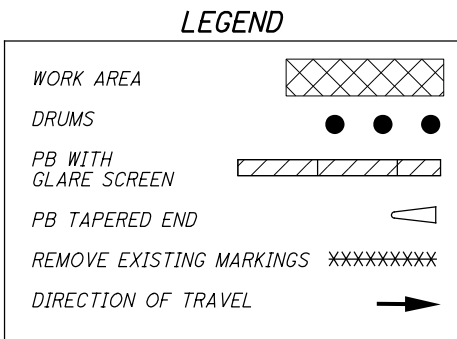


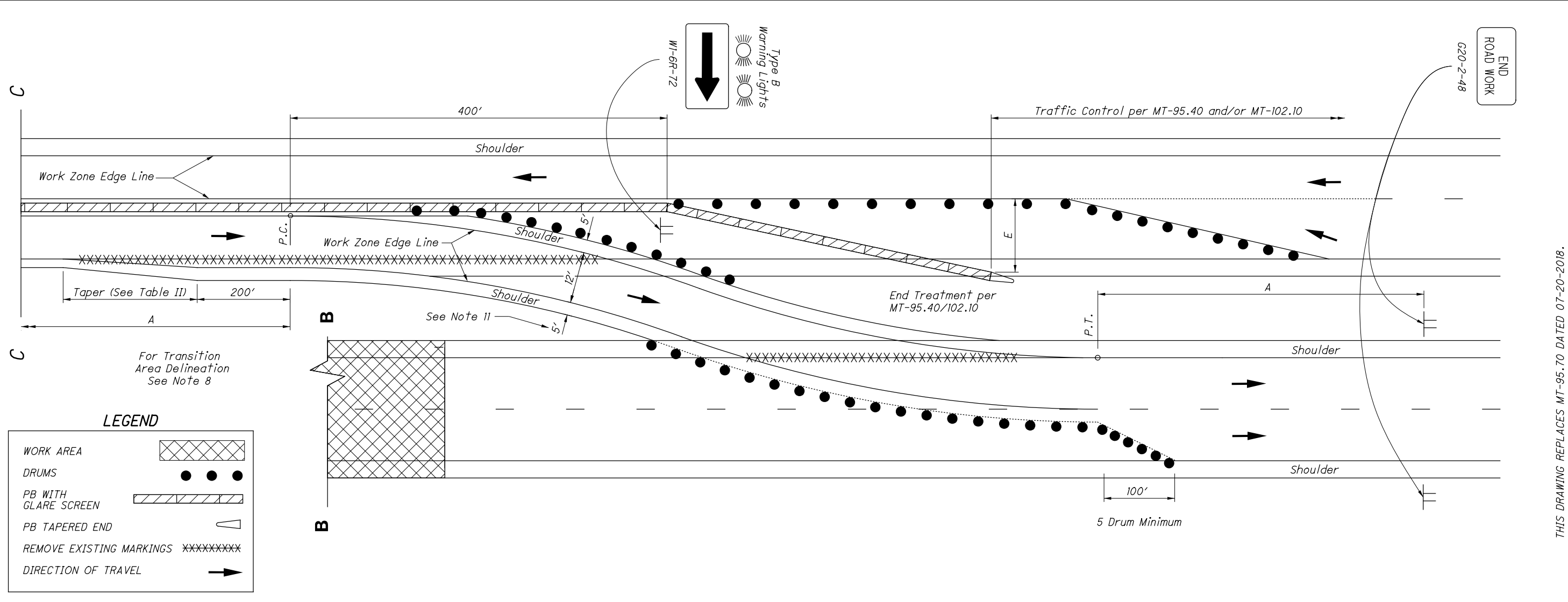
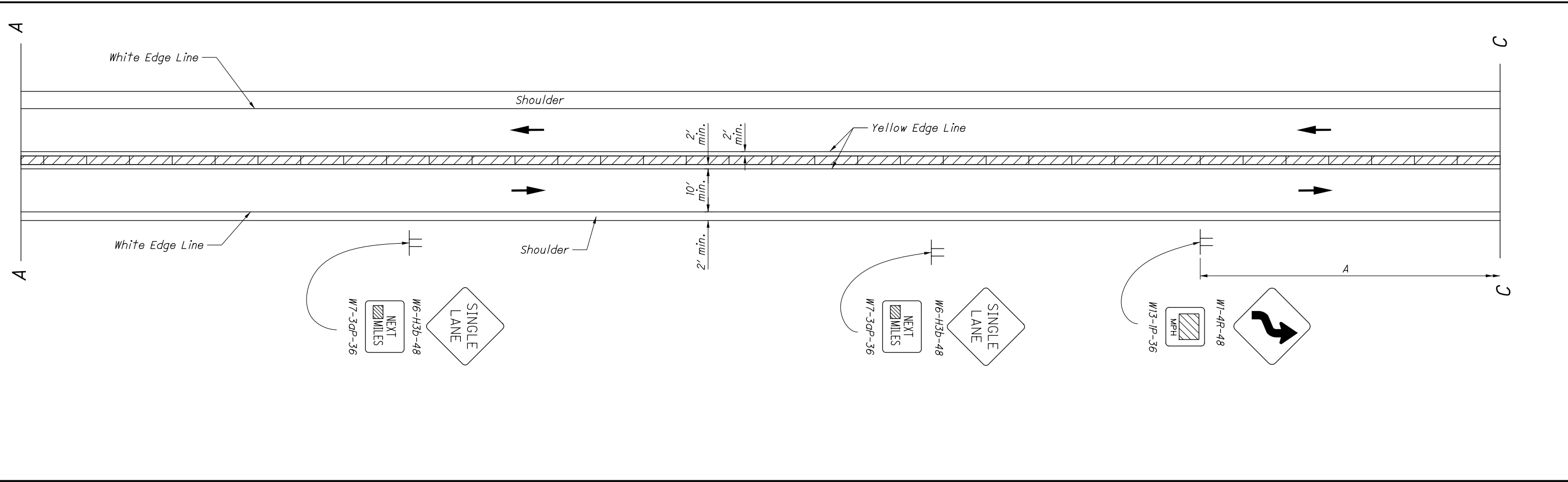
TABLE I (SIGN SPACING)

