TYPICAL TRAFFIC CONTROL PLANS

Washington State Department of Transportation

TAPER 72" 2.0 SEC P.E. STAMP BOX
BY 80 570' MIN BUFFER 2.0 SEC 100' 60 MPH W4-2(R) REGIONAL ADM. PROJ. ENGR. CHECKED BY ENTERED BY DESIGNED BY PLOTTED BY DATE TIME FILE NAME

1-10.3(3)C. LOCATE PCMS PER NEAREST MILE ROUNDED UP TO QUEUE LENGTH # = APPROXIMATE NO LONGER PRESENT. REMOVE WHEN QUEUE DRUMS ARE OPTIONAL. MOUNTED; IF SO, THE PCMS MAY BE TRUCK IN ADVANCE OF QUEUE. TO REMAIN 1 +/- MILE ADVANCE OF PCMS 2. LEAST 1/2 +/- MILE IN FIELD LOCATE AT 2.0 SEC PCMS TRAFFIC AHEAD SLOW T M A

LEGEND

1 TEMPORARY SIGN LOCATION
2 TEMPORARY SIGN LOCATION (5 MIN HEIGHT)
3 28' REFLECTIVE TRAFFIC CONE
4 42' TALL CHANNELIZATION DEVICE
5 TRAFFIC SAFETY DRUM
6 RADAR SPEED DISPLAY SIGN
7 SEQUENTIAL ARROW SIGN
8 PORTABLE CHANNELIZATION DEVICE
9 PORTABLE CHANGABLE MESSAGE SIGN

NOTES:
1. DISTANCE BETWEEN LANE CLOSURE TAPER AND ALL OPEN RAMPS SHALL BE 500' MINIMUM.
2. IF FEASIBLE AVOID PLACING LANE CLOSURE TAPER WITHIN LIMITS OF HORIZONTAL CURVES.
3. AS ORDERED BY THE ENGINEER ADDITIONAL SPEED RADAR DISPLAY SIGNS MAY BE USED 500' PRIOR TO EACH WORK CREW WITHIN WORK AREA.
4. PLACE TRANSVERSALLY ACROSS CLOSURE AT A 45° ANGLE WITH 5' SPACING AT STRATEGIC LOCATIONS OR EVERY 1000' +/-.
5. ALL SPEED LIMIT SIGNS CONDUCTING WITH WORK ZONE SPEED LIMIT SHALL BE COVERED PER STANDARD SPECIFICATIONS 8-21.3(3).
6. REOPENING TAPER OPTIONAL ALLOW FOR CONSTRUCTION VEHICLES TO ACCELERATE STRAIGHT OUT OF WORK AREA INTO THE LEFT LANE.
7. OPTIONAL IF PERMANENT SPEED LIMIT SIGNS ARE WITHIN 150' OF THE REOPENING TAPER.
8. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
9. THIS TRAFFIC CONTROL PLAN IS APPLICABLE TO SHORT-TERM AND INTERMEDIATE/TERM DURATION LANE CLOSURES OF 3 DAYS OR LESS.

FREEWAY (2 LANES): SINGLE LEFT LANE CLOSURE WITH NO LANE SHIFTS (70 MPH TO 60 MPH VARIABLE WORK ZONE SPEED LIMIT REDUCTION) NOT TO SCALE

NOTE: HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.

HOST VEHICLE WEIGHT > 22,000 lbs.

MINIMUM SHOULDER CLOSURE TAPER LENGTH = L/3

Shoulder Width Min. 60 MPH 120'

10 200' USE A MINIMUM 3 DEVICES FOR SHOULDER LESS THAN 6'
NOTES:
1. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC224, SHEET 1.
2. ACTUAL NUMBER OF LANES MAY VARY.

OPEN RIGHT EXIT-RAMP DETAIL
NOT TO SCALE

OPEN RIGHT ON-RAMP DETAIL
NOT TO SCALE

CLOSED RIGHT EXIT-RAMP DETAIL
RIGHT EXIT-RAMPS ARE TO REMAIN OPEN WITH THIS LEFT LANE CLOSURE CONFIGURATION

CLOSED RIGHT ON-RAMP DETAIL
NOT TO SCALE

FREeway (2+ LANES): SINGLE LEFT LANE CLOSURE WITH NO LANE SHIFTS
(70 MPH TO 60 MPH VARIABLE WORK ZONE SPEED LIMIT REDUCTION)
NOT TO SCALE

