD W20-1
C24A	SHOULDER WORK AHEAD (Square shape)	Use MUTCD W21-5
C32	END SURVEY WORK	Use MUTCD G20-2
C33	BLASTING ZONE 1000 FT	Use MUTCD BLASTING ZONE AHEAD (W22-1)
C36	PREPARE TO STOP	Use MUTCD W3-4 "BE PREPARED TO STOP"
C39	ACCIDENT AHEAD	Use MUTCD W20 series or CA Code C12, C30, SC10, SC11, etc instead of identifying condition.
C41	Uneven Lane symbol	Use MUTCD W8-11
C41A	UNEVEN LANES (Rectangular)	Use MUTCD W8-11 (Diamond)
SC2-1	ONE LANE ROAD	Use MUTCD W20-4
SC4	SECOND RAMP CLOSED AHEAD	Use CA Code SC8
SC6	NOTICE - THIS RAMP WILL BE CLOSED TEMPORARILY - (Dates & Times)	Use CA Code SC6-4
SC6-1	ON (Day - Date - Time)	Use CA Code SC6A or SC6B
SC6-2	WEEKDAYS (Day - Date - Time)	Use CA Code SC6A or SC6B
SC14	RIGHT LANE	Use MUTCD M4-9 series or M6 series
SC17	TRAFFIC BREAK DO NOT PASS	Use CA Code SC13

Section 6F.01 Types of Devices

Paragraph 2 requirement to include the needs and control of all road users (motorists, bicyclists, pedestrians and pedestrians with disabilities) through a TTC (Temporary Traffic Control) zone, is new.

Paragraph 8 requiring construction, maintenance, utility, or incident management to conform to the MUTCD is new.

Section 6F.02 General Characteristics of Signs

Paragraph 5 option to use fluorescent pink background in TTC incident management situations, is new.

Paragraph 7 option to use yellow or FYG background in TTC zones, is new.

Paragraph 10 requiring sizes of TTC signs per Table 6F-1, is new.

Paragraph 15 prohibiting the use of street, highway or strobe lighting to meet sign illumination requirement, is new.

Paragraph 17 option that signs may be of rigid or flexible material, is new.

Section 6F.03 Sign Placement

As shown in Paragraph 5 first sentence, the Traffic Manual “should be mounted at a height of at least 7 ft” criteria (Page 5-22, Section 5-05.2, seventh paragraph, second sentence) is changed to “shall be mounted at a height of at least 5 ft” for ground mounted signs in rural areas.

Paragraph 6 requiring signs mounted on barricades be crashworthy, is new.

Paragraph 7 requiring (where determined accommodation of pedestrians with disabilities is necessary) signs be mounted and placed in accordance with ADAAG, is new.

Paragraph 8 (as modified in the CA Supplement) is new. It recommends that sign supports be located to accommodate pedestrians and bicyclists and to maintain a minimum lateral width of 4 ft for pedestrian pathways. Further, signs mounted lower than 7 ft should not project more than 4 in. into pedestrian facilities.

Paragraph 9 option to use 7 ft mounting height in rural areas for increased visibility, is new.

As shown in Paragraph 11, the Traffic Manual “short-term, short-duration, and mobile conditions” condition (Page 5-25, Section 5-05.2, eighth paragraph, second sentence) implying “up to 12 hours” (See definitions in Traffic Manual on page 5-63, Section 5-06.3) is changed to “3 days” for duration of signs mounted on portable sign supports.

Paragraph 12 option for signs specified to be used on portable supports for longer than 3 days, is new.

As shown in Paragraph 15 first sentence, the Traffic Manual “should” criteria (Page 5-25, Section 5-05.2, eighth paragraph, third sentence) is changed to “shall” for crashworthiness of sign supports.

Paragraph 15 second sentence, requiring large signs to be mounted a minimum of 7 ft above the ground, is new.

Paragraph 18 recommending unshielded sign posts yield or be breakaway, is new.

Section 6F.04 Sign Maintenance

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 5-25, Section 5-05.2, tenth paragraph, last sentence) is changed to “shall” for replacement of signs that have lost legibility.

Section 6F.08 ROAD (STREET) CLOSED Sign (R11-2)

As shown in Paragraph 1, the Traffic Manual “shall” and “may” criteria (Page 5-25, Section 5-05.2.A.4, tenth paragraph, first sentence) is changed to “should” for the use of ROAD (STREET) CLOSED sign and accompanying warning and detour signs to be consistent with the MUTCD and CA Code C3 and C3A signs.

Section 6F.09 Local Traffic Only Signs (R11-3a, R11-4)

As shown in Paragraph 2, the Traffic Manual “shall” criteria (Page 5-26, Section 5-05.2.A.5, second sentence) is changed to “should” for the legend on Local Traffic Only sign.

Section 6F.10 Weight Limit Signs (R12-1, R12-2, R12-5)

As shown in Paragraph 1, the Traffic Manual “should” criteria (Page 5-26, Section 5-05.2.A.6, second sentence) is changed to “shall” for the Weight Limit sign to be consistent with State or local regulations.

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 5-26, Section 5-05.2.A.6, last sentence) is changed to “shall” to provide a marked detour.

Section 6F.11 STAY IN LANE Sign (R4-9)

This section is new.

Section 6F.12 PEDESTRIAN CROSSWALK Sign (R9-8)

This section is new.

Section 6F.13 SIDEWALK CLOSED Signs (R9-9, R9-10, R9-11, R9-11a)

Paragraph 1 second sentence, recommending Bicycle/Pedestrian Detour and Pedestrian Detour signs, is new.

Paragraphs 1 through 4 recommending the use of SIDEWALK CLOSED, SIDE WALK CLOSED (ARROW) USE OTHER SIDE and SIDE WALK CLOSED (ARROW) CROSS HERE signs, are new.

As shown in Paragraph 5, the Traffic Sign Specifications “may” criteria (C42 sign policy) is changed to “should” for the location of SIDE WALK CLOSED (ARROW) CROSS HERE sign.

Section 6F.15 Warning Sign Function, Design, and Application

The “higher-speed”, “moderately low”, “very low” speed criteria in the Traffic Manual (Page 5-29, Section 5-05.2.B.2) and the MUTCD (Paragraphs 11 through 14) is being deleted as both manuals do not define these criteria nor is this criteria shown in a table or other form. This criteria is replaced with reference to use MUTCD Table 2C-2 as for regular warning signs for sizes based on road classification.

Paragraph 3 option to use fluorescent pink background in TTC incident management situations, is new.

Paragraph 8 recommending that audible information or detectable barriers or barricades be considered for people with visual disabilities, is new.

Section 6F.16 Position of Advance Warning Signs

As shown in Paragraph 1 last sentence, the Traffic Manual “60 m” criteria (Page 5-30, Section 5-05.2.B.3, second paragraph) is changed to “30 m” for placement of the closest sign to the TTC zone.

