



Florida Department of Transportation

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Mail Station 32

September 17, 2004

Ms. Regina S. McElroy, Director
Office of Transportation Operations (HOTO)
Federal Highway Administration
400 Seventh Street SW
Washington, DC 20590

Subject: MUTCD 6G.12 – FHWA Interpretation

The Florida Department of Transportation (FDOT) is requesting the Federal Highway Administration's (FHWA) interpretation regarding The Manual on Uniform Traffic Control Devices (MUTCD) Part 6 Temporary Traffic Control, Section 6G.12, Work Within the Traveled Way of Multi-lane, Nonaccess Controlled Highways, specifically the Standard: "When a lane is closed on a multi-lane road for other than a mobile operation, a transition area containing a merging taper shall be used."

The FDOT has a series of standard work zone setups contained in the FDOT Design Standards that are used for construction, maintenance and utility work on the State Highway System in Florida. These standard work zone setups are consistent with MUTCD requirements and are somewhat similar to the Typical Applications provided in MUTCD Section 6H, but specific to Florida. Note, the State Highway System in Florida consists primarily of higher volume, higher speed, arterial and Interstate routes and does not include low volume local roads. Given this important factor, many of FDOT's temporary traffic control requirements exceed the minimum requirements of the MUTCD.

The utility industry in Florida has questioned the length of the merging taper for work periods 45 minutes or less currently called for in FDOT's Design Standard Index 612. Index 612 provides standard work zone setups for Multilane, Divided and Undivided Rural, Operations One Daylight Period or Less. The length of merging taper in Index 612 is based on the taper equations provided in MUTCD 6C.08. It is FDOT's position that the length of taper called for is appropriate and necessary to meet minimum MUTCD requirements. The utility industry believes the length of the merging taper may be reduced to a very short taper approximately 100' long when the work zone consists of work vehicles with high intensity rotating, flashing, oscillating or strobe lights. The utility industry contends this is in accordance with the Guidance, Option, and Support provided in MUTCD 6G.02 for short duration work.

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We note that MUTCD 6G.12 is specific in that it requires not just a taper, but a "merging" taper. While the use of the taper length equations in MUTCD 6C.08 are not mandated, there is no other discussion, guidance or support in the MUTCD whatsoever on alternate methods of computing the length of tapers, except for "observation of driver performance after TTC plans are put into effect." Given no other documented support for computing tapers, FDOT believes the intent is to provide the merging taper length computed in accordance with 6C.08. Any taper length less than a merging taper length would not meet 6G.12.

The utility industry cites MUTCD 6G.02 Options that state "Appropriately colored or marked vehicles with high-intensity rotating, flashing, oscillating, or strobe lights may be used in place of signs and channelizing devices for short-duration or mobile operations." and "Considering these factors, simplified control procedures may be warranted for short-duration work. A reduction in the number of devices may be offset by the use of other more dominant devices such as high intensity rotating, flashing, oscillating, or strobe lights on work vehicles." However, we note that 6G.12 is written very specifically to require the merging taper with the only exception being for moving operations. It is clear that there is no exception for short duration work. For this reason, it is FDOT's position that the use of high intensity lights on work vehicles is not intended to be used in lieu of providing a merging taper for work periods 45 minutes or less. Further, 6G.02 Guidance states "Safety in short duration or mobile operations should not be compromised by using fewer devices simply because the operation will frequently change its location."

The FDOT does not disagree there may be occasions where it may be acceptable to use a shorter taper, depending on the location and traffic conditions, and the MUTCD provides sufficient flexibility to allow for this when using an appropriate level of engineering study and engineering judgment. However, establishing a "Standard" to allow shorter tapers that would be used in all scenarios on Florida's State Highway System would not be appropriate and would not meet the requirements and the intent of the MUTCD.

Attached is a copy of FDOT's Index 612 as well as a letter and drawing from the utility industry which details their position regarding this issue. Your prompt response to this request will be appreciated.

Sincerely,

Robert Greer, P.E.
Director, Office of Design

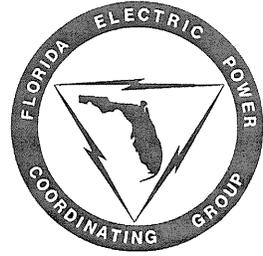
cc: Ken Wiley, Florida Electric Power Coordinating Group
Freddie Simmons, FDOT State Highway Engineer
Chris Richter, FWHA Florida Division
Brian Blanchard, FDOT State Roadway Design Engineer

Attachments

FLORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FCG)

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TAMPA, FLORIDA 33607-4512



September 13, 2004

Mr. Ken Flechler
Vice President
Safety and Compliance
Comcast Corporation
2001 Pennsylvania Avenue, NW
Suite 500
Washington DC 20006

Dear Ken:

The Florida Electric Power Coordinating Group (FCG) represents 29 electric utilities in the State of Florida. We have been working with the Florida Department of Transportation (FDOT) to update their Utility Accommodation Manual which regulates the utility usage of the state right-of-ways.

One of the items we have been discussing is the Maintenance of Traffic (MOT) requirements for a multi-lane, divided or undivided highway where the utility work would last for a period of 15 minutes or less. The applicable FDOT MOT Index for this activity is #612 and is attached. In the upper left hand corner under "Conditions", is the specific item under discussion. The FDOT has agreed to change this condition such that it is for a period of "45 minutes or less" in lieu of the existing requirement of "15 minutes or less".

Also, on that diagram you will notice that the existing requirement calls for spacing up to 500 feet for signage and tapers. The FDOT has agreed to change this requirement to a requirement that meets the MUTCD standard. As you can see from Index 612, the existing FDOT standard far exceeds the MUTCD requirements.

The electric utility industry, through the FCG, has proposed the following as a substitute for the existing requirement. This is shown on the attachment labeled "MUTCD Alternative". This "MUTCD Alternative" was arrived at by the following logic:

MUTCD 6G.12 requires a merging taper. It does not specify length.

MUTCD 6C.08 provides "Guidance" (recommended but not mandatory) that the appropriate taper length "should" be determined using the criteria shown in Tables 6C-3 and 6C-4.

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MUTCD 6G.02 provides the "Options" that "Appropriately colored or marked vehicles with high-intensity rotating, flashing, oscillating, or strobe lights may be used in place of signs and channelizing devices for short-duration or mobile operations." (short duration defined as 60 minutes or less) and that "Considering these factors, simplified control procedures may be warranted for short-duration work. A reduction in the number of devices may be offset by the use of other more dominant devices such as high intensity rotating, flashing, oscillating, or strobe lights on work vehicles."

MUTCD Introduction provides that "Standards" can be modified by "Options."

MUTCD 6G.02 goes on to state that "During short-duration work, it often takes longer to set up and remove the TTC zone than to perform the work. Workers face hazards in setting up and taking down the TTC zone. Also, since the work time is short, delays affecting road users are significantly increased when additional devices are installed and removed."

The FCG would like to have someone at the Federal Highway Administration review this proposal in order to ensure that it meets the requirements outlined in the MUTCD. I would appreciate any help that you could give us in getting a quick review by the appropriate Individuals at the FHA.

Sincerely,



KEN WILEY
President and CEO

KW/ab
Attachments