NOTES:
1. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC224, SHEET 1.
2. ACTUAL NUMBER OF LANES MAY VARY.
R. PER MUTCD FIGURE 6H-33, TRANSPORTABLE ATTENUATORS ARE OPTIONAL BUT THEIR USE IS STRONGLY RECOMMENDED FOR FREEWAY LANE CLOSURES. TRANSPORTABLE ATTENUATOR SHOULD BE PLACED IN CLOSED LANE ADJACENT TO TRAFFIC PRIOR TO SEPARATE WORK AREAS, PARTICULARLY AFTER OPEN TEMPORARY EXIT-RAMPS AND OPEN TEMPORARY ON-RAMPS. EITHER PROTECTIVE VEHICLES OR TRANSPORTABLE ATTENUATORS CAN BE PLACED IN THE ADDITIONAL CLOSED LINES EXCEPT THE CLOSED LANE ADJACENT TO TRAFFIC.

S. PLACING CHANNELIZING DEVICES TRANSVERSLY (AT 45° AND 5-FOOT SPACE) IS AN EFFECTIVE TECHNIQUE TO MOVE ERRANT DRIVERS BACK OUT OF CLOSED LANES AND SHOULDERS.

T. PER MUTCD FIGURE 6H-33, THE REOPENING TAPER IS OPTIONAL.

U. A TAPERED TEMPORARY EXIT-RAMP IS TYPICALLY USED WITH A TYPICAL 20:1 TAPER RATE.

V. THE ON-RAMP SHIFT CAN OCCUR THROUGH THE PAVED GORE INSTEAD AT THE END OF THE GORE. PAVEMENT MARKINGS BUT VERIFY CROSS-SLOPE IS TRAVERSIBLE, PAVEMENT THICKNESS IS ADEQUATE, CATCH BASINS/BIN BOXES ARE TRAFFIC BEARING TYPES.

W. A PARALLEL TEMPORARY ON-RAMP IS BASED ON WSDOT DESIGN MANUAL EXHIBIT 1360-13b. THE ON-RAMP IS SHIFTS ACROSS EACH CLOSED LANE AT 1/2 PER CLOSED LANE SHIZT RATE THEN AN ACCELERATION TAPER RATE BASED FOLLOWED BY AN 1/2 ON-RAMP MERGE TAPER. IT IS IMPORTANT TO UNDERSTAND MUTCD FIGURE 6H-44. TYPICAL APPLICATION IS GUIDANCE PER MUTCD SECTION 6H-01.

X. RO_TypeDef= | Region | Exit Ramp closure is reduced by half across closed exit ramps between the "exit closed" sign and the end of the exit ramp's paved gore.

Y. ACTUAL WORK AREA LIMITS CAN BE MODIFIED.

Z. RAMP DETOUR SIGNAGE IS RECOMMENDED BY MUTCD 6C-09. IT IS RECOMMENDED TO USE ROUTE SPECIFIC DETOUR SIGNAGE FOR SIGNIFICANT RAMP CLOSURES.

AA. THE ROUTE SPECIFIC DETOUR ROUTE SIGN INCLUDES EITHER AN INTERSTATE SHIELD (FOR FREEWAY RAMPS), HIGHWAY SHIELDS (FOR STATE HIGHWAY RAMPS), OR ROADWAY DESCRIPTION. IF THE RAMP IS TO A SPECIFIC ROUTE DIRECTION, INCLUDE ITS DIRECTION. MAXIMIZE THE SHIELD SIZE, AND ARRAYS TO FIT ON THE 48"X48" SIGN.

BB. THIS TRAFFIC CONTROL PLAN IS NOT APPLICABLE WHEN HOV-RESTRICTED LANES ARE PRESENT. FOR FREEWAYS WITH LEFT LANE HOV RESTRICTIONS, SEPARATE TYPICAL TRAFFIC CONTROL PLANS ARE PRESENT. WARM HOV LANES ARE CLOSED FOR UNDECL HOV LAKE CHANGES RESTRICTIONS INCLUDING A BUFFER SEPARATION, DIRECT ACCESS HOV RAMPS, OR RIGHT LANES THAT ARE HOV-RESTRICTED CONTACT REGION TRAFFIC OFFICE WHEN DEVELOPING PLANS.

CC. THIS TRAFFIC CONTROL PLAN IS NOT APPLICABLE WHEN EXPRESS TOLL LANE(S) PRESENT. FOR FREEWAYS WITH EXPRESS TOLL LANE(S), CONTACT REGION TRAFFIC OFFICE WHEN DEVELOPING PLANS.