Section 6F.17 ROAD (STREET) WORK Sign (W20-1)

As shown in Paragraph 1, the Traffic Sign Specifications “may” criteria (C23 sign policy) is changed to “should” for the use of ROAD (STREET) WORK sign.

Section 6F.18 DETOUR Sign (W20-2)

Paragraph 2 defining the legend on DETOUR sign, is new.

Section 6F.19 ROAD (STREET) CLOSED Sign (W20-3)

Paragraph 2 defining the legend on ROAD (STREET) CLOSED sign, is new.

Section 6F.20 ONE LANE ROAD Sign (W20-4)

As shown in Paragraph 1 first sentence, the Traffic Manual “should” criteria (Page 5-32, Section 5-05.2.B.9, first sentence) is changed to “shall” for the use of ONE LANE ROAD sign.

Paragraph 1 second sentence, defining the legend on ONE LANE ROAD sign, is new.

Section 6F.21 Lane(s) Closed Signs (W20-5, W20-5a)

As shown in Paragraph 1, the Traffic Manual “is used” criteria (Page 5-32, Section 5-05.2.B.10, first sentence) is changed to “shall” for the use of Lane(s) Closed sign.

Paragraph 2, defining the legend on Lane(s) Closed sign, is new.

As shown in Paragraph 2, the RIGHT (LEFT) TWO LANES CLOSED XX FT, XX MILE(S) or AHEAD (W20-5a) sign is new.

Section 6F.22 CENTER LANE CLOSED AHEAD Signs (W9-3, W9-3a)

This section is new. These signs are not be used for moving lane closures on State highways.

Section 6F.27 SLOW TRAFFIC AHEAD Sign (W23-1)

This section is new.

Section 6F.28 EXIT OPEN, EXIT CLOSED, EXIT ONLY Signs (E5-2, E5-2a, E5-3)

This section is new.

Section 6F.29 Flagger Sign (W20-7a, W20-7)

As shown in Paragraph 2 second sentence, the Traffic Manual “should” criteria (Page 5-33, Section 5-05.2.B.11, first paragraph, second sentence) is changed to “may” for the use of the Flagger sign (CA Code C9A) in conjunction with other warning signs.

Section 6F.31 Workers Sign (W21-1, W21-1a)

Paragraph 2 recommending to use the Workers symbol sign in the absence of other warning devices, is new.

Section 6F.34 Motorized Traffic Signs (W8-6, W11-10)

This section is new.

Section 6F.35 Shoulder Work Signs (W21-5, W21-5a, W21-5b)

Paragraph 2, defining the legend on Shoulder Work sign, is new.

Paragraph 4 recommending the use of W21-5b followed by W21-5a and preceded by ROAD WORK AHEAD signs on freeways and expressways, is new.

The RIGHT (LEFT) SHOULDER CLOSED (W21-5a) sign is new.

Section 6F.36 SURVEY CREW Sign (W21-6)

As shown in this section, the Traffic Manual “may” criteria (Page 5-34, Section 5-05.2.B.17) is changed to “should” for the use of the SURVEY CREW sign.

Section 6F.37 UTILITY WORK Sign (W21-7)

This section is new.

Section 6F.38 Signs for Blasting Areas

As shown in Paragraph 2 second sentence, the Traffic Manual “should” criteria (Page 5-35, Section 5-05.2.B.18, second paragraph, first sentence) is changed to “shall” for displaying a sequence of signs to direct operators to turn off transmitters in a blasting area.

Section 6F.39 BLASTING ZONE AHEAD Sign (W22-1)

As shown in the first sentence, the Traffic Manual “1000 FT” criteria (Page 5-35, Section 5-05.2.B.18.a, first sentence) is changed to “AHEAD” for the W22-1 sign.

Section 6F.40 TURN OFF 2-WAY RADIO AND CELL PHONE Sign (W22-2)

As shown in this section, the Traffic Manual “should” and “is” criteria (Page 5-35, Section 5-05.2.B.18.b, first sentence) is changed to “shall” for the W22-2 sign to follow the W22-1 sign and advance placement distance before the blasting zone.

Section 6F.42 Shoulder Signs (W8-4, W8-9, W8-9a)

Paragraph 3, the SHOULDER DROP-OFF (W8-9a) sign and policy is new.

Section 6F.43 UNEVEN LANES Sign (W8-11)

As shown in this section, the Traffic Manual “may” criteria (Page 5-36, Section 5-05.2.B.20) is changed to “should” for the use of the UNEVEN LANES sign.

Section 6F.44 NO CENTER STRIPE Sign (W8-12)

As shown in the first sentence, the Traffic Manual “may” criteria (Page 5-36, Section 5-05.2.B.21, first sentence) is changed to “should” for the use of the NO CENTER STRIPE sign.

Section 6F.45 Double Reverse Curve Signs (W24 Series)

This section is new.

Section 6F.46 Other Warning Signs

Paragraph 1 option that advance warning signs may be used by themselves or with other advance warning signs, is new.

Section 6F.47 Special Warning Signs

This section is new.

Section 6F.48 Advisory Speed Plaque (W13-1)

As shown in Paragraph 2 last sentence, the Traffic Manual “should” criteria (Page 5-37, Section 5-05.2.B.23, second last sentence) is changed to “shall” prohibiting the use of the Advisory Speed plaque until the recommended speed is determined by the highway agency.

Section 6F.49 Supplementary Distance Plaque (W7-3a)

This section is new.

Section 6F.50 Guide Signs

Paragraph 4 option to use fluorescent pink background in TTC incident management situations, is new.

Paragraph 6 option to use white legend on a green background for permanent directional and street name signs, is new.

Section 6F.51 ROAD WORK NEXT XX KM (MILES) Sign (G20-1)

Paragraph 2 option to mount G20-1 signs on Type III barricades and for use for TTC zones of shorter length, is new.

Section 6F.52 END ROAD WORK Sign (G20-2)

Paragraph 2 option to mount G20-2 signs on the back of a warning sign (facing the opposite direction) or Type III barricades, is new.

Section 6F.53 Detour Signs (M4-8, M4-8a, M4-8b, M4-9, M4-9a, M4-9b, M4-9c, and M4-10)

As shown in Paragraph 3, the Traffic Manual “should” criteria (Page 5-41, Section 5-05.2.C.4, first sentence) is changed to “may” for the use of Detour Arrow sign.

As shown in Paragraph 7, the Traffic Manual “may” criteria (Page 5-41, Section 5-05.2.C.4, third paragraph, last sentence) is changed to “should” for the placement of the Street Name sign.

Paragraphs 10 through 13 requirement, recommendation and options pertaining to Pedestrian/Bicycle Detour and Pedestrian Detour signs are new.