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
FREEWAY & EXPRESSWAY	1000	1500	2640

TABLE II

SPEED LIMIT (MPH)	TAPER RATE MINIMUM	T (FT)	PB FLARE RATE MINIMUM	MAXIMUM DRUM SPACING (FT)		CLEAR ZONE WIDTH (E) (FT)
				TAPER SEC.	TANGENT SEC.	
25	11:1	600	8:1	25	40	15
30	15:1	720	8:1	30	40	15
35	21:1	840	9:1	35	40	15
40	27:1	960	10:1	40	80	15
45	45:1	1080	12:1	45	80	19
50	50:1	1200	14:1	50	80	19
55	55:1	1320	16:1	55	80	23
60	60:1	1440	18:1	60	120	30
65	65:1	1560	19:1	65	120	30
70	70:1	1680	20:1	70	120	30





NOTES:

GENERAL

- 1A. This Standard Construction Drawing (SCD) presents information which is applicable to crossover design. Additional information applicable to maintenance of traffic on multi-lane highways can be found on other MT-series SCD's.
- 1B. SCD's MT-101.60 and MT-101.70 shall be used with this drawing.

DESIGN SPEED

- 2. The design speed used for taper rates should typically be the permanent legal speed. However, on construction projects for which the speed limit is reduced, the reduced speed may be used in determining the taper rate when the taper is not the first active construction area within the project.

TAPERS

- 3. The minimum acceptable length of taper shall be determined by multiplying the width of offset by the taper rate. The taper rate is provided in Table II.

SIGNING

- 4A. The Advisory Speed (W13-IP) plaque shall be used when specified in the plans.
- 4B. The work zone sign spacings shown in Table I are minimums. Maximum spacing should not be greater than 1.5 times the distances shown in Table I.
- 4C. Sign spacing should be adjusted to avoid conflict with existing signs. Minimum spacing to existing signs shall be 200' for speeds of 45 mph or less and a minimum of 400' for speeds of 50 mph or greater.
- 4D. Sign locations should be adjusted to provide adequate sight distance for the existing vertical and horizontal roadway alignment.
- 4E. If the tangent distance along the temporary diversion is less than 2000', the second Reverse Curve (W1-4) sign should be placed at the midpoint of the tangent.
- 4F. If the tangent distance along the temporary diversion is 600' or less, then the Double Reverse Curve (W24-1) sign may be used in place of the first Reverse Curve sign, eliminating the need for the second Reverse Curve sign.
- 4G. The SINGLE LANE (W6-H3b) signs shall be provided along directional single-lane roadways over 3 miles. Spacing of the W6-H3b sign shall be at approximately 1 mile intervals.
- 4H. Any END ROAD WORK (G20-2) signs which would fall within the limits of another work zone may be omitted.

