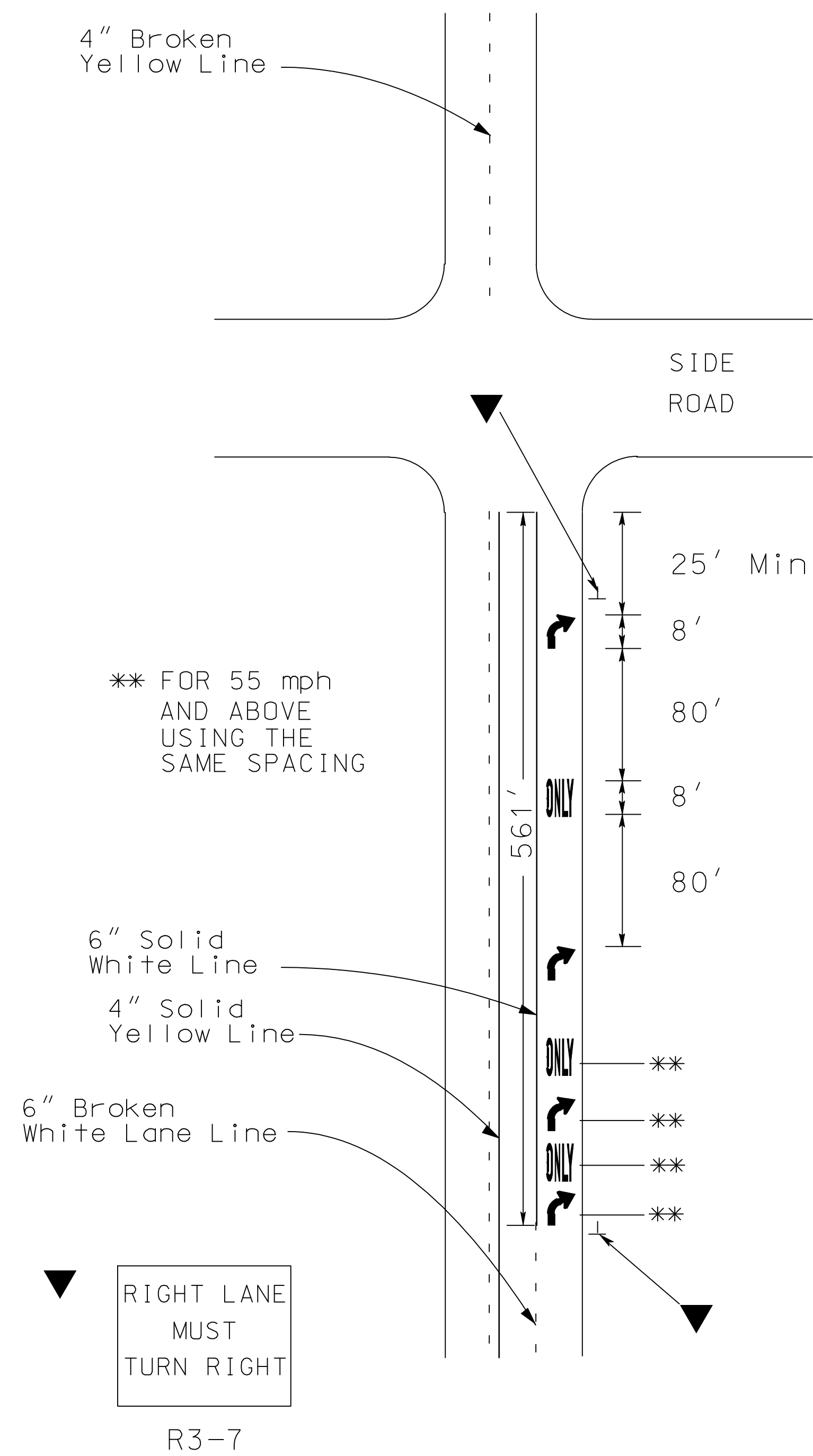
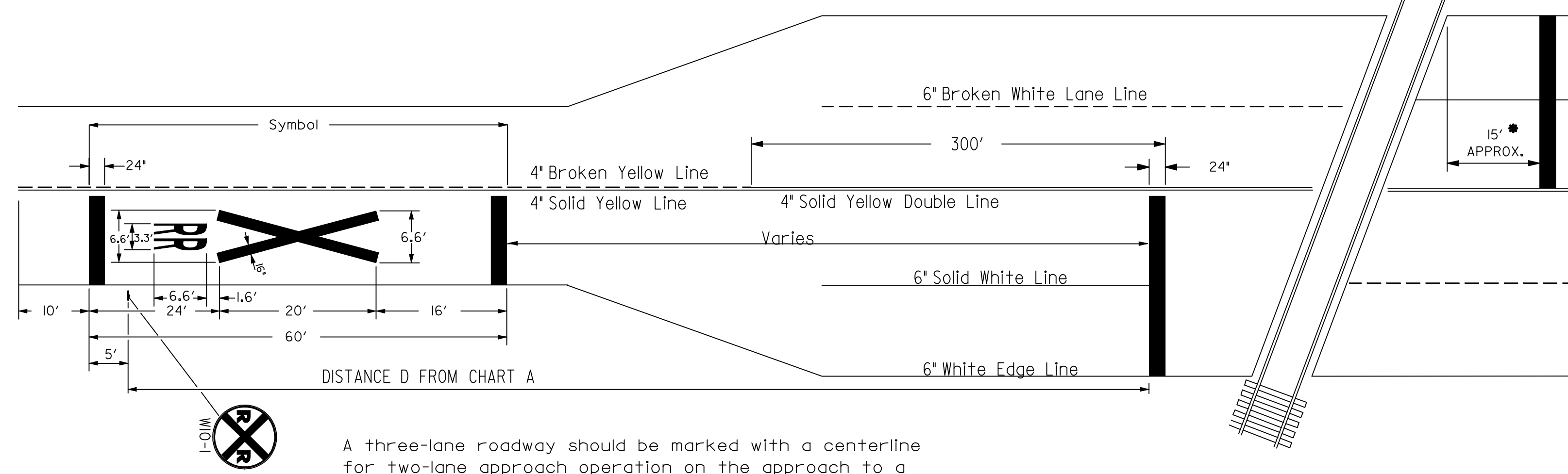


STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84745	2009	R37	R52

TYPICAL SIGNING AND MARKING FOR RIGHT LANE MUST TURN RIGHT



RAILROAD CROSSING MARKING



A three-lane roadway should be marked with a centerline for two-lane approach operation on the approach to a crossing.

On multi-lane roads the transverse bands should extend across all approach lanes, and individual R X R symbols should be used in each approach lane.

Refer to Standard Alphabet for Highway Signs and Markings for R X R symbols details.

* Stop line 8' from near edge of gate or cantilever, if present.

NOTE:
ON NON I, US, AND K ROUTES, 4" EDGE LINES MAY BE INSTALLED.
6" EDGE LINES ARE NOT REQUIRED ON NON I, US, AND K ROUTES.

Chart "A"

SPEED mph	DISTANCE D (feet)
70	900
65	850
60	775
55	700
50	625
45	550
40	475
35	400
30	325
25	250
20	175

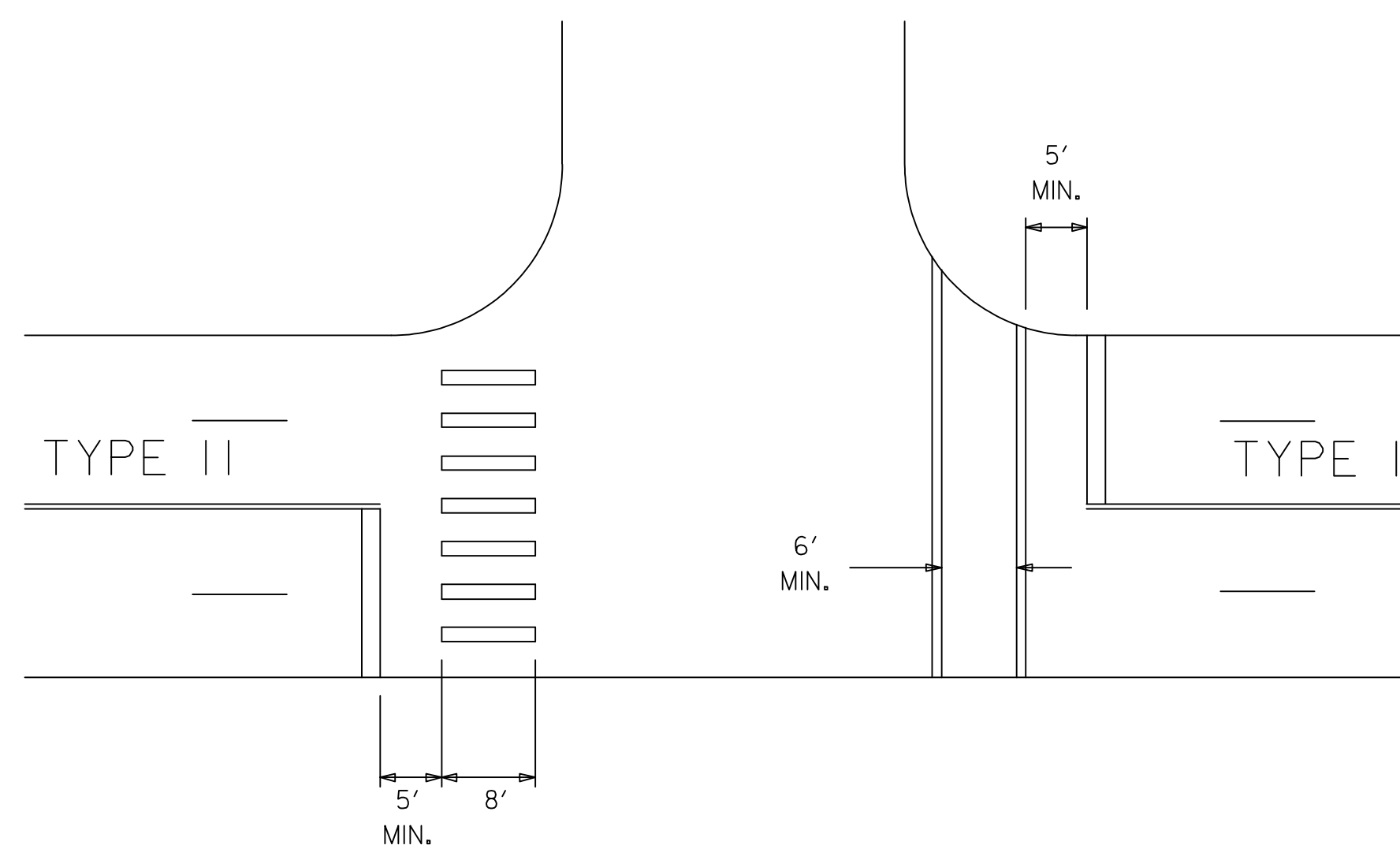
ALL DISTANCES ARE MINIMUM.