Section 6F.55 Portable Changeable Message Signs

As shown in Paragraph 1, the Traffic Manual “are” and “(blank)” criteria (Page 5-42, Section 5-05.3.A, first two sentences) is changed to “shall” requiring PCMS to be TTC devices with flexibility to display a variety of messages and that each message consist of one or two phases.

Section 6F.56 Arrow Panels

As shown in Paragraph 1, the Traffic Manual “is” and “is” criteria (Page 5-45, Section 5-05.4, first two sentences) is changed to “shall” requiring arrow panel to be a sign with a matrix of elements and to provide additional warning and directional information.

As shown in Paragraph 17, the Traffic Manual “may” criteria (Page 5-45, Section 5-05.4.B, first paragraph, first sentence) is changed to “shall” for the use of arrow or chevron mode.

Section 6F.58 Channelizing Devices

Paragraph 4 requiring channelizing devices used for pedestrians to be detectable and visible to persons with low vision, is new.

Paragraph 5 requirement and specifications for barricades used to channelize pedestrians be detectable, are new.

Paragraph 6 option for 6 in. gap between bottom rail and ground, is new.

Paragraph 7 requiring no gaps, if drums, cones or tubular markers are used to channelize pedestrians, is new.

Paragraph 10 recommending the extension of channelizing devices beyond the end of transition area, is new.

As shown in Paragraph 11, the Traffic Manual “should” criteria (Page 5-48, Section 5-05.6.A, fifth paragraph, first sentence) is changed to “may” for adding warning lights to channelizing devices.

As shown in Paragraph 12 first sentence, the Traffic Manual “may” criteria (Page 5-48, Section 5-05.6.A, fifth paragraph, second sentence) is changed to “shall” for flashing of warning lights.

Section 6F.59 Cones

Paragraph 6 recommending not to use cones for pedestrian channelization unless they are continuous and detectable, is new.

Section 6F.60 Tubular Markers

Paragraph 4 recommending not to use tubular markers for pedestrian channelization unless they are continuous and detectable, is new.

Section 6F.61 Vertical Panels

This section is new.

Section 6F.62 Drums

As shown in Paragraph 1 second last sentence, the Traffic Manual “50 mm” criteria (Page 5-51, Section 5-05.6.E, third paragraph, second last sentence) is changed to “75 mm” for maximum space between horizontal orange and white stripes.

Paragraph 4 recommending not to use drums for pedestrian channelization unless they are continuous and detectable, is new.

Section 6F.63 Type I, II, or III Barricades

As shown in Paragraph 5 first sentence, the Traffic Manual “is” criteria (Page 5-52, Section 5-05.6.F.1, second paragraph, third sentence) is changed to “shall” for the minimum length for Type I and II Barricades.

Paragraph 10 and 11 recommending to provide width of existing pedestrian facilities and specific criteria per ADAAG and to allow individuals in wheelchairs to pass, are new.

Paragraph 16 second sentence, prohibiting ballast to extend into the accessible passage width of 60 in. is new.

As shown in Paragraph 23, the Traffic Manual “should not be extended” criteria (Page 5-53, Section 5-05.6.F.2, third paragraph, first sentence) is changed to “usually are not extended” for barricades, when highway is legally closed but access must still be allowed for local road users. As shown in Paragraph 24, the Traffic Manual “should” criteria (Page 5-53, Section 5-05.6.F.2, third paragraph, second sentence) is changed to “shall” for installation of signs concerning permissible use by local road users.

Section 6F.64 Direction Indicator Barricades

This section is new.

Section 6F.66 Longitudinal Channelizing Barricades

This section is new.

Section 6F.67 Other Channelizing Devices

This section is new.

Section 6F.68 Detectable Edging for Pedestrians

This section is new.

Section 6F.69 Temporary Raised Islands

Most of this section is new. This section has been revised, as compared to the Traffic Manual Section 5-05.6.H (Page 5-53) and the MUTCD 1993.

Paragraph 1 requires temporary raised islands to be only used in combination with pavement markings and other suitable channelizing devices.

Paragraph 6 requires temporary raised islands to provide 60 in. pathway opening for pedestrians.

Section 6F.70 Opposing Traffic Lane Divider

Paragraph 2 prohibiting the opposing traffic lane dividers placement across pedestrian crossings, is new.

Section 6F.71 Pavement Markings

Paragraph 1 prohibiting the use of this section for short-term, mobile, or incident management TTC zones, is new.

Paragraph 8 recommending the use of markings in intermediate-term stationary work zones, is new.

Section 6F.72 Temporary Pavement Markings

As shown in Paragraph 2, the Traffic Manual “shall” criteria (Page 5-55, Section 5-05.7.B, third paragraph, second sentence) is changed to “should” recommending not to use temporary pavement markings for more than 2 weeks.

Paragraph 3 requiring temporary pavement markings to conform to chapters 3A and 3B, is new.

Paragraph 4 option to use half-cycle lengths on roadways with severe curvature, is new.

Paragraph 5 option to use passing zone signs, is new.

Section 6F.75 Lighting Devices

Paragraph 1 recommending the use of lighting devices based on engineering study, is new.

Paragraph 2 recommending the spacing of warning lights (when used to supplement channelizing devices) to be identical to channelizing device spacing requirements, is new.

Paragraph 6 prohibiting the use of vehicle hazard warning lights instead of high-intensity rotating, flashing, oscillating or strobe lights, is new.

Section 6F.76 Floodlights

As shown in Paragraph 3, the Traffic Manual “should” criteria (Page 5-56, Section 5-05.8.B, first paragraph, fourth sentence) is changed to “shall” requiring illumination of flagger stations.

Section 6F.78 Warning Lights

Paragraph 3 requiring that warning lights be used in a manner that they will not be likely to penetrate the windshield, is new.

Paragraph 4 recommending the spacing of warning lights to be identical to channelizing device spacing requirements, is new.

Paragraph 15 recommending the use of warning lights on the outside of the curve and not on the inside of the curve, is new.

Section 6F.79 Steady-Burn Electric Lamps

As shown in Paragraph 1, the Traffic Manual “shall” criteria (Page 5-57, Section 5-05.8.D, first sentence) is changed to “are” in describing the steady-burn electric lamps.

Paragraph 2 option to use steady-burn electric lamps in place of Type C Steady-Burn warning lights, is new.

Section 6F.80 Temporary Traffic Control Signals

Paragraph 4 recommending the use of engineering judgment to determine the need for pedestrian signals or accessible pedestrian signals, is new.

Paragraph 5 recommending conflict monitors for traditional traffic control signals be used for temporary traffic control signals, is new.

Paragraph 6 option that temporary traffic control signals be portable or mounted on fixed supports, is new.

Paragraph 7 prohibiting the encroaching of supports for temporary traffic control signals into the 48 in. (pedestrian access route) or 36 in. (alternate circulation path), is new.

Paragraph 8 recommending the use of temporary traffic control signals only where they are preferable to other means of traffic control, is new.

