

Meeting Date: November 04, 2021 Item Number: 21-21	<b>From:</b> Gurinderpal (Johnny) Bhullar, PE, TE, Secretary to CTCDC
Sponsored By: Lee Haber, PE, Caltrans	<b>Presented By:</b> Russ Wenham, PE, TE, PTOE, Caltrans
<b>Description:</b> Proposal to add Figures and to make text revisions for Temporary Traffic Control at Roundabouts.	

#### **Recommendation:**

Motion by committee to recommend inclusion of the proposed changes to Section 6G.13 "Work Within the Traveled Way at an Intersection", Table 6H-1 (CA), and Figures 6H-106(CA), and 6H-107(CA) in the CA MUTCD.

#### **Agency Making Request/Sponsor:**

Caltrans.

#### **Background:**

California is lacking guidance on Temporary Traffic Control (TTC) at roundabouts.

It is anticipated that the new federal MUTCD will be published in early 2022. Caltrans will have up to 2 years to adopt an updated CA MUTCD. While the goal of the attached proposed updates is to be consistent with the pending new federal MUTCD, it is anticipated that some sections and wording will need to be updated in the updated version of the CA MUTCD. In order to provide the best practices for the endusers of the CA MUTCD at the earliest time, Caltrans is planning the updates presented in the attachments.

FHWA Notice of Proposed Amendments for the next version of the Federal MUTCD includes figures and notes for TTC in a roundabout. The attached proposal is consistent with the proposed amendment to the next version of the Federal MUTCD. Caltrans supports adoption of the guidance for current use in roundabouts. Based on the edits shown on the attachments, Caltrans will develop Standard Plans to be used for roundabouts on the State Highway System.

#### **Attachments:**

Attachment A – Proposed Change to Section 6G.13 Attachment B – Proposed Change to Table 6H-1(CA) Attachment C – Proposed Addition of Figure 6H-106(CA) Attachment D – Proposed Addition of Figure 6H-107(CA)



# **ATTACHMENT A**



#### Attachment A – Proposed Change to Section 6G.03

#### **Proposal:**

Note:

Black text is consistent with the Federal MUTCD.

Blue text is current text as amended for use in California.

Struck-out red text is to be deleted from the CA MUTCD.

Red text is newly proposed text.

### Modify Section 6G.13 as follows:

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

Option

- 15 If the work is within the intersection, any of the following strategies may be used:
- A. A small work space so that road users can move around it, as shown in Figure 6H-26;
- B. Flaggers or uniformed law enforcement officers to direct road users, as shown in Figure 6H-27 and Figure 6H-106 (CA);
- C. Work in stages so the work space is kept to a minimum; and
- D. Road closures or upstream diversions to reduce road user volumes.

Guidance:

16 Depending on road user conditions, a flagger(s) and/or a uniformed law enforcement officer(s) should be used to control road users.

#### Support:

<sub>17</sub>Work at a roundabout can present a challenge for developing an effective TTC plan. Figures 6H-106(CA) and 6H-107(CA) provide guidance on applicable procedures for work performed within a roundabout.



# **ATTACHMENT B**



### Attachment B – Proposed Change to Table 6H-1(CA)

#### Proposal:

Note:

Black text is consistent with the Federal MUTCD.

Blue text is current text as amended for use in California.

Struck-out red text is to be deleted from the CA MUTCD.

Red text is newly proposed text.

### Modify Table 6H-1 (CA) as follows:

### Table 6H-1(CA). Index of Typical Applications

Typical Application Description	Typical Application Number	
Work affecting Pedestrian and Bicycle Facilities (see Section 6G.05)		
Shoulder Closure on Urban (Low Speed) Locations to Accommodate Bicyclists	TA-101(CA)	
Lane Closure on Freeway, Expressway, Rural and Urban (High Speed) Locations	TA-102(CA)	
to Accommodate Bicyclists		
Detour for Bike Lane on Roads with Closure of One Travel Direction	TA-103(CA)	
Right Lane and Bike Lane Closure on Far Side of Intersection	TA-104(CA)	
Work Within the Traveled Way of a Two-Lane Highway (see Section 6G.10)		
Lane Shift on Road with Low Traffic Volumes	TA-105(CA)	
Work Within the Traveled Way of a Roundabout (see Section 6G.13)		
Partial Closure in a Single-Lane Roundabout	TA-106(CA)	
Inside Lane Closure on a Multi-Lane Roundabout	TA-107(CA)	



# ATTACHMENT C



#### Attachment C – Proposed Change to Figure 6H-106(CA)

#### Proposal:

Note:

Black text is consistent with the Federal MUTCD.

Blue text is current text as amended for use in California.

Struck-out red text is to be deleted from the CA MUTCD.

Red text is newly proposed text.

