



U.S. Department
of Transportation

**Federal Highway
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

September 29, 2005.

Refer to: HOTO-1

Mr. Jeffrey C. Rivers
Project Engineer
Snohomish County Public Works
3000 Rockefeller Avenue, M/S #607
Everett, WA 98201-4046

Dear Mr. Rivers:

Thank you for your July 28 letter requesting an official interpretation of the Manual on Uniform Traffic Control Devices (MUTCD) regarding the recommended placement of accessible pedestrian push buttons for accessible pedestrian signals (APS.) You also asked whether the maximum dimension of 10 feet from the curb as shown in Figure 4E-2 is measured from the tangent section of curb or from where the crosswalk intersects the curb in the corner radius.

Section 4E.09 (Accessible Pedestrian Detectors) of the 2003 edition of the MUTCD states that:

Pushbuttons for accessible pedestrian signals should be located (see Figure 4E-2) as follows:

- A. Adjacent to a level all-weather surface to provide access from a wheelchair, and where there is an all-weather surface, wheelchair accessible route to the ramp;
- B. Within 1.5 m (5 ft) of the crosswalk extended;
- C. Within 3 m (10 ft) of the edge of the curb, shoulder, or pavement; and
- D. Parallel to the crosswalk to be used.

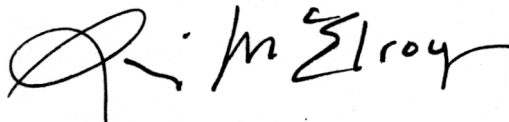
In Figure 4E-2, the two diagrams do appear to show the recommended 10 feet maximum distance from the curb as being dimensioned from the tangent section of curb. However, the figure does not accurately depict the intent of the text of Section 4E.09 as cited above as item C. The intent of the recommended maximum distance from the curb (in conjunction with the maximum of 5 feet from the crosswalk extended) is to keep the pushbutton location reasonably close to the point where a pedestrian enters the crosswalk, to minimize the time it takes a pedestrian to enter the crosswalk after actuating the pushbutton. For vision-impaired pedestrians this is a very important aspect of the design. Typically those pedestrians will remain near the APS pushbutton while awaiting the Walk signal, listening for the tone or feeling the vibrotactile surface. When the Walk signal does come on, if the pushbutton is located further than the recommended 10 feet from the entry to the crosswalk, the excess distance can negatively impact the ability of the pedestrian to complete the crossing within the allocated time.



It is therefore our official interpretation that the recommended maximum distance of 10 feet as stated in item C above is measured from the curb, shoulder, or pavement at its closest point, regardless of whether that point is on the tangent section of curb or road edge or along the corner radius. This would correspond with "Example 3: 10' Dimension Measured as an Offset Arc from Face of Curb" in the attachment to your letter.

Thank you for writing on this subject. If you have any questions, please feel free to contact Mr. Scott Wainwright of our staff at scott.wainwright@fhwa.dot.gov or call him at 202-366-0857. Please note that we have assigned your request the following official interpretation number and title: "4-293(I)—APS Pushbutton Locations." Please refer to this number in any future correspondence on this matter.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Regina S. McElroy". The signature is fluid and cursive, with a large initial "R" and "M".

Regina S. McElroy
Director, Office of Transportation
Operations

cc: Mr. Roger Wentz, ATSSA



Snohomish County
Public Works
Engineering Services

Aaron Reardon
County Executive

(425) 388-3488
FAX (425) 388-6670

M/S #607
3000 Rockefeller Avenue
Everett, WA 98201-4046

July 28, 2005

Federal Highway Administration (FHWA),
Office of Transportation Operations,
400 Seventh Street SW,
HOTO
Washington DC, 20590

Dear Sir or Madam:

I am a traffic signal designer working for Snohomish County Public Works, in Washington State. I am writing to ask for a clearer interpretation of one of the figures in the Millenium Edition of the MUTCD. Figure 4E-2, Recommended Pushbutton Locations for Accessible pedestrian Signals shows the recommended ADA-compliant locations for the ped pushbuttons. The ten-foot dimension shown appears to be measured from the face of curb on the tangent. It could also be interpreted to be measured from the point where the crosswalk line intersects the curb line. If that second interpretation is correct it will have an impact on typical County signal designs.

Most of our designs are new urban traffic signals and we typically use a 35-foot radius for the curb line. If the ten-foot dimension controlling the pushbutton location is measured from the point where the crosswalk intersects the curb line, then that point is about one-and-one-half feet farther from the face of curb than if that point is measured to the tangent.

I've included a drawing of these two interpretations. I have also drawn up a third interpretation, where the ten-foot dimension is measured along the face of curb resulting in an arc within the sidewalk. The second and third interpretations of the figure give me more flexibility in locating signal poles and pushbuttons. Which interpretation is correct? I would appreciate all insight you can provide me in this matter.