Paragraph 11 recommending other TTC devices to supplement temporary traffic control signals, is new.

Paragraph 12 recommending the design and placement of temporary traffic control signals to include interconnect to other traffic control signals, is new.

Paragraph 13 recommending the covering or removal of temporary traffic control signals, when not in use, is new.

Section 6F.81 Temporary Traffic Barriers

Paragraph 3 option to use temporary traffic barriers to separate two-way vehicular traffic, is new.

Section 6F.82 Crash Cushions

As shown in Paragraph 7, the Traffic Manual “must” criteria (Page 5-59, Section 5-05.9.A.2, third paragraph, first sentence) is changed to “should” for positioning of the shadow truck.

Paragraph 8 recommending the use of truck-mounted attenuator in accordance with manufacturer’s specifications, is new.

Section 6F.83 Vehicle-Arresting Systems

This section is new.

Section 6F.84 Rumble Strips

Paragraph 3 requiring (if desirable) the color of rumble strip to be the same color as the longitudinal line it supplements, is new.

Paragraph 4 requiring that if the color of the transverse rumble strip is not the color of the pavement, it be white, is new.

As shown in Paragraph 5 first sentence, the Traffic Manual “should” criteria (Page 5-61, Section 5-05.9.D, third paragraph, last sentence) is changed to “may” for reducing the interval between transverse rumble strips.

Paragraph 6 recommending transverse rumble strips be placed transverse to vehicular traffic movement and not adversely affect skid resistance, is new.

Paragraph 7 recommending the design of transverse rumble strips in a manner that does not promote unnecessary braking or erratic steering maneuvers, is new.

Paragraph 9 recommending not to place rumble strips through pedestrian crossings or on bicycle routes, is new.

Paragraph 10 recommending not to place transverse rumble strips on roadways used by bicyclists unless a 4 ft clear path is provided, is new.

Paragraph 11 recommending not to place longitudinal rumble strips on the shoulder of a roadway that is used by bicyclists unless a 4 ft clear path is provided, is new.

Section 6F.86 Future and Experimental Devices

This section is new.

Section 6F.105 OPEN TRENCH Sign (CA Code C27)

New text has been added to this section based on Caltrans internal memos.

Figure 6F-1. Height and Lateral Location of Signs—Typical Installations

This figure is adopted and replaces Traffic Manual Figure 5-5 (Page 5-23).

As shown in this figure, the Traffic Manual “2.1 m” criteria (Page 5-23, Figure 5-5) for mounting height in rural district is changed to “1.5 m”.

As shown in this figure, the Traffic Manual “1.8 m” criteria (Page 5-23, Figure 5-5) for mounting height of advisory speed plate in rural district is changed to “1.2 m”.

Figure 6F-3. Regulatory Signs in Temporary Traffic Control Zones

The R2-6, R3-18, R4-9, R9-8, R9-9 and R12-2 signs are new.

Figure 6F-4. Warning Signs in Temporary Traffic Control Zones

The W3-5, W3-5a, W4-2, W8-9a, W9-2, W9-3, W9-3a, W11-10, W20-5a, W21-5a, W21-7, W22-2, W24-1, W24-1a and W24-1b signs are new.

Figure 6F-5. Exit Open and Closed and Detour Signs

The E5-2, E5-2a, E5-3, M4-8b, M4-9, M4-9a, M4-9b and M4-9c signs are new.

Figure 6F-7. Channelizing Devices

The Vertical Panel, the 36 in. high cone and Directional Indicator Barricade figures are new.

Figure 6F-101. California Temporary Traffic Control Signs

This figure is new.

Figure 6F-103. Examples of Object Markers in Temporary Traffic Control Zones

This figure is new.

Table 6F-1. Sizes of Temporary Control Signs

This table is new.

Table 6F-101. List of California Temporary Control Signs

This table is new.

Table 6F-102. Maximum Spacing of Channelizing Devices

This table is new.

CHAPTER 6G. TYPE OF TEMPORARY TRAFFIC CONTROL ZONE ACTIVITIES

Section 6G.01 Typical Applications

Paragraph 2 requirement to include the needs and control of all road users (motorists, bicyclists, pedestrians and pedestrians with disabilities) through a TTC (Temporary Traffic Control) zone, is new.

Section 6G.02 Work Duration

Paragraph 13 option to use colored or marked vehicles in place of signs and channelizing devices for short-duration or mobile operations, is new.

Paragraph 15 option to use simplified control procedures and offset the reduction in devices by using more dominant devices for short-duration work is new.

Paragraph 18 option to use flaggers for mobile operations, is new.

Paragraph 23 option to retrieve and reposition signs for mobile operations that move at speeds less than 3 mph, is new.

Paragraph 24 option to use vehicles as components of TTC zones for mobile operations, is new.

Paragraph 25 option to use a single vehicle with warning devices for continuously moving operations, is new.

Paragraph 26 requiring mobile operations that move at speeds greater than 20 mph to have appropriate devices on the equipment or use a separate vehicle, is new.

Section 6G.04 Modifications to Fulfill Special Needs

Paragraph 3 option to add other devices to supplement the devices indicated in the typical applications, option to adjust device spacing and reducing devices for less complex conditions, is new.

As shown in Paragraph 4, the Traffic Manual “may” criteria (Page 5-66, Section 5-06.3.C, third paragraph) is changed to “should” for modifying typical applications when conditions are more complex.

Section 6G.05 Work Affecting Pedestrian and Bicycle Facilities

This section is new.

Paragraph 8 requires alternate pedestrian routes where pedestrian routes are closed.

Paragraph 9 requires temporary facilities for pedestrians be detectable and include accessibility features.

Section 6G.06 Work Outside of Shoulder

Paragraph 4 option to use the SHOULDER WORK sign, is new.

Paragraph 5 option to repeat the SHOULDER WORK signs every 1 mi., is new.

Paragraph 6 option to use NEXT X MILES supplementary plaque, is new.

Section 6G.07 Work on the Shoulder with No Encroachment

Paragraph 4 recommendations when paved shoulders 8 ft wide or more are closed, is new.
Paragraph 6 recommending the LOW SHOULDER or SOFT SHOULDER signs when the shoulder is not occupied but work has affected its condition, is new.
Paragraph 7 recommending that signs be repeated every 1 mi., is new.
Paragraph 8 option to use NEXT X MILES supplementary plaque, is new.
Paragraph 9 requiring arrow panels to operate only in the caution mode when used for shoulder work, is new.

Section 6G.08 Work on the Shoulder with Minor Encroachment

Paragraph 3 recommending to consider truck off-tracking when determining minimum lane width of 10 ft, is new.

Section 6G.09 Work Within the Median

Paragraph 2 recommending the use of TTC if work within the median is within 15 ft of the edge of traveled way, is new.