PAVEMENT MARKING

- 5A. The existing conflicting pavement markings and reflectors from the raised pavement markers shall be removed and the appropriate color work zone edge lines shall be applied.

- 5B. Work zone edge lines shall be provided along the tangent section when specified in the plans.
- 5C. Work zone pavement markings which would conflict with the final traffic lanes shall be removable tape (CMS 740.06, Type I) unless the area will be resurfaced prior to project completion.
- 5D. After completion of the work, pavement markings other than CMS 740.06, Type I shall be removed in accordance with CMS 614.11 I. The original markings and raised pavement marker reflectors shall be restored at no additional cost unless separately itemized in the plans.
- 5E. Edge lines shall be of the appropriate color for the direction of travel. If the temporary edge lines are located on the same alignment as existing lines, the temporary lines may be painted over top of the existing lines (with subsequent over-painting if necessary during the life of the work stage to maintain day and night color) if other than on the final surface. If on the final surface, all marking shall be removable tape per Note 5C above.

PORTABLE BARRIER (PB)

- 6A. The PB near the exiting crossover shall extend straight on the permanent roadway to 400' beyond the PC of the crossover. The PB shall then be flared at the rate specified in Table II.
- 6B. The PB shall be at least 32". Any barrier less than 50" shall be fitted with glare screen when there is live traffic on both sides.
- 6C. PB end treatment shall be by impact attenuator if located within the clear zone of approaching traffic.
- 6D. NCHRP 350 PB end treatment may be by tapered ends if located beyond the clear zone of approaching traffic.
- 6E. When used, impact attenuators shall be installed parallel to traffic. The last full section of PB adjacent to the impact attenuator shall be located parallel to traffic. For installation procedures, refer to the manufacturer's installation instructions.
- 6F. No reflectors or other channelizing devices shall be permitted on the face of the PB facing the exiting crossover, from PC to end of barrier.
- 6G. Where PB is located beyond the edge of the paved shoulder, the cross slope within the clear zone, including the surface on which the PB is placed, shall be graded at 10:1 or flatter. If the cross slope is steeper than 10:1, the PB shall be terminated on the paved shoulder. The PB shall be extended along the paved shoulder as necessary to satisfy the length of need, and then terminated using an impact attenuator.
- 6H. For details on delineation of PB, see SCD MT-101.70.

DRUMS

- 7A. Drums along the crossover curves shall be spaced at 20' center-to-center.
- 7B. Drums used to close off a crossover shall be spaced at 10' center-to-center.
- 7C. All other drum spacing shall be per Table II.
- 7D. Drums located along the crossover ramps should be placed on the aggregate shoulder as much as possible in order to maximize the width of pavement open to traffic.

TRANSITION AREA DELINEATION

- 8. Transition area delineation shall be provided per SCD MT-99.30, or as otherwise specified in the plans.

LIGHTING

- 9. Work zone lighting shall be provided per SCD MT-100.00.

GEOMETRICS

- 10. Geometrics of the crossover shall be as specified in the plans.
- 11. Shoulders in the crossover shall be 5' consisting of 3' of paved shoulder and 2' of Item 411 stabilized crushed aggregate shoulder. The depth of Item 411 shall be a minimum of 6".

EXISTING LONGITUDINAL RUMBLE STRIPS

- 12. Existing longitudinal rumble strips located within the crossover alignment shall be eliminated by pavement planing and resurfacing.

THIS DRAWING REPLACES MT-95.70 DATED 07-20-2018.

SCD NUMBER

MT - 95.70

STANDARD ROADWAY CONSTRUCTION DRAWING

MEDIAN CROSSOVER - SINGLE LANE

OFFICE OF ROADWAY ENGINEERING

STATE ENGINEER

Soisson

STATE OF OHIO DEPARTMENT OF TRANSPORTATION ADMINISTRATOR

David L. Holstein

REVISION DATE

01-17-2020