April 8, 2009

In Reply Refer To: HOTO-1

Mr. Wayne Henley
Office Chief
California Department of Transportation
Division of Traffic Operations
P.O. Box 942873
Sacramento, CA 94273-0001

Dear Mr. Henley:

Thank you for your letter of March 4 requesting an official interpretation of the meaning of the first sentence of Section 6F.20 of the 2003 MUTCD, which states the following:

The ONE LANE ROAD (W20-4) sign (see Figure 6F-4, Sheet 3 of 4) shall be used only in advance of that point where motor vehicle traffic in both directions must use a common single lane (see Section 6C.10).

The wording in this Standard sentence is meant to restrict the use of the W20-4 sign to only those locations where traffic traveling in opposing directions will be forced to alternately travel through a one-lane section of roadway. This sentence prohibits the use of the W20-4 sign in situations where drivers in two or more lanes traveling in the same direction are forced to merge with each other to share a single lane. The W4-2, W9-1, and W9-2 signs, not the W20-4 sign, should be used to warn drivers that the number of lanes traveling in the same direction is being reduced to a single lane.

Use of the W20-4 sign is further clarified in the typical applications (TAs) in Chapter 6H. Situations where traffic traveling in opposing directions will be directed by flaggers, a YIELD sign, or a temporary traffic control signal to alternately travel through a one-lane section of roadway are shown in TAs 10, 11, 12, and 46. All four of these TAs show W20-4 signs being displayed to both directions of traffic and none of them label their use as optional. Therefore, the clear inference is that the use of W20-4 signs for both directions of traffic in these situations is at least recommended.

The TA 18 shows a lane closure situation on a minor street where speeds and traffic volumes are low and where the drivers can see the roadway beyond the one-lane section such that they can determine for themselves whether it is safe to proceed. This TA does not show any W20-4 signs.
and the clear inference is that the use of W20-4 signs in this situation is neither recommended nor required. (Note 3 in TA 18 says if speeds, traffic volumes, or the length of the one-lane section is such that traffic cannot effectively self-regulate, then the flaggers and traffic control devices, including the W20-4 signs, shown in TA 10 shall be used).

The TA 27 shows a situation where the work space occupies a portion of an intersection of two 2-lane, 2-way roadways. In this situation, flaggers are being used to direct traffic to proceed through the intersection from only one of the four approaches at a time. This is a unique situation where the only portion of the roadway that is one-lane, two-way is at the intersection itself. This TA does not show any W20-4 signs and the clear inference is that the use of W20-4 signs in this situation is neither recommended nor required. In fact, Note 4 in TA 27 says that the use of W20-4 signs is optional in this situation.

I hope this interpretation has clarified the intent of the first sentence of Section 6F.20 and the expected use of the W20-4 sign for various situations.

We have assigned your request for interpretation the following official ruling number and title: "6-225 (I) – Use of ONE LANE ROAD AHEAD Signs in TTC Zones." Please refer to this official ruling number in any future correspondence.

If you have any further questions, please contact Mr. Ken Wood of my staff at 708-283-4340 or at ken.wood@fhwa.dot.gov.

Sincerely yours,

[Signature]

Paul Pisano  
Acting Director, Office of Transportation Operations
DF (Official Ruling 6-225)
M:\MUTCD\EXPERIMENT\Part 6 - Temp Traffic Control\6-225 (I) – Use of ONE LANE ROAD AHEAD Signs in TTC Zones\Letter to CA DOT re Section 6F.20 interpretation.doc
| Hari Kalla      | Wayne Henley, Office Chief – Signs, Marking and External Support (Caltrans) 1120 N. Street MS 36 P.O. Box 942873 Sacramento, CA 94273 (916) 654-6246 or Wayne_Henley@dot.ca.gov | N/A     | 3/31/09 | Action to Bruce F. on 3/16/09 | Letter dated 3/4/09 to Robert Arnold requesting interpretation of the application and operation of the ONE ROAD Sign (W20-4) – as stated in Part 6 of the MUTCD. |
March 04, 2009

Mr. Robert Arnold, Director
Office of Transportation Operations
U. S. Department of Transportation
Federal Highway Administration
1200 New Jersey Avenue, SE
Washington. DC 20590

Dear Mr. Arnold,

In accordance with the guidelines set forth in the Manual of Uniform Traffic Control Devices (MUTCD), the California Department of Transportation (Caltrans) formally requests interpretation of the application and operation of the ONE LANE ROAD Sign (W20-4) as stated in Part 6 of the MUTCD. Please provide clarification on this safety oriented issue to ensure continued compliance.