Section 6G.10 Work Within the Traveled Way of Two-Lane Highways

Paragraph 7 option to use flaggers per Figure 6H-10, is new.
Paragraph 8 option to use STOP/YIELD control on roads with low traffic volumes per Figure 6H-11, is new.
Paragraph 9 option to use temporary traffic control signal per Figure 6H-12, is new.

Section 6G.11 Work Within the Traveled Way of Urban Streets

Paragraph 4 second sentence, requiring that accessibility and detectability be maintained for pedestrian facilities, is new.
Paragraph 5 requiring adequate access for bicyclists, is new.
Paragraph 6 requiring access to temporary transit stops, is new.
Paragraph 8 recommending detectable channelizing devices within the intersection, is new.
Paragraph 10 requiring all TTC devices to be retroreflective or illuminated for nighttime utility work, is new.

Section 6G.12 Work Within the Traveled Way of Multi-Lane, Non-Access Controlled Highways

Paragraph 3 requiring a transition area containing a merging taper for lane closure on multi-lane road, is new.
Paragraph 5 requiring channelizing devices, delineation and/or other TTC devices on temporary traffic barriers and merging tapers, is new.
As shown in Paragraph 9, the Traffic Manual “may” criteria (Page 5-69, Section 5-06.8.A, first paragraph, third sentence) is changed to “consideration should be given” for closing the inside lane for opposing traffic per Figure 6H-31.
As shown in Paragraph 10, the Traffic Manual “can” criteria (Page 5-69, Section 5-06.8.A, second paragraph, first sentence) is changed to “should” to change TTC for allowing two lanes for opposing traffic by moving devices from the opposing lane back to the centerline.
As shown in Paragraph 12, the Traffic Manual “should” criteria (Page 5-69, Section 5-06.8.B, second sentence) is changed to “shall” for placement of channelizing devices along the centerline and adjacent lane.
As shown in Paragraph 15, the Traffic Manual “should” criteria (Page 5-69, Section 5-06.8.C, last sentence) is changed to “shall” to cover, remove or obliterate existing traffic control devices.

As shown in Paragraph 17, the Traffic Manual “should” criteria (Page 5-70, Section 5-06.8.D, second sentence) is changed to “can” to use Figure 6H-35 for five-lane road for short duration and mobile operations.

Section 6G.13 Work Within the Traveled Way at an Intersection

Paragraph 5 requiring contact with the highway agency having jurisdiction, is new.

As shown in Paragraph 6 first sentence, the Traffic Manual “are” criteria (Page 5-70, Section 5-06.9, first paragraph, first sentence) is changed to “should” for using signs, markings and devices on all cross streets.

Paragraph 6 second sentence, recommending the use of additional warning signs where speeds exceed 40 mph, is new.

Paragraph 7 recommending separation of pedestrian crossings from worksite by barriers that maintain accessibility and detectability, is new.

Paragraph 9 option to use exclusive turn lane for near-side work spaces, is new.

Paragraph 10 option to use two warning signs and a third action-type sign where space is restricted, is new.

Paragraph 12 recommending lane closure on the near-side if the lane on the far-side is closed, is new.

Paragraph 13 option to convert the near-side into an exclusive turn lane, if the lane on the far-side is closed, is new.

Paragraph 16 recommending the use of a flagger or uniformed law enforcement officer, is new.

Section 6G.14 Work Within the Traveled Way of Expressways and Freeways

As shown in Paragraph 1 second last sentence, the Traffic Manual “may” criteria (Page 5-70, Section 5-06.10, first paragraph, second last sentence) is changed to “often” for situations requiring more conspicuous devices.

Paragraph 4 recommending the method for closing an interior lane per Figure 6H-37 and 6H-38, is new.

Section 6G.15 Two-Lane, Two-Way Traffic on One Roadway of a Normally Divided Highway

Paragraph 2 requiring temporary traffic barriers or channelizing devices to separate opposing traffic rather than using only markings and signing, is new.

Section 6G.18 Movable Barriers

This section is new.

Section 6G.19 Work in the Vicinity of Highway-Rail Grade Crossings

This section is new.

Paragraph 1 prohibits the queuing of vehicles across railroad tracks due to lane restrictions, flagging or other operations unless uniformed law enforcement officer or flagger is used.

Section 6G.20 Temporary Traffic Control During Nighttime Hours

This section is new.

CHAPTER 6H. TYPICAL APPLICATIONS

Section 6H.01 Typical Applications

Paragraph 2 requirement to include the needs and control of all road users (motorists, bicyclists, pedestrians and pedestrians with disabilities) through a TTC (Temporary Traffic Control) zone, is new.

Notes for Figure 6H-1 – Typical Application 1

Note 6 prohibiting the use of vehicle hazard warning signals instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Notes for Figure 6H-3 – Typical Application 3

Note 5 option to use of vehicle hazard warning signals to supplement the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Note 6 prohibiting the use of vehicle hazard warning signals instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Note 7 requiring at least one advance warning sign if paved shoulder 8 ft wide or more is closed, is new.

Notes for Figure 6H-4 – Typical Application 4

Note 3 option to use ROAD WORK NEXT X MILES instead of ROAD WORK AHEAD for work locations over 2 mi. long, is new.

Note 6 prohibiting the use of vehicle hazard warning signals instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Note 7 requiring the caution mode, if arrow panel is used, is new.

Notes for Figure 6H-6 – Typical Application 6

Note 3 option to use minimum 9 ft lane width for low-volume, low-speed roadways, is new for local agencies.

Note 7 prohibiting the use of vehicle hazard warning signals instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Notes for Figure 6H-7 – Typical Application 7

Note 2 requiring similar devices for the opposite direction of travel, is new.

Note 4 requiring temporary barriers and end treatments to be crashworthy, is new.

Note 10 option to use delineators or channelizing devices, is new.

Notes for Figure 6H-8 – Typical Application 8

Note 5 option to use cardinal direction plaques with route signs, is new.

Notes for Figure 6H-9 – Typical Application 9

Note 6 option to use cardinal direction plaques with route signs, is new.

Notes for Figure 6H-10 – Typical Application 10

Note 5 requiring illumination of flagger stations at night, is new.

Note 6 recommendation (as modified by the CA Supplement) for the location of the BE PREPARED TO STOP SIGN, is new.

Notes 7 through 10 recommendations pertaining to highway-rail grade crossings, are new.

Note 11 option to use a flagger or uniformed law enforcement officer at the highway-rail grade crossing, is new.

Notes for Figure 6H-12 – Typical Application 12

Note 5 requiring safeguards to avoid conflicting signal indications, is new.

Note 6 recommending to add no-passing lanes, is new.

As shown in Note 7, the Traffic Manual both “may” criteria (Page 5-106, Notes for Typical Application 5-12) are changed to “should” for making adjustments in the location of advance warning signs and adjustments in the height of signal heads.