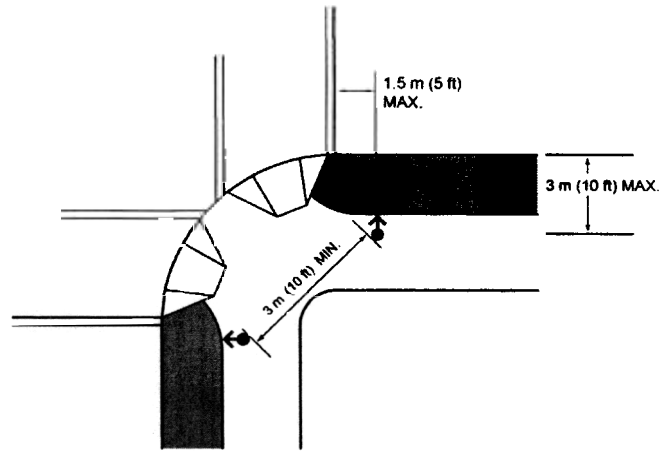
Sincerely,

Jeffrey C. Rivers
Project Engineer
Snohomish County Public Works
(425) 388-3488 x4250

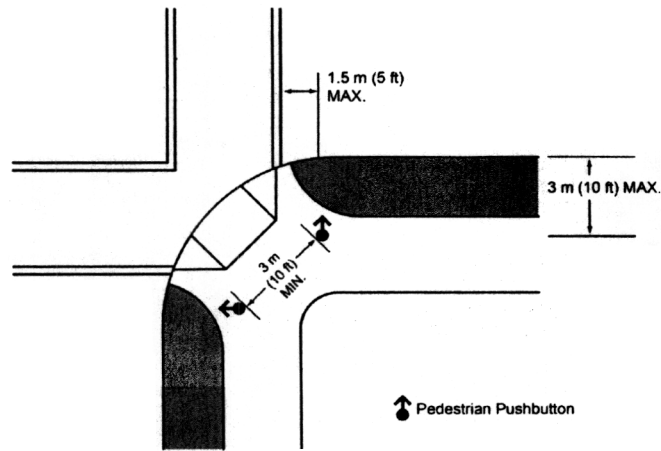
end: example County sidewalk drawing
MUTCD Figure 4E-2

0 33x

Figure 4E-2. Recommended Pushbutton Locations for Accessible Pedestrian Signals



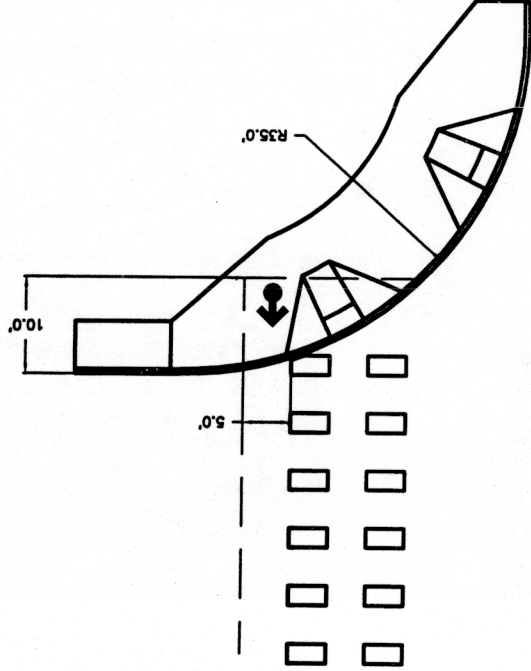
Two Curb-Cut Ramps



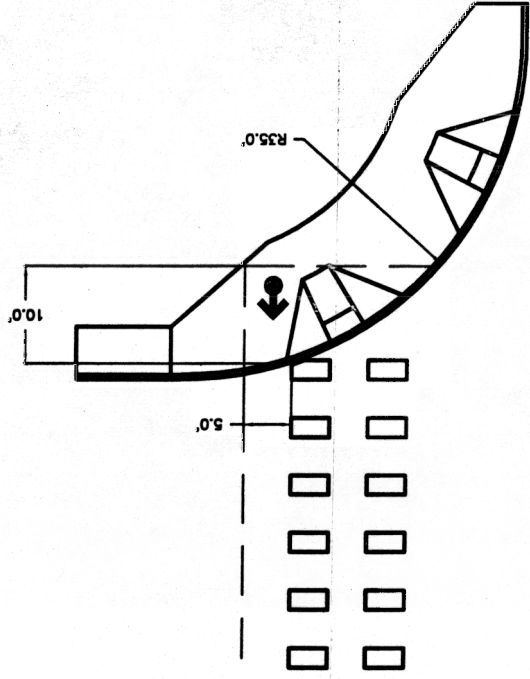
One Curb-Cut Ramp

THREE EXAMPLES OF INTERPRETING
 FIGURE 4E-2, "RECOMMENDED
 PUSHBUTTON LOCATIONS FOR
 ACCESSIBLE PEDESTRIAN SIGNALS",
 MILLENNIUM EDITION OF THE MUTCD.

EXAMPLE 1:
 10' DIMENSION
 MEASURED FROM
 TANGENT.



EXAMPLE 2:
 10' DIMENSION
 MEASURED FROM
 POINT ON CURB
 CLOSEST TO
 CROSSWALK.



EXAMPLE 3:
 10' DIMENSION
 MEASURED AS AN
 OFFSET ARC FROM
 FACE OF CURB.