Statement of the interpretation being sought

MUTCD Section 6F.20 ONE LANE ROAD Sign (W20-4)
Standard:
The ONE LANE ROAD (W20-4) sign (see Figure 6F-4, Sheet 3 of 4) shall be used only in advance of that point where motor vehicle traffic in both directions must use a common single lane (see Section 6C.10). It shall have the legend ONE LANE ROAD, XX m (FT), XX km (MILES), or AHEAD.

Caltrans is questioning the intent of the Section 6F.20 Standard to limit the use of the W20-4 sign to ONLY the case where two opposing lanes are forced to share one lane? And in this case, is the sign required, encouraged or optional?

Or

Is the Section 6F.20 Standard intended to require the use of the W20-4 sign each and every time two opposing lanes are forced to share one lane?

"Caltrans improves mobility across California"
Condition that provoked the need for an interpretation
As stated in policy text above, is the W20-4 sign required only when traffic in both directions must use a common single lane or the requirement is applicable to the advance location portion of the policy?

What is the policy to apply the W20-4 sign for the following Typical Applications (TA):

Typical Application 10 - Lane Closure on Two-Lane Road Using Flaggers

Typical Application 11 - Lane Closure on Two-Lane Road with Low Traffic Volumes

Typical Application 12 - Lane Closure on Two-Lane Road Using Traffic Control Signals

Typical Application 27 - Closure at Side of Intersection

Is the W20-4 sign required for TAs 10, 11, 12 & 27 under the 6F.20 policy?

The Notes for these TAs are silent with an indirect reference to W20-4 sign but there are other signs shown as optional on these TA figures implying that the W20-4 sign is either recommended or required but not optional. Further, Note 4 in TA 27 allows the use of W20-4 sign as an option, does not this conflict with Section 6F.20 requirement since traffic in both directions must use a common single lane as well in this case? Is the W20-4 sign required if flaggers are present? Please clarify and provide policy interpretation for the use of W20-4 sign.

Illustrations that would be helpful to understand the request

Please see the following attachments:

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

Typical Application 10 - Lane Closure on Two-Lane Road Using Flaggers

Typical Application 11 - Lane Closure on Two-Lane Road with Low Traffic Volumes

Typical Application 12 - Lane Closure on Two-Lane Road Using Traffic Control Signals

Typical Application 27 - Closure at Side of Intersection

Copy of Emails exchanged between Gurinderpal (Johnny) Bhullar of my staff, Matthew Schmitz and Ken Wood of the FHWA regarding this issue.

"Caltrans improves mobility across California"
Supporting materials that is pertinent to the item to be interpreted

In California, for TA 10 situation, there were only 3 sets of signs (without the W20-4 sign) until the recent adoption of MUTCD in California. In TA 10, since the flagger is present to direct traffic and the motorist needs to pay attention to the flagger regardless of the closure and activity, what purpose does the W20-4 sign serve? The extra employee exposure is not worth the benefit of an additional sign. In fact, having to place and retrieve the extra signs on foot in proximity to moving traffic becomes detrimental to employee safety. After all, how many years have we operated successfully with the three sign package? The W20-4 sign may be appropriate in situations when flaggers are not utilized. This issue is being raised as part of a safety task force in response to Caltrans recent worker fatalities to enhance worker safety by reducing the amount of time workers are exposed to moving traffic.

There are also some reported cases of motorist confusion as the W20-4 sign, by identifying the condition downstream, leads motorists to start reacting and planning for it rather than paying attention to the flagger regardless of the downstream condition. It confuses motorists as they are not sure as to which lane they should be in when approaching and observing the W20-4 sign. What is the benefit of the W20-4 sign as a fourth sign, where three worked as well before?