Notes for Figure 6H-13 – Typical Application 13

Note 2 requiring a flagger or uniformed law enforcement officer for this typical application, is new.

Note 4 option to use the BE PREPARED TO STOP sign, is new.

Note 5 recommendation (as modified by the CA Supplement) for the location of the BE PREPARED TO STOP SIGN, is new.

Notes for Figure 6H-14 – Typical Application 14

Note 2 recommending to add no-passing lanes, is new.

Note 6 requiring illumination of flagger stations at night, is new.

Note 9 requiring stop lines with TTC signals, is new.

Note 10 requiring requiring removal of conflicting pavement markings and after TTC signal removal, the removal of temporary markings and restoring permanent markings, is new.

Notes for Figure 6H-15 – Typical Application 15

Note 2 recommending workers to wear high-visibility safety apparel per Section 6D.03, is new.

Note 5 option to use minimum 9 ft lane width for low-volume, low-speed roadways, is new for local agencies.

Note 7 option to use of vehicle hazard warning signals to supplement the vehicle’s high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Note 8 prohibiting the use of vehicle hazard warning signals instead of the vehicle’s high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Notes for Figure 6H-16 – Typical Application 16

Note 10 option to omit the use of a flagger if the work is along a shoulder, is new.

Note 12 option to add the BE PREPARED TO STOP sign to the sign series, is new.

Note 13 recommendation (as modified by the CA Supplement) for the location of the BE PREPARED TO STOP SIGN, is new.

Notes for Figure 6H-17 – Typical Application 17

Note 3 requiring the caution mode, if arrow panel is used, is new.

As shown in Note 6, the Traffic Manual “shall” criteria (Page 5-116, Notes for Typical Application 5-17, Note 5) is changed to “should” for shadow vehicles to be equipped with two high intensity flashing lights.

As shown in Note 9, the Traffic Manual “should” criteria (Page 5-116, Notes for Typical Application 5-17, Note 4) is changed to “may” for using a truck-mounted attenuator on the shadow or work vehicle.

Note 10 option to use the DO NOT PASS sign on the work or shadow vehicle, is new.

Note 12 prohibiting the use of vehicle hazard warning signals instead of the vehicle’s high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Notes for Figure 6H-18 – Typical Application 18

Note 3 requiring one or two flaggers per Figure 6H-10, is new.

Note 5 option to use truck-mounted attenuator on the shadow or work vehicle, is new.

Notes for Figure 6H-19 – Typical Application 19

Note 1 recommending to use this plan for streets without posted route numbers, is new.

Note 2 recommending Detour signs with an Advance Turn Arrow, is new.

Notes for Figure 6H-21 – Typical Application 21

Note 1 requiring merging taper to direct vehicular traffic into either the right or left lane, not both, is new.

Note 5 option to use truck-mounted attenuator on the shadow vehicle, is new.

Note 6 option to use work vehicle with high intensity lights with the high-level warning device, is new.

Note 7 option to use of vehicle hazard warning signals to supplement the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Note 8 prohibiting the use of vehicle hazard warning signals instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Notes for Figure 6H-24 – Typical Application 24

Note 2 recommending the use of two turn prohibition signs, is new.

Note 9 option to use temporary pavement markings, is new.

Notes for Figure 6H-26 – Typical Application 26

Note 3 option to use minimum 9 ft lane width for low-volume, low-speed roadways, is new for local agencies.

Note 7 option to use of vehicle hazard warning signals to supplement the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Note 8 prohibiting the use of vehicle hazard warning signals instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Notes for Figure 6H-27 – Typical Application 27

Note 2 recommending the use of a flagger(s) or uniformed law enforcement officer(s), is new.

Note 3 requiring illumination of flagger stations at night, is new.

Note 7 option to add the BE PREPARED TO STOP sign to the sign series, is new.

Note 6 option to eliminate channelizing devices if a vehicle displaying high-intensity lights is positioned in the work space for short-duration operations, is new.

Note 8 recommendation (as modified by the CA Supplement) for the location of the BE PREPARED TO STOP SIGN, is new.

Note 10 option to use of vehicle hazard warning signals to supplement the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Note 11 prohibiting the use of vehicle hazard warning signals instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights, is new.

Notes for Figure 6H-28 – Typical Application 28

Note 1 requiring detectable and accessible features for pedestrian facilities, is new.

Note 3 recommending the consideration of audible information devices for pedestrians with visual disabilities, is new.

Notes for Figure 6H-29 – Typical Application 29

Note 1 requiring detectable and accessible features for pedestrian facilities, is new.

Note 3 recommending the consideration of audible information devices for pedestrians with visual disabilities, is new.

Note 9 option to use FYG background for pedestrian, bicycle and school warning signs, is new.

Notes for Figure 6H-30 – Typical Application 30

Note 1 recommending additional signing such as LEFT LANE CLOSED XX FT, is new.

Note 4 recommending to extend the TTC zone so that transition area precedes the highway-rail grade crossing, is new.

Note 5 recommending early coordination with the railroad company, is new.

Notes for Figure 6H-31 – Typical Application 31

As shown in Note 1, the Traffic Manual “would” criteria (Page 5-144, Notes for Typical Application 5-31, Note 1, first sentence) is changed to “shall” for use of Figure 6H-31(CA) when traffic volume indicates that two lanes shall be maintained in the direction of travel for which one lane is closed.

Note 10 option to use truck-mounted attenuator on the shadow or work vehicle, is new.

The Traffic Manual “3 meters” condition (Page 5-144, Note 4) is changed to the criteria shown in Section 6F.58 and newly created Table 6F-102.

Notes for Figure 6H-32 – Typical Application 32

Note 1 requiring the removal or obliteration of pavement markings no longer applicable, requiring temporary pavement markings and channelization be made dominant by using close device spacing, is new.

Note 2 recommendation to use channelizing devices to close the shoulder when paved shoulders 8 ft wide or more are closed, is new.

Note 4 recommending the use of Reverse Curve sign instead of the Double Reverse Curve sign, is new.

Notes 6 through 8 recommendations pertaining to highway-rail grade crossings, are new.

Note 9 option to use a flagger at the highway-rail grade crossing, is new

Note 10 option to use truck-mounted attenuator on the shadow or work vehicle, is new.

The Traffic Manual “3 meters” condition (Page 5-144, Note 4) is changed to the criteria shown in Section 6F.58 and newly created Table 6F-102.

Notes for Figure 6H-33 – Typical Application 33

Note 3 recommendation to use channelizing devices to close the shoulder when paved shoulders 8 ft wide or more are closed, is new.

Note 4 option to use truck-mounted attenuator on the shadow or work vehicle, is new.

Notes for Figure 6H-34 – Typical Application 34

All Notes, 1 through 9, are new.

Notes for Figure 6H-35 – Typical Application 35

Note 6 recommending to minimize spacing between vehicles to deter road users from driving in between, is new.

