

3/26/2025 12:02:45 PM H:\26\26180 - Tennessee DOT Road Design Manual\004 - TDOT Traffic Design Updates\design\CAD\Work Zone (WZ)\TWZ63.dgn

TRAFFIC CONTROL FOR ONE LANE CLOSURE NEAR ENTRANCE RAMP ON DIVIDED HIGHWAYS

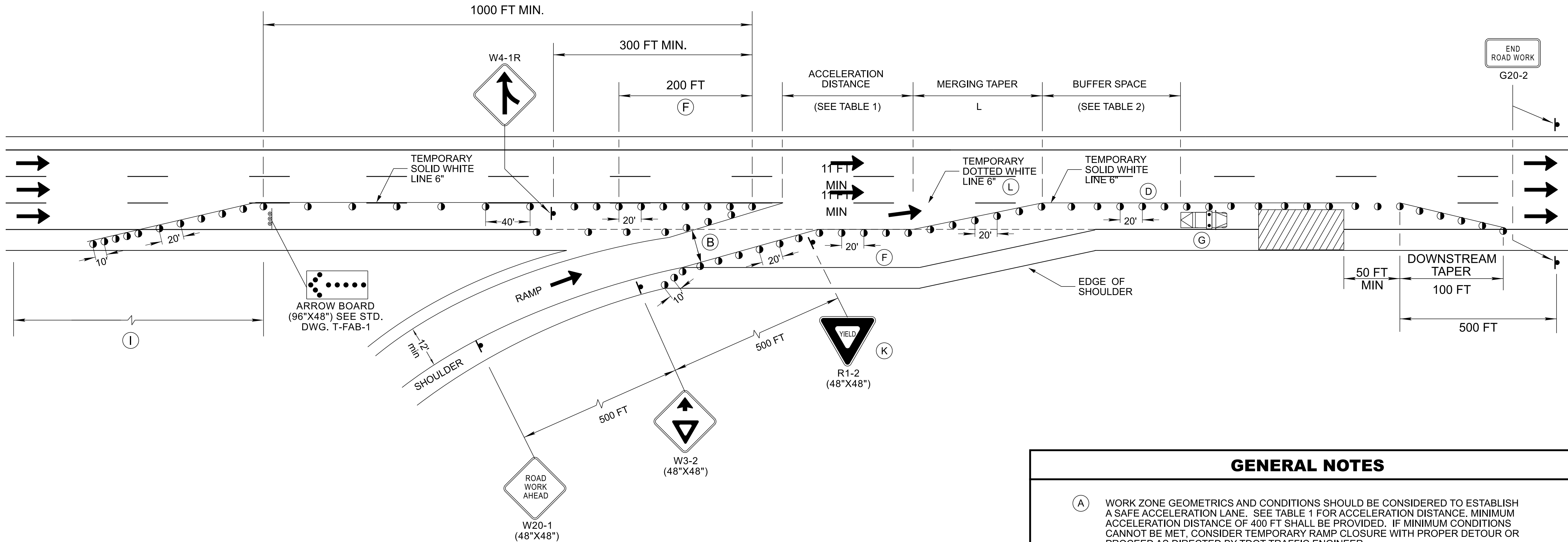


TABLE 1 (A)		
ACCELERATION DISTANCE		
TEMPORARY SPEED (mph)	RURAL (feet)	URBAN (feet)
45 OR LESS	675	930
50	750	1030
55	865	1135
60	990	1280
65	1050	1365
70	1105	1445
BASED ON DECISION SIGHT DISTANCE		

TABLE 2 (C)	
BUFFER SPACE	
SPEED (mph)	DISTANCE (feet)
45	360
50	425
55	495
60	570
65	645
70	730
BASED ON PRE-CONSTRUCTION POSTED SPEED	

COMPUTATION FOR MERGING TAPER	
$L = W \times S$	(FOR POSTED SPEEDS OF 45 MPH OR GREATER)
$L = \frac{W \times S^2}{60}$	(FOR POSTED SPEEDS OF 40 MPH OR LESS)
L = TAPER LENGTH IN FEET W = WIDTH OF OFFSET IN FEET S = PERMANENT POSTED SPEED	