TYPICAL CROSSWALKS

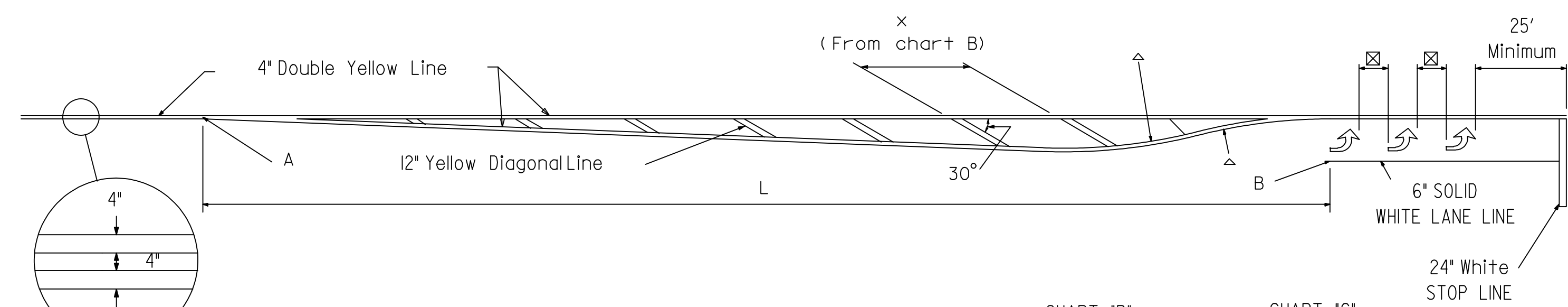
TYPE I: Crosswalk lines shall be 12" solid white lines. They shall be spaced a minimum of 6' apart from inside edge to inside edge.

TYPE II: These lines should be solid white 24" wide placed parallel to the direction of traffic flow. The line placement is determined by lane line, center line, and wheelpath in such a manner as to minimize traffic wear. The crosswalk width should be not less than 8'. The transverse crosswalk lines may be added.

When required, Stop lines shall be installed a minimum of 5' from crosswalks.



TYPICAL APPROACH TAPER DETAIL



The approach taper length from point A to point B is to be determined using CHART C. Values for L were calculated using the equations below and increased to the next higher 5 mph increment.

- Speeds < 45 mph $L = \frac{W \cdot S^2}{60}$

- Speeds ≥ 45 mph $L = W \cdot S$

☒ If arrows are used and unless otherwise specified the space between lines should be at least four times the height of the characters for low speed roads but not more than ten times the height of the characters, under any conditions.

△ For speeds less than or equal to 40 mph, R=150'.
For speeds greater than or equal to 45 mph, R=300'.

CHART "B"

Approach Speed	X
20 mph	20'
25 mph	25'
30 mph	30'
35 mph	35'
40 mph	40'
45 mph	45'
50 mph	50'
55 mph	55'
60 mph	60'
65 mph	65'
70 mph	70'

CHART "C"

Approach Speed	L
20 mph	80'
25 mph	125'
30 mph	180'
35 mph	245'
40 mph	320'
45 mph	540'
50 mph	600'
55 mph	660'
60 mph	720'
65 mph	780'
70 mph	840'

3	10/20/2006	RR Xing symbol changed from 18" to 16"	TLH	BDG
2	09/20/2005	Added 4" Solid Yellow Double Line to RR Xing	JFF	BDG
1	07/26/2005	New FHWA Approval Date	JFF	BDG
NO.	DATE		BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
TYPICAL
MISCELLANEOUS
PAVEMENT MARKING
DETAIL SHEET

TE309

FHWA APPROVAL	07/26/2005	APP'D	Brian D. Gower
DESIGNED	JFF	QUANTITIES	TRACED
DESIGN CK.	BDG	QUAN. CK.	TRACE CK.

Plotted By : unfiled
Plot File : I:\2008\08457\Standards\08457-4e309.dgn
Plot Date : 2/20/2009