Note 8 recommending the use of Shadow Vehicle 2 to drive the right shoulder with a sign indicating that work is taking place in the interior lane, is new.

Notes and Figures 6H-36 and 6H-39 through 6H-46 (TA-36 and TA-39 through TA-46)

All these Typical Applications and Figures are new.

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

This table is new.

Table 6H-4. Formulas for Determining Taper Lengths

This table is new.

**CHAPTER 6I. CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT
MANAGEMENT AREAS**

This entire chapter is new.

Traffic Manual Section 5-06.11 (Page 5-73) contained text on this topic some of which has been carried over into this MUTCD chapter.

Section 6I.01 General

Paragraph 2 requires including the needs and control of all road users (motorists, bicyclists, pedestrians and pedestrians with disabilities) through a TTC (Temporary Traffic Control) zone. Paragraph 10 provides an option to use warning and guide signs with black legend and border on a fluorescent pink background for TTC traffic incident management situations.

PART 7. TRAFFIC CONTROLS FOR SCHOOL AREAS

CHAPTER 7A. GENERAL

Section 7A.01 Need for Standards

Paragraph 6 recommending to prepare a school route plan, is new.

Paragraph 7 recommending that the school route plan consist of a map per Figure 7A-1, is new.

Paragraph 8 recommending the type of traffic control devices used be related traffic volume and speed, street width, and number and age of students using the crossing, is new.

Paragraph 9 recommending that school area traffic control devices be included in a school traffic control plan, is new.

Section 7A.02 School Routes and Established School Crossings

As shown in Paragraph 7 of the CA Supplement (first paragraph under sub-heading School Responsibility), the Traffic Manual “shall” criteria (Page 10-2, Section 10-02.3, first paragraph, first sentence) is changed to “should” regarding referring of traffic related issues to the school district or the local school principal.

Section 7A.04 Scope

This section is new.

Section 7A.05 Application of Standards

This section is new.

Section 7A.06 Engineering Study Required

This section is new.

Section 7A.07 Maintenance of Traffic Control Devices

This section is new.

Section 7A.08 Placement Authority

This section is new.

Section 7A.09 Unauthorized Devices and Messages

This section is new.

CHAPTER 7B. SIGNS

Section 7B.01 Size of School Signs

Paragraph 1 requirement for sizes of signs and plaques per Table 7B-1, is new.

Paragraph 5 option to use minimum sign size on local low volume low speed urban streets, is new.

Section 7B.03 Position of Signs

As shown in Paragraph 1 first sentence, the Traffic Manual “shall” criteria (Page 10-5, Section 10-03.4, first paragraph) is changed to “should” for the placement of signs in positions where they convey their message effectively.

Section 7B.04 Height of Signs

This section is new.

Section 7B.05 Installation of Signs

This section is new.

Section 7B.06 Lettering

This section is new.

Section 7B.07 Sign Color for School Warning Signs

This section is new.

Paragraph 1 requires school warning signs to have a yellow background with black legend and border, unless the FYG option is used.

Paragraph 3 recommends a systematic approach to using yellow or FYG color background and also recommends avoiding the mixing of the two colors.

Section 7B.08 School Advance Warning Assembly (S1-1 with Supplemental Plaque)

This section in the CA Supplement has been extensively revised (from the Traffic Manual) to further clarify the California Vehicle Code interpretations.

Section 7B.09 School Crosswalk Warning Assembly (S1-1 with Diagonal Arrow)

Paragraph 2 prohibiting the use of School Crosswalk Warning assembly at marked crosswalks that are not adjacent to schools or on established school pedestrian routes, is new.

Paragraphs 5 through 8 pertaining to the R1-6 sign and its policy are new. The R1-6a sign is deleted for application in California.

Paragraph 1 requiring School Crosswalk Warning assembly to consist of a School Advance Warning (S1-1) sign supplemented with a diagonal downward pointing arrow plaque to show the location of the crossing is new. This requirement is different from the Traffic Manual (CA Code W66 and W66A signs, page 4-34). This new MUTCD requirement is being adopted. The CA Code W66 and W66A signs are deleted.

This section in the CA Supplement has been revised (from the Traffic Manual) to further clarify the California Vehicle Code interpretations.

Section 7B.10 SCHOOL BUS STOP AHEAD Sign (S3-1)

The SCHOOL BUS STOP ___ FT (CA Code W64) is being replaced with SCHOOL BUS STOP AHEAD (S3-1) sign.

The Traffic Manual policy (Page 10-9) is “shall” for 0 to 200 ft. is retained. The MUTCD section is adopted as “should” condition for 200 to 500 ft.

Section 7B.11 School Speed Limit Assembly (S4-1, S4-2, S4-3, S4-4, S5-1)

This section is new.

New text has been added in the CA Supplement section based on Caltrans internal memos and to further clarify the California Vehicle Code interpretations.

Section 7B.12 Reduced Speed School Zone Ahead Sign (S4-5, S4-5a)

This section is new.

Section 7B.13 END SCHOOL ZONE Sign (S5-2)

The Traffic Manual END SCHOOL ZONE (CA Code W65-1) black on yellow sign (W65-1 policy, Page 10-9) is being replaced with MUTCD’s END SCHOOL ZONE (S5-2) black on white sign.

Section 7B.14 Parking and Stopping Signs (R7 and R8 Series)

This section is new.

Section 7B.101 TRAFFIC FINES DOUBLED Sign (CA Code SR59)

This section is new.

Figure 7B-2. Examples of Signing for School Crosswalk Warning Assembly

This figure is new.

Figure 7B-3. Examples of Signing for School Area Traffic Control with School Speed Limits

This figure is new.

Figure 7B-4. In-Street Signs in School Areas

The R1-6 sign is new.

Figure 7B-101. School Area Signs

This figure is new.

Sign assemblies A, B, C and D are shown as a package.

The MUTCD signs S3-1, S4-5, S4-5a and S5-2 are shown.

The SR59 (CA Code) sign is shown.

Figure 7B-102. Examples of Signing for Traffic Control in School Areas

This figure has been revised (from the Traffic Manual Figures 10-3 and 10-4, Pages 10-24 and 10-25) to further clarify the California Vehicle Code interpretations.

Figure 7B-103. Examples of Signing for Traffic Control in School Areas with Flashing Yellow Beacons

This figure has been revised (from the Traffic Manual Figure 10-5, Page 10-26) to further clarify the California Vehicle Code interpretations.

Figure 7B-104. Examples of School Area Signs with Flashing Yellow Beacons

This figure has been revised (from the Traffic Manual Figure 10-6, Page 10-27) to show sign assemblies.

Table 7B-1. Size of School Area Signs and Plaques

This table is new.

CHAPTER 7C. MARKINGS

Section 7C.03 Crosswalk Markings

As shown in Paragraph 5, the Traffic Manual “shall” criteria (Page 10-11, Section 10-04.3, second paragraph, second sentence) is changed to “should” for the minimum 6 ft gap between the crosswalk lines.

