

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SPACING OF CHANNELIZING DEVICES (G) FEET	SPACING OF ADVANCE WARNING SIGNS (A) FEET	DECISION SIGHT DISTANCE FEET	TAPER LENGTH (L) FEET	SHIFTING TAPER (L/2) FEET	TYPICAL SHOULDER TAPER (L/3) FEET	BUFFER SPACE (B) FEET
0 - 30	25	100	550	200	100	75	200
35 - 40		325	700	325	175	125	305
45 - 50	50	600	900	600	300	200	425
55		750	1200	700	350	250	500
60 - 65		1000	1400	800	400	275	650
70 - 75		1200	1600	900	450	300	820

- ⊙ SURFACE MOUNTED DELINEATOR
- DRUMS
- — — TEMPORARY WET REFLECTIVE PAVEMENT MARKING.

ALL DISTANCES BASED ON 12 FT LANE WIDTHS.

DESIGNER NOTES:

TYPICAL APPLICATION FOR REFERENCE ONLY, NOT TO BE INSERTED INTO PLAN. THIS LAYOUT IS INTENDED AS A CHECKLIST OF DEVICES. A SITE SPECIAL PLAN SHOULD BE MADE USING THIS AS A GUIDE.

1. INSERT SPACING CHART DISTANCES INTO LAYOUTS.
 - ② "END WORK ZONE SPEED LIMIT" R2-12 SIGN REQUIRED.
 3. CONSIDER THE INSTALLATION OF A PCMS AND/OR G20-X2 OR SPECIAL SIGN, IF CONGESTION IS EXPECTED, IF ADVANCE SIGNING TO DIVERT TRAFFIC IS NEEDED OR OTHER CONDITIONS DETERMINED BY THE ENGINEER.
 4. CONSIDER THE INSTALLATION OF A PCMS AND/OR G20-X1 SIGN (MODIFIED) OR G20-X2 SIGN FOR SEVEN DAY ADVANCE WARNING OF RESTRICTION.
 5. FOR ANY EXCAVATION OR DROP-OFF IN EXCESS OF 12 IN., SEE THE MINNESOTA DEPARTMENT OF TRANSPORTATION "TEMPORARY BARRIER GUIDANCE MANUAL".
 6. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE WET REFLECTIVE MATERIAL.
 7. MASK OR REMOVE ALL CONFLICTING PAVEMENT MARKINGS. DETERMINE QUANTITY OF MARKINGS TO BE MASKED OR REMOVED FOR PAY ITEM QUANTITIES.
 - ⑧ SUPPLEMENTAL DELINEATION (SUCH AS CHEVRONS, DOWN ARROWS, ETC.) MAY BE REQUIRED IN THE BYPASS.
 - ⑨ USE IF WORK AREA IS TWO MILES OR GREATER.
 - ⑩ ALTERNATE "TWO WAY TRAFFIC" AND "DO NOT PASS" ASSEMBLIES AT ½ MILE INTERVALS.
 - ⑪ IF A 24/7 CONSTRUCTION SPEED LIMIT IS TO BE USED IT MUST BE AUTHORIZED BY MNDOT OFFICE OF TRAFFIC, SAFETY & TECHNOLOGY.
 - ⑫ CONTINUE AT ONE MILE SPACING.
 - ⑬ INSTALL SURFACE MOUNTED DELINEATORS AT G/2 SPACING FOR THE FIRST 250 FOOT DISTANCE FROM EACH CROSSOVER GORE.
 - ⑭ IF BACKUPS ARE EXPECTED, CONSIDER USE OF "LANE CLOSURE WITH ZIPPER MERGE LAYOUT"
 - ⑮ DISTANCE PLAQUES MAY BE USED AS DETERMINED BY THE DESIGNER.
 - ⑯ END OF TEMPORARY REDUCED SPEED LIMIT AND BEGINNING OF ORIGINAL ZONE.
 17. LIST ALL CONFLICTING INPLACE SIGNING THAT MUST BE MODIFIED, COVERED, AND/OR REMOVED. INCLUDE SIGN MODIFICATIONS, COVERS AND/OR REMOVALS IN THE TRAFFIC CONTROL PLAN.
 - ⑰ USE APPROPRIATE ADVANCE LANE CLOSURE SIGNS
 - ⑱ 12" x 18".
 - ⑳ MEASURE 200 FT FROM THE END OF RADIUS.
 - ㉑ SECOND ASSEMBLY MAY BE ADDED TO LEFT SIDE OF ROADWAY FOR ADDED ENHANCEMENT.
 - ㉒ MAY ADD W4-4P "CROSS TRAFFIC DOES NOT STOP" UNDER INPLACE STOP SIGN(S).
 - ㉓ MAY SUBSTITUTE 4' DOUBLE SOLID YELLOW WITH TEMPORARY RAISED PAVEMENT MARKERS (2 DOUBLE SIDED TRPM'S SIDE BY SIDE 4" APART, AT 10' INTERVALS).
 - ㉔ OPTIONAL WRONG WAY PAVEMENT MESSAGE.
 - ㉕ CONSIDER THE ADDITION OF A W13-1P ADVISORY SPEED PLAQUE. PLAQUE SHOULD BE PLACED DIRECTLY BELOW OR ON LOWER TRAFFIC SIDE OF THE WARNING SIGN. AVOID PLACING SIGN WITH ADVISORY SPEED PLAQUE NEAR AN INPLACE SPEED LIMIT SIGN. EXPERIENCE AND ENGINEERING JUDGEMENT SHOULD BE USED TO DETERMINE THE APPROPRIATE ADVISORY SPEED AND VERIFIED IN THE FIELD ONCE INSTALLED AND ADJUSTED AS NEEDED.
 - ㉖ WHEN A W13-1P ADVISORY SPEED PLAQUE IS USED CONSIDER THE ADDITION OF A "VEHICLE SPEED FEEDBACK SYSTEM" LONG TERM TYPICAL APPLICATION 77, OR "VEHICLE SPEED FEEDBACK" TRAFFIC RESPONSIVE SYSTEM TR-7 IN THE IWZ TOOL BOX.
- 4DY = 4 INCH DOUBLE SOLID LINE YELLOW WET REFLECTIVE 6SY = 6 INCH SOLID LINE YELLOW WET REFLECTIVE
4SY = 4 INCH SOLID LINE YELLOW WET REFLECTIVE 6SW = 6 INCH SOLID LINE WHITE WET REFLECTIVE
4SW = 4 INCH SOLID LINE WHITE WET REFLECTIVE

TWO-LANE, TWO-WAY OPERATION
ON ONE SIDE OF MULTI LANE DIVIDED ROAD
SHEET 4 OF 4