If the W20-4 sign is not required in all (or certain) cases, then Caltrans wants to work towards making it an option in some cases and not even an option when flaggers are being used. If the W20-4 sign is required, then please clarify the issues raised above so that Caltrans can reiterate this policy and convince practitioners to adhere to it to improve worker and road user safety.

If there are any questions, please contact me by telephone at (916) 654-6246 or by e-mail at Wayne_Henley@dot.ca.gov.

Sincerely,

Wayne Henley, Office Chief Signs, Marking and External Support

"Caltrans improves mobility across California"
To: "Johnny Bhullar" <johnny_bhullar@dot.ca.gov>, <gordon_wang@dot.ca.gov>
cc
bcc

Subject: RE: Section 6F.20 ONE LANE ROAD (W20-4) Sign - Seeking Policy Clarification

I'm glad to see that Ken Wood agrees with our speculation: the sign may ONLY be used where two lanes-two directions neck down to one. In that case, it is recommended that the sign be used, not required. In fairness to Ken, we need to speak with him by phone before we take our answer and run. I'll ask Ken to take the opportunity to better clarify the language in the the next edition of the MUTCD.

If all goes as hoped when we talk to Ken, we can determine that D1 has the latitude to use its judgment to not follow the guidance.

So, do we still need to meet tomorrow at 3pm? I ask because I have a Holiday Lunch that may not be quite over in time. If there's still a need to meet, let me know and I'll make it work.

Please call me on my cell at (916) 316-1367.

Thanks - Matt

From: Wood, Ken
Sent: Monday, December 08, 2008 11:47 AM
To: Schmitz, Matthew
Cc: 'Johnny Bhullar'; Ranck, Fred
Subject: RE: Section 6F.20 ONE LANE ROAD (W20-4) Sign - Seeking Policy Clarification

Matt/ Johnny -

I guess it's my opinion that the key word in the Standard is only - it is a Standard because the use of this sign is restricted to the condition of opposing traffic using the same lane. While I believe warning signs are critical and should be used in most cases, their use in the MUTCD is Guidance. There are conditions where the sign would not have to be used - short term situations, low volume or speed streets(see Fig 6G-18), etc.

I hope this helps. Maybe we should have a call to discuss it further. Let me know if you want to do that - I am on travel tomorrow and Wednesday this week, but pretty open other that that.

Ken Wood
FHWA - Resource Center - Ops TST
19900 Governors Drive
Olympia Fields, IL 60461
708-283-4340 - Office
708-308-7402 - Cell
ken.wood@dot.gov

-----Original Message-----
From: Schmitz, Matthew
Sent: Friday, December 05, 2008 7:50 PM
To: Wood, Ken
Cc: Johnny Bhullar; Ranck, Fred
Subject: RE: Section 6F.20 ONE LANE ROAD (W20-4) Sign - Seeking Policy Clarification

Thanks, Johnny, for taking the time to convert our discussion into something the MUTCD Team can weigh in on.

Ken (and Fred, if interested), this issue is challenging enough to discuss by phone and even more difficult to read (even though Johnny has done a commendable job). I suggest after reading, it may be worth setting up a call.

Capturing Johnny's write-up (which I still encourage you to read) in another way:

Is the intent of the Section 6F.20 Standard to limit the use of the W20-4 sign to ONLY the case where two opposing lanes are forced to share one lane? (And in that case, is the sign required, encouraged or optional?)

Or

Is the Section 6F.20 Standard intended to require the use of the W20-4 sign each and every time two opposing lanes are forced to share one lane?

Matt

-----Original Message-----
From: Johnny Bhullar [mailto:johnny_bhullar@dot.ca.gov]

Sent: Friday, December 05, 2008 12:34 PM

To: Schmitz, Matthew
Cc: gordon.wang; wayne.henley; Mark Suchanek; Kochevar, Ken; Celso Izquierdo; Len Nelson; Gonzalo Gomez

Subject: Section 6F.20 ONE LANE ROAD (W20-4) Sign - Seeking Policy Clarification

Matt,

As discussed separately via phone, here's the issue in detail and in writing. Please work with the MUTCD team members for a quick clarification on this safety oriented issue to ensure continued compliance.

National MUTCD Policy:

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