Paragraph 10 recommending the width (12 to 24 in.) and spacing (12 to 60 in. apart) of diagonal or longitudinal lines and to avoid wheel paths, is new.

Section 7C.04 Stop and Yield Lines

Paragraph 2, 5, 6 and 8 requirement, recommendations and option for the yield lines, are new.

Paragraph 9 recommending the placement of stop lines 40 ft in advance of the nearest signal indication for midblock signalized location, is new.

Section 7C.06 Pavement Word and Symbol Markings

Paragraph 2 second sentence prohibiting the use of word and symbol markings for mandatory messages except when supported by standard signs, is new.

Paragraph 4 recommending that word and symbol markings not exceed three lines of information, is new.

Figure 7C-101. Pavement Word Markings for School Areas

This figure is new.

CHAPTER 7E. CROSSING SUPERVISION

Section 7E.02 Adult Crossing Guards

This section is new.

Section 7E.03 Qualifications of Adult Crossing Guards

This section is new.

Section 7E.04 Uniform of Adult Crossing Guards and Student Patrols

Paragraph 2 requiring safety apparel labeled as ANSI standard for adult crossing guards, is new.

Paragraph 3 requiring safety apparel labeled as ANSI standard for student patrols, is new.

Paragraph 4 recommending that law enforcement officers wear high-visibility retroreflective material for nighttime operation, is new.

Section 7E.05 Operating Procedures for Adult Crossing Guards

As shown in Paragraph 2, the Traffic Manual “may” criteria (Page 10-10, C28A sign policy, and page 10-17, Section 10-07.8, second paragraph, first sentence) is changed to “should” for the use of STOP paddle.

Paragraph 3 requirements for the STOP paddle are new.

Paragraphs 4 option to incorporate flashing lights and the pattern arrangements, is new.

Paragraph 5 requiring the specific flash rate range, is new.

Section 7E.06 Uniformed Law Enforcement Officers

This section is new.

Section 7E.07 Student Patrols

Paragraph 3 second sentence, recommending that student patrols not function as uniformed law enforcement officers or adult crossing guards, is new.

Section 7E.08 Choice of Student Patrols

As shown in Paragraph 1 first sentence, the Traffic Manual “shall” criteria (Page 10-18, Section 10-07.12, first paragraph, first sentence) is changed to “should” for the selection of student patrols.

Section 7E.09 Operating Procedures for Student Patrols

This section is new.

Paragraph 2 requires flagging devices to be retroreflective or illuminated during periods of twilight or darkness.

Paragraph 3 prohibits the use of STOP paddle by student patrols.

CHAPTER 7F. GRADE-SEPARATED CROSSINGS

Traffic Manual Chapters 10-08 (Grade Separation Crossings) and 10-09 (Pedestrian Walkways) are being deleted as they are not traffic control device topics but rather design features and are more appropriate in the Design or Planning Manuals.

PART 8. TRAFFIC CONTROLS FOR HIGHWAY-RAIL GRADE CROSSINGS

Majority of this entire part is new.

Since majority of this part is new, only changes from Traffic Manual are discussed below. All new chapters, sections, figures, signs and tables, as they apply to California have been omitted from the text that follows. Please refer to the specific topics in this part of the MUTCD or the CA Supplement for details contained in all the new changes.

This part in the CA Supplement has been enhanced throughout by including a number of CPUC regulations and references.

CHAPTER 8B. SIGNS AND MARKINGS

Section 8B.04 Highway-Rail Grade Crossing Advance Warning Signs (W10 Series)

As shown in Paragraph 4, the Traffic Manual “may” criteria (Page 4-19, CA Code W10 thru W10B sign policies) is changed to “shall” for the use of W10-2, W10-3 or W10-4 signs.

PART 9. TRAFFIC CONTROL FOR BICYCLE FACILITIES

Majority of this entire part is new.

This part as adopted from the MUTCD and included in the CA Supplement is based on Caltrans Highway Design Manual Chapter 1000 – Bikeway Planning and Design. The Traffic Manual Chapter 12 was never written and only a place holder. The traffic control device policies for bicycle facilities were included in this Caltrans Highway Design Manual Chapter 1000. Caltrans Highway Design Manual, Chapter 1000 traffic control device policies have been revised for formatting purposes and minor enhancements to the figures have been made to clarify some details.

Since majority of this part is new, only changes from Traffic Manual are discussed below. All new chapters, sections, figures, signs and tables, as they apply to California have been omitted from the text that follows. Please refer to the specific topics in this part of the MUTCD or the CA Supplement for details contained in all the new changes.

CHAPTER 9B. SIGNS

Section 9B.17 Bicycle Warning Sign (W11-1)

As shown in Paragraph 2, the Traffic Manual “should” criteria (Page 4-37, W79 sign policy) is changed to “may” for the use of supplemental plaque with Bicycle Warning sign.

Section 9B.19 Bicycle Route Guide Signs (D11-1)

As shown in Paragraph 1, the Traffic Manual “may” criteria (Page 4-122, G93 sign policy, first paragraph, first sentence) is changed to “If used” for the use of Bicycle Route Guide (D11-1) sign.

Section 9B.21 Destination Arrow and Supplemental Plaque Signs for Bicycle Route Signs

As shown in Paragraph 3, the Traffic Manual “shall” criteria (Page 4-122, G93 sign policy, first paragraph, second sentence) is changed to “If used” for the use of arrows below the Bicycle Route Guide (D11-1) sign.

PART 10. TRAFFIC CONTROLS FOR HIGHWAY-LIGHT RAIL TRANSIT GRADE CROSSINGS

Majority of this entire part is new.

This part as adopted from the MUTCD and included in the CA Supplement is based on California Traffic Control Devices Committee's (CTCDC) Light Rail Traffic Manual publication. The traffic control device policies for Light Rail facilities were included in this CTCDC publication. The Light Rail Traffic Manual's traffic control device policies have been revised for formatting purposes and minor enhancements to the figures have been made to clarify some details.

Since majority of this part is new, only changes from Traffic Manual are discussed below. All new chapters, sections, figures, signs and tables, as they apply to California have been omitted from the text that follows. Please refer to the specific topics in this part of the MUTCD or the CA Supplement for details contained in all the new changes.

This part in the CA Supplement has been enhanced throughout by including a number of CPUC regulations and references.

CHAPTER 10C. SIGNS, ILLUMINATION, AND MARKINGS

Section 10C.12 No Vehicles On Tracks Signs (R15-6, R15-6a)

As shown in Paragraph 3, the Traffic Sign Specifications "shall" criteria (CA Code SR52 sign policy) is changed to "may" for the use of No Vehicles On Tracks sign.

The NO VEHICLES ON TRACKS (CA Code SR52A) educational plaque is being deleted.