



PASSIVE ZIPPER MERGE SYSTEM
RIGHT LANE CLOSURE
MULTI-LANE DIVIDED ROAD

| 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 |

ALL DISTANCES BASED ON 12 FT LANE WIDTHS.

DESIGNER NOTES:

- TYPICAL APPLICATION FOR REFERENCE ONLY, NOT TO BE INSERTED INTO PLAN.
- 1. INSERT SPACING CHART DISTANCES INTO LAYOUTS.
- 2. 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.
- 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. USE WHEN MORE THEN TWO LANES AVAILABLE.
- 7. THE FLASHING ARROW BOARD SHALL BE USED WHEN THE POSTED SPEED LIMIT IS 45 MPH OR GREATER, AND SHALL BE PLACED FULLY ON THE SHOULDER. IF THERE IS NO SHOULDER, OR THE SHOULDER IS TOO NARROW, PLACE THE FLASHING ARROW BOARD AT THE END OF THE TAPER IN LIEU OF THE TYPE III BARRICADE ASSEMBLY.
- 8. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE A WET REFLECTIVE MATERIAL.
- 9. IF 48"x48" ADVANCE WARNING SIGNS WILL NOT FIT ON THE LEFT SIDE BECAUSE OF A NARROW MEDIAN (LESS THAN 6 FT.)
 - A. REDUCE THE LEFT SIDE SIGN SIZES OR
 - B. ELIMINATE THE LEFT SIDE SIGNING, USE AN ADDITIONAL "RIGHT LANE CLOSED AHEAD" SIGN ON THE RIGHT.
- 10. AN ADDITIONAL SET OF "RIGHT LANE CLOSED AHEAD" SIGNS MAY BE ADDED ON HIGH VOLUME ROADS.
- 11. MASK OR REMOVE CONFLICTING MARKINGS. DETERMINE MATERIAL TYPE AND QUANTITY OF MARKINGS TO BE MASKED OR REMOVED FOR PAY ITEM QUANTITIES.
- 12. DISTANCE PLAQUES ARE RECOMMENDED WHEN THE DISTANCE IS 2 MILES OR GREATER.
- 13. SUPPLEMENTAL PLAQUES SHALL BE INSTALLED BELOW OR TO THE TRAFFIC SIDE OF THE APPROPRIATE WARNING SIGNS.
- 14. DESIGNER MUST SPECIFY THE DISTANCE AND INSERT INTO PLAN.

6SW - 6 INCH SOLID LINE WHITE WET REFLECTIVE

● DRUMS.

— — — TEMPORARY WET REFLECTIVE PAVEMENT MARKING.