



U.S. Department
of Transportation
**Federal Highway
Administration**

1200 New Jersey Ave., SE
Washington, D.C. 20590

MAR 9 2016

In Reply Refer To:
HOTO-1

Mr. Richard M. Campbell
President
CTC, Incorporated
9601 Camp Bowie West
Fort Worth, TX 76116

Dear Mr. Campbell:

Thank you for your letter of February 23 requesting an official interpretation regarding the use of tubular markers at grade crossings.

Tubular markers are described in detail in Section 6F.65 of the 2009 *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD) in terms of their use in temporary traffic control zones, and are mentioned in Chapter 3H as one of the various types of channelizing devices that may be used in a permanent manner to emphasize pavement marking patterns such as edge lines. In accordance with Part 8 of the MUTCD, approval is required from both the highway agency with the jurisdictional and/or statutory authority and the railroad company before installing or modifying a highway-rail traffic control system.

Unlike stand-alone delineators, which are mounted on rigid support posts, tubular markers are made of a flexible rubberized material that can be struck without causing damage to the impacting vehicle.

The primary reason for using tubular markers at a grade crossing would be to discourage road users from erroneously turning onto the track(s) at the grade crossing itself instead of proceeding straight across the track(s) and turning at a nearby downstream highway-highway intersection. They would be placed next to the edge line leading up to the crossing, perhaps across the crossing itself including between tracks, and next to the edge line leading away from the crossing.

The following are the three specific questions that you asked in your request for an official interpretation:

1. Does the 2009 MUTCD allow the use of tubular markers on the approach to, the departure from, and where multiple tracks exist, between the tracks at a grade crossing?
2. Should the use and location of tubular markers at grade crossings be based on a diagnostic team determination?
3. Should the tubular marker be the same color as the line that it supplements?

Regarding Question 1, there are no provisions in the 2009 MUTCD that prohibit the use of tubular markers in the vicinity of a grade crossing. Furthermore, Paragraph 1 in Section 3H.01 provides an option to use channelizing devices, including tubular markers, for traffic control purposes at any location where engineering judgment determines that they will be beneficial to traffic control or safety. As far as the placement of tubular markers between the tracks of a multi-track grade crossing is concerned, there are no provisions in the 2009 MUTCD that prohibit this placement, but agreement would need to be obtained from representatives of the railroad company or the light-rail transit agency and representatives of the highway agency prior to installing tubular markers between the tracks in accordance with Section 8A.02 of the MUTCD.

Regarding Question 2, per Paragraph 6 of Section 8A.02 and Paragraph 8 of Section 8A.03, before any traffic control device is installed at a grade crossing, approval shall be obtained from the highway agency and the railroad company or the light-rail transit agency, respectively. A determination from a diagnostic team, which would have representation from both the highway agency and the railroad company or light-rail transit agency, would be an ideal manner of making sure that all parties of interest agree with the use, placement, and design of tubular markers at the grade crossing.

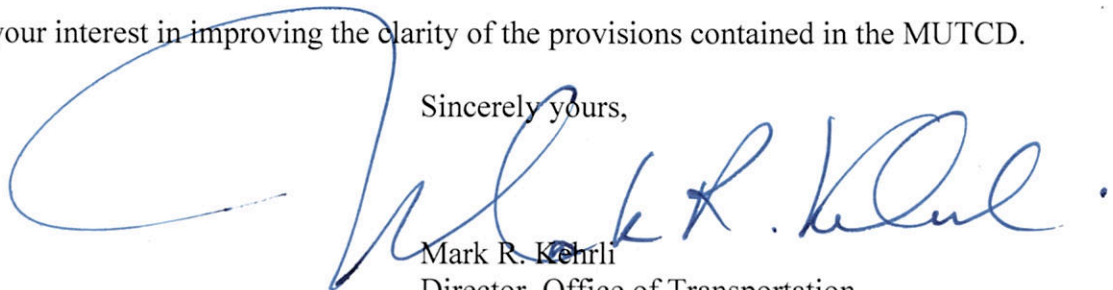
Regarding Question 3, per Paragraph 3 of Section 3H.01, the color of the tubular markers shall be either orange or the color of the pavement marking that they supplement, which in the case of an edge line on the right-hand side of the roadway would be white.

It is the FHWA's official interpretation that tubular markers may be used at grade crossings where such use has been determined based on engineering judgment to be beneficial to traffic control or safety, as long as both the highway agency and the railroad company or light-rail transit agency have agreed to the use, placement, and design of the tubular markers that will be installed at the grade crossing.

For recordkeeping purposes, we have assigned the following official ruling number and title: "8(09)-21 (I) – Use of Tubular Markers at Grade Crossings." Please refer to this number and title in any future correspondence regarding this topic.

Thank you for your interest in improving the clarity of the provisions contained in the MUTCD.

Sincerely yours,

A large, stylized handwritten signature in blue ink, appearing to read "Mark R. Kehrli".

Mark R. Kehrli
Director, Office of Transportation
Operations