



**GENERAL NOTES:**

- The location of the merging taper and the Advance Warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment.
- The spacing between proposed signs should be adjusted not to conflict with and to provide a minimum of 200 ft (60 m) clearance to existing signs.
- The taper length (L) and spacing (S) of drums for the merging taper shall conform to Table I. Drums placed along the centerline shall be spaced at (S). Drum spacing (S) shall also be used for the buffer area and for the first 1000 ft (300 m) of the work area and at other locations as directed by the Engineer. The maximum drum spacing for the balance of the work area except along the centerline is to be two times the spacing (S) in Table I. A minimum of 5 drums shall be used in the downstream taper.
- Cones having a minimum height of 28 inches (0.7 m) may be substituted for drums for daytime lane closures. Provisions shall be made to safely stabilize the cones to prevent them from blowing over. If this cannot be achieved, drums shall be used.
- If the construction operation requires the lane closure for more than one day then the existing conflicting pavement markings and reflectors from the raised pavement markers (RPMs) shall be removed and the appropriate color work zone edge lines shall be applied along the taper. Work zone edge lines which would conflict with final traffic lanes shall be removable (740.06 Type II) tape unless the area will be resurfaced prior to project completion. After completion of the work, pavement markings other than 740.06 Type I shall be removed in accordance with 641.10. The original markings and raised pavement marker reflectors shall be restored at no additional cost.
- The Advisory Speed sign W13-1 shall be used when specified in the plan.
- Type A flashing warning lights shown on the W20-1 and W20-5 signs are required whenever a night lane closure is necessary.
- The flashing arrow panel shall meet the requirements of MT-35.10.
- The shadow vehicle, located close to the work, shall be in place and unoccupied whenever workers are in the work area. This vehicle shall be removed from the pavement whenever workers are not in the work area.
- The vehicle shall be equipped with a 360 degree rotating or flashing amber beacon clearly visible a minimum of 1/4 mile (400 m). Other protective devices may be used in lieu of the shadow vehicle shown when approved by the Engineer.
- The G20-2 signs are only required for lane closures of more than one day and may be omitted if they fall within the limits of a construction project.
- W20-1 signs shall be provided on entrance ramps and/or side roads located within the work limits or the Advance Warning sign group. Within the length of closure, provision shall be made to control traffic entering from intersecting streets and driveways. Three drums shall be placed on each side across the closed lane at each intersection and driveway.
- All material and equipment shall be removed from the closure and the work area when no work is being done.
- The speed chosen for design of tapers shall be the normal legal speed except where the legal speed limit is reduced due to the construction and the subject lane closure is not the first active construction area encountered by traffic within the project.
- 36 inch (900 mm) warning sign sizes may be used when the legal speed limit is 40 mph or less.
- This drawing should be used on projects with dropoffs less than 5 in. in the work area. Projects with dropoffs greater than 5 in. in the work area should refer to MT-95.40 or MT-95.41.

TABLE I

SPEED LIMIT (MPH)	MINIMUM TAPER (L) FT (m)	MAXIMUM SPACING (S) OF DRUMS FT (m)	BUFFER (D) FT (m)
20-25	125 (38)	20 (6)	55 (17)
30-40	320 (98)	30 (9)	170 (52)
45-55	660 (201)	40 (12)	335 (102)

TABLE II

MINIMUM DISTANCE FT (m)	A
URBAN (≤ 40 MPH)	200 (60)
URBAN (≥ 45 MPH)	350 (105)
MAJOR STANDARD	500 (150)