

STATE OF CALIFORNIA  
GRAY DAVIS, Governor  
PUBLIC UTILITIES COMMISSION  
505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298

July 20, 2001

William H. Watson  
Field Engineer  
C&S Amtrak  
31-39 Allerton St.  
Roxbury, MA 02119

RE: Manual on Uniform Traffic Control Devices, Section 4D.15 and Section 8D.02.

Dear Mr. Watson:

Recently an issue has arisen in California involving the size of the backgrounds that should be mounted on a railroad crossing warning device to contrast a specific size of signal. To help resolve this matter, the Railroad Engineering Section of the California Public Utilities Commission requests an interpretation of Section 4D.15 and Figure 8D-1 of the Manual on Uniform Traffic Control Devices (MUTCD).

Section 4D.15 of MUTCD requires that signals mounted on a railroad warning device should be either 8-in or 12-in diameter, depending on such variables as sight distance. However, when sizing the background for a signal, it is not clear as to the specific size of background that should be installed to contrast an 8-in or 12-in signal. Furthermore, Figure 8D-1 of the MUTCD, illustrates the option to install either a 20-in or 24-in diameter background on a warning device, but the size of the signal that should be installed with a 20-in or 24-in background is not clearly defined. The issue is of importance because, if a 12-in signal must be mounted with a 24-in background, an existing crossing may have to be modified to accommodate the clearance requirement between the curb and the warning device.

Please advise us on the size of background that must be mounted on a warning device to contrast an 8-in and 12-in signal. Is the practice of installing a 12-in signal with a 20-in background acceptable?

We would appreciate your assistance on this matter. If you have any questions, please contact me at (415) 703-1559.

Sincerely,

Michael Robertson  
Senior Utilities Engineer

Rail Safety and Carriers Division  
California Public Utilities Commission  
Cc: Fred Small, Federal Highway Administration