



FOR LEFT SHOULDER CLOSURE USE SIGNS W21-5L

COMPUTATION FOR DISTANCE L

$L = W \times S$

L = TAPER LENGTH IN FEET
 W = WIDTH OF OFFSET IN FEET
 S = 10 MPH OVER EXISTING POSTED SPEED LIMIT

BUFFER SPACE BASED ON PRE-CONSTRUCTION POSTED SPEED

SPEED	DISTANCE
45	360
50	425
55	495
60	570
65	645
70	730
75	820

TRAFFIC CONTROL SHOULDER CLOSURE DETAIL

CHANNELIZATION DEVICE LEGEND

	FLEXIBLE DRUMS (ITEM NO. 712-04.01, PER EACH)
	FLASHING YELLOW ARROW BOARD (SEE STD. DWG. NO. T-WZ-FAB1, FOR DETAILS AND SPECIFICATIONS) (ITEM NO. 712-08.03, PER EACH)
	SIGN SUPPORT
	DIRECTION OF TRAFFIC
	WORK SPACE
	BARRIER RAIL DELINEATOR (ITEM NO. 712-04.50, PER EACH)
	ATTENUATOR SEE STD. DWG. S-CC-1 (ITEM NO. 712-02.60, PER EACH)

SPECIAL NOTES

LANE WIDTHS SHALL BE A MINIMUM OF 11FT WITH 2FT SHOULDER. WHEN ALIGNMENT IS IN A HORIZONTAL CURVE WITH A RADIUS LESS THAN 2500FT, LANE WIDTHS SHALL BE A MINIMUM OF 12FT WITH 2FT SHOULDERS.

IF THE MINIMUM DESIGN REQUIREMENTS OF THIS STANDARD DRAWING CANNOT BE MET, A WORK ZONE DESIGN DEVIATION MUST BE SUBMITTED TO AND APPROVED BY THE STATE WORK ZONE ENGINEER.

GENERAL NOTES

(A) THIS STANDARD CAN BE USED FOR THE CLOSURE OF AN INSIDE OR OUTSIDE SHOULDER OF ANY MULTI-LANE DIVIDED HIGHWAY. FOR THE CLOSURE OF AN INTERIOR LANE, SEE STANDARD DRAWING NOS.T-WZ-13, TWZ-14, OR T-WZ-15 FOR DETAILS.

(B) MINIMUM TWO FEET (2') OFFSET BETWEEN TRAVEL LANE AND PORTABLE BARRIER IS REQUIRED. THE MAXIMUM POSSIBLE OFFSET BETWEEN TRAVEL LANE AND PORTABLE BARRIER MUST BE OBTAINED. A 2' MINIMUM OFFSET IS REQUIRED BETWEEN THE TRAVELLED LANE AND BRIDGE PARAPET, PORTABLE BARRIER RAIL, CONCRETE MEDIAN BARRIERS, ETC.

(C) PORTABLE BARRIER RAIL WILL BE REQUIRED WHERE DROP OFFS EXCEED 18 INCHES. PORTABLE BARRIER RAIL MAY BE USED WHERE DROP OFFS EXCEED 6 INCHES. FOR MORE SPECIFIC INFORMATION SEE TDOT DESIGN GUIDELINES FOR DROP-OFF REQUIREMENT.

(D) TAPER LENGTH SHOWN FOR THE PORTABLE BARRIER RAIL IS A MINIMUM FOR A 10' SHOULDER. PORTABLE BARRIER RAIL SHOULD BE EXTENDED BEYOND THE CLEAR ZONE OR BE SHIELDED WITH A CRASH CUSHION WHEN IT IS NOT FEASIBLE TO EXTEND THE PORTABLE BARRIER RAIL. SEE STANDARD DRAWING S-CZ-1 FOR CLEAR ZONE DISTANCE.

(E) REFER TO THE QUALIFIED PRODUCT LIST FOR APPROVED BARRIER RAIL DELINEATORS. DELINEATORS SHOULD NOT BE MIXED IN THE SAME LINE. BARRIER RAIL DELINEATORS SHALL BE USED ON PORTABLE BARRIER RAIL.

(F) SEE STANDARD DRAWING T-WZ-10 FOR OTHER NECESSARY ADVANCE WARNING SIGNS.

(G) RAISED PAVEMENT MARKERS SHOULD NOT BE USED ON RIGHT EDGE LINE.

FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
 STANDARD DRAWING
 DEPARTMENT OF TRANSPORTATION

SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS

05-27-1998 T-WZ-18

- REV. 4-15-99: MODIFIED CHANNELIZATION DEVICE LEGEND.
- REV. 12-18-99: MODIFIED GENERAL NOTE (E).
- REV. 7-29-03: CHANGED GENERAL NOTE (E).
- REV. 4-15-04: CHANGED GENERAL NOTE (E) TO COMPLY WITH 2003 MUTCD.
- REV. 5-12-06: REPLACED VERTICAL PANEL WITH BARRIER RAIL DELINEATORS. ADDED GENERAL NOTES (E) & (F).
- REV. 10-06-06: CHANGED ITEM NO. FOR BARRIER RAIL DELINEATOR. ADDED GENERAL NOTE (E). CHANGED GENERAL NOTE (F).
- REV. 03-13-09: CHANGED GENERAL NOTE (E) AND ATTENUATOR LEGEND DESCRIPTION.
- REV. 03-05-17: ADDED ITEM NO. 716-05.02 AND 712-09.02.
- REV. 06-28-19: ADDED REFERENCED STD DWG S-CC-1 TO LEGEND FOR TEMPORARY CRASH CUSHION. ADDED ITEM NUMBER FOR FLEXIBLE DRUMS AND BARRIER RAIL DELINEATORS. REORGANIZED AND MODIFIED GENERAL NOTES FOR CLARITY. REVISED REFERENCE TO OTHER STD DWG. REDREW SHEET.
- REV. 05-01-20: ADDED SPECIAL NOTES. ADDED BUFFER SPACE TABLE. CHANGED CALCULATION FOR DISTANCE L.
- REV. 03-04-21: CHANGED ITEM NO. 712-02.60 FOR STD DWG S-CC-1. ADDED REFERENCED STD DWG T-WZ-PCB SERIES. REVISED GENERAL NOTE (B).
- REV. 07-07-23: REVISED GENERAL NOTES (B), (C) AND (D). REMOVED W21-5R SIGNS FROM THE LEFT SIDE.