Add the following notes to new Figure 6H-106(CA):

# Notes for Figure 6H-106(CA)-Typical Application 106(CA) Partial Closure in a Single Lane Roundabout

#### Option:

- 1. Flashing warning lights and/or flags may be used to call attention to the advance warning signs. A BE PREPARED TO STOP sign may be added to the sign series.
- 2. If closure continues overnight, warning lights may be used on the channelizing devices.

#### **Standard:**

- 3. Where a quadrant of the roundabout is closed as shown in Figure 6P-106(CA), only one direction of approach traffic shall be released at a time.
- 4. At night, flagger stations shall be illuminated, except in emergencies.
- 5. WRONG WAY signs shall be covered.

#### Guidance:

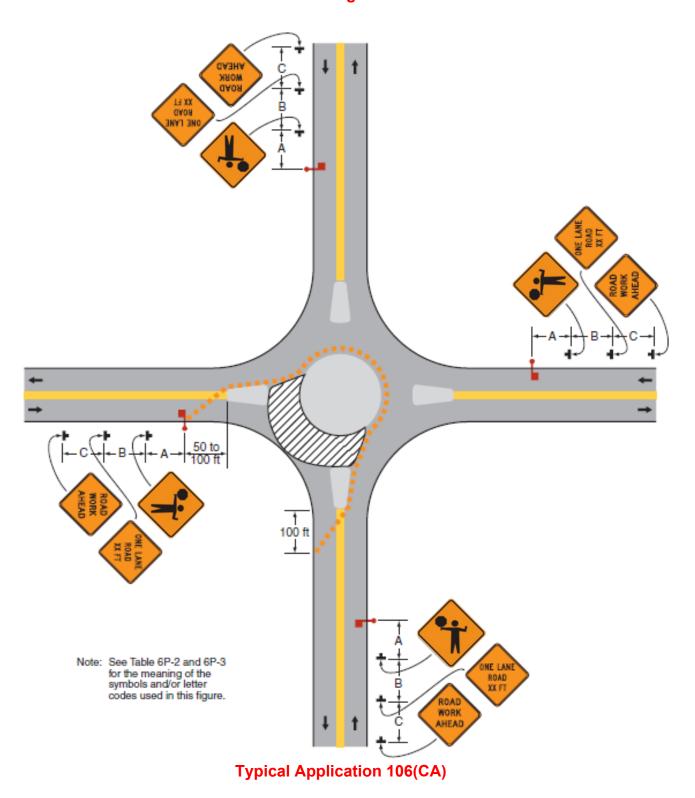
- 6. When used, the BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.
- 7. YIELD, ONE WAY, and Directional arrow signs should be covered or removed.
- 8. Confusing or misleading guide or lane-use control signs should be covered.
- 9. Crosswalks may be closed.
- 10. As an alternative to closing crosswalks, warning signs may be added informing pedestrians that there is traffic coming from the left.

#### Guidance:

- 11. Since the geometrics of the roundabout will be temporarily altered, consideration should be given to establishing a truck detour for the duration of the project.
- 12. For intermediate or long-term work, the roundabout should be closed and traffic detoured, with appropriate detour signing provided.



# Figure 6H-106(CA)-Typical Application 106(CA) Partial Closure in a Single Lane Roundabout





# ATTACHMENT D



#### Attachment D – Proposed Change to Figure 6H-107(CA)

#### Proposal:

Note:

Black text is consistent with the Federal MUTCD.

Blue text is current text as amended for use in California.

Struck-out red text is to be deleted from the CA MUTCD.

Red text is newly proposed text.

### Notes for Figure 6H-107(CA) -Typical Application 107 Inside Lane Closure on a Multi-Lane Roundabout

#### Standard:

- 1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility. See Figure 6H-28, Crosswalk Closures and Pedestrian Detours (TA-28). *Guidance:*
- 2. Care should be exercised when establishing the limits of the work zone to sight distance in advance of the transition.
- 3. When designing the temporary traffic control and installing the channelizing devices for work activities at roundabouts, accommodations for the turning radius of wider heavy commercial vehicles should be considered.
- 4. Since the geometrics of the roundabout will temporarily be altered, consideration should be given to establishing a truck detour for the duration of the project.
- 5. For intermediate or long-term work, the roundabout should be closed if traffic cannot be accommodated, and traffic detoured with appropriate detour signing provided. See Figure 6H-8, Road Closure with an Off-Site Detour (TA-8).
- 6. Conflicting pavement markings should be removed for long-term projects. For short-term and intermediate-term projects where this is not practical, the channelizing devices in the area where the pavement markings conflict should be placed at a maximum spacing of 1/2 S feet where S is the speed in mph. Temporary markings should be installed where needed.

#### Option:

- 7. A portable changeable message sign may be utilized as part of the temporary traffic control plan to provide clear guidance to motorist on all approaches of the roundabout.
- 8. On a multi-lane approach, either lane may be closed.



### Figure 6H-107(CA)-Typical Application 107(CA) Inside Lane Closure on a Multi-Lane Roundabout