SPECIAL NOTE	
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.	
CHANNELIZATION DEVICE LEGEND	
	FLEXIBLE DRUMS (ITEM NO. 712-04.01 PER EACH)
	SIGN SUPPORT
	DIRECTION OF TRAFFIC
	WORK SITE
	WORK TRUCK WITH TRUCK MOUNTED ATTENUATOR
	FLASHING YELLOW ARROW BOARD (SEE STD. DWG. NO. T-WZ-FAB1, FOR DETAILS AND SPECIFICATIONS) (ITEM NO. 712-08.03, PER EACH)

GENERAL NOTES	
(A)	WORK ZONE GEOMETRICS AND CONDITIONS SHOULD BE CONSIDERED TO ESTABLISH A SAFE ACCELERATION LANE. SEE TABLE 1 FOR ACCELERATION DISTANCE. MINIMUM ACCELERATION DISTANCE OF 400 FT SHALL BE PROVIDED. IF MINIMUM CONDITIONS CANNOT BE MET, CONSIDER TEMPORARY RAMP CLOSURE WITH PROPER DETOUR OR PROCEED AS DIRECTED BY TDOT TRAFFIC ENGINEER.
(B)	MINIMUM ALLOWABLE TRAVEL WAY SHOULD BE 13 FT BETWEEN CHANNELIZING DEVICES OR BARRIERS. IF CONDITIONS DO NOT ALLOW 13 FT, OFF TRACKING ANALYSIS SHALL BE CONDUCTED TO VERIFY ALLOWABLE HORIZONTAL CLEARANCE. ANY ALTERATIONS TO HORIZONTAL SHALL BE APPROVED BY TDOT ENGINEER.
(C)	BUFFER ZONE SHOULD BE PROVIDED BASED ON STOPPING SIGHT DISTANCE. SPEED SELECTED SHALL REPRESENT THE PERMANENT SPEED LIMIT AND NOT THE WORK ZONE SPEED.
(D)	PROJECTS SUCH AS RESURFACING OF LESS THAN 3 DAYS NEED NOT PROVIDE STRIPING UNLESS STRIPING CONFLICTS WITH INTENDED TRAFFIC PATTERN
(E)	WHEN PAVED SHOULDERS HAVING A WIDTH OF 8 FT OR MORE ARE CLOSED, CHANNELIZING DEVICES SHALL BE USED TO CLOSE THE SHOULDER IN ADVANCE TO DELINEATE THE BEGINNING OF THE WORK SPACE AND TO DIRECT VEHICULAR TRAFFIC TO REMAIN IN THE TRAVELED WAY.
(F)	DRUM SPACING SHALL BE 20 FT BEGINNING 200 FT FROM THE RAMP AND CONTINUING THROUGH THE WORK ZONE UNTIL THE DOWNSTREAM TAPER.
(G)	FOR LONGER DURATION PROJECTS TRUCK MOUNTED ATTENUATORS (TMA) MAY BE REPLACED WITH PORTABLE BARRIER RAIL WITH TEMPORARY WZ CRASH CUSHION. TMA SHOULD BE PROPERLY POSITIONED TO ACCOUNT FOR ROLL AHEAD.
(H)	DRUMS ARE REQUIRED FOR ALL TAPERS, BUFFERS, AND ACCELERATION AREAS. REFER TO SPEC. 712.04.
(I)	REFER TO T-WZ-11 ONE LANE CLOSURE DETAILS FOR DIVIDED HIGHWAYS FOR ADVANCED WARNING SPACING AND MERGING TAPER.
(J)	REFER TO MUTCD PART 6 FIGURE 6H-44 (TA-44) DETAIL A "ADDED LANE" FOR ALTERNATIVE RAMP LOCATIONS.
(K)	SIGNS TO BE PAID UNDER 712-06 SIGNS (SF). ALL OTHER ITEMS NOT ASSOCIATE WITH A PAY ITEM TO BE INCLUDED WITHIN 712-01 TRAFFIC CONTROL (LS).
(L)	DOTTED AND SOLID LINES MAY NOT BE REQUIRED FOR SHORT-TERM WORK, SEE WORK ZONE DESIGN MANUAL.