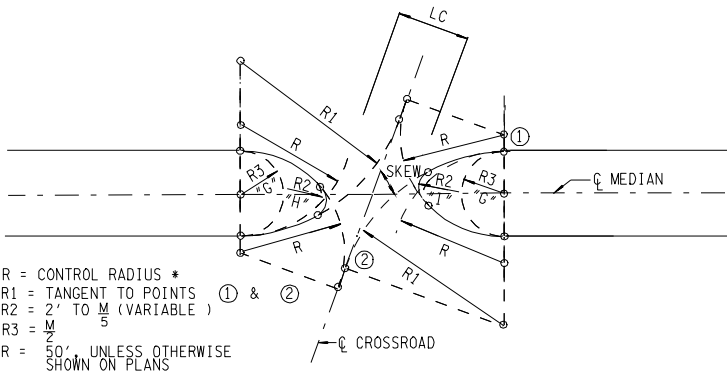


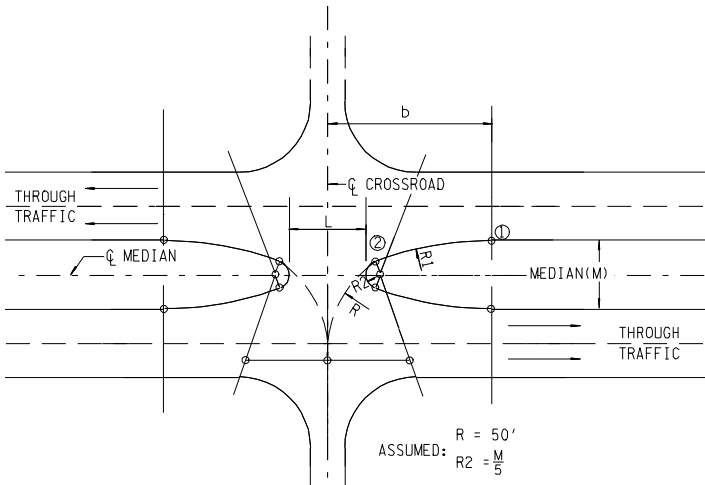
### MINIMUM DESIGN OF MEDIAN FOR PERPENDICULAR CROSSROADS

NOTE: SEMICIRCULAR ENDS ARE NOT DESIRABLE FOR MEDIANS GREATER THAN 10' IN WIDTH.



### MINIMUM DESIGN OF MEDIAN OPENINGS FOR SKEWED CROSSROADS TYPES "G", "H" & "I"

NOTE: ASYMMETRIC BULLET NOSE DESIGN, TYPE "I" IS PREFERABLE FOR SKEWED CROSSROADS.



### MINIMUM DESIGN OF MEDIAN OPENINGS TYPICAL BULLET NOSE END TYPES "L", "M" & "N"

NOTE: RADIUS R1 MAY VARY FROM 80' TO 400' OR MORE, DEPENDING ON THE TURNING SPEED DESIRED. THE TABULATED VALUES FOR TYPES "L", "M" & "N" OPENINGS ARE FOR SAFE TURNING SPEEDS OF 20, 25 AND 30 MPH, RESPECTIVELY.

NOTE: AT SKEWED INTERSECTIONS, THE ABOVE DESIGN CAN BE APPLIED TO EACH INTERSECTION INDIVIDUALLY. ADJUSTMENTS IN R1 & R2 FROM THE VALUES SHOWN ARE REQUIRED.

MEDIAN WIDTH M IN FEET	L= MINIMUM LENGTH OF MEDIAN OPENING ( IN FEET )					
	P DESIGN VEHICLE CONTROL RADIUS = 40'		SU DESIGN VEHICLE CONTROL RADIUS = 50'		WB-40 DESIGN VEHICLE CONTROL RADIUS = 75'	
	SEMICIRCULAR TYPE "A"	BULLET NOSE TYPE "B"	SEMICIRCULAR TYPE "C"	BULLET NOSE TYPE "D"	SEMICIRCULAR TYPE "E"	BULLET NOSE TYPE "F"
4	76	76	96	96	146	122
6	74	60	94	76	144	115
8	72	53	92	68	142	110
10	70	47	90	62	140	105
12	68	43	88	58	138	100
14	66	40 MIN	86	53	136	96
16	64	40 MIN	84	50	134	92
20	60	40 MIN	80	44	130	85
24	56	40 MIN	76	40 MIN	126	78
28	52	40 MIN	72	40 MIN	122	73
32	48	40 MIN	68	40 MIN	118	67
36	44	40 MIN	64	40 MIN	114	62
40	40 MIN	40 MIN	60	40 MIN	100	57
50	40 MIN	40 MIN	50	40 MIN	95	52
60	40 MIN	40 MIN	40 MIN	40 MIN	90	40 MIN
70	40 MIN	40 MIN	40 MIN	40 MIN	80	40 MIN
80	40 MIN	40 MIN	40 MIN	40 MIN	70	40 MIN
100	40 MIN	40 MIN	40 MIN	40 MIN	50	40 MIN
110	40 MIN	40 MIN	40 MIN	40 MIN	40 MIN	40 MIN

TABLE IS TAKEN FROM FIGURE IX-16 (PAGE 804) AND FIGURES IX-17 & IX-18 (PAGE 807).

LC = MINIMUM LENGTH OF MEDIAN OPENING ( IN FEET ) BASED ON CONTROL RADIUS OF 50 FEET					
SKEW ANGLE DEGREES	MEDIAN WIDTH IN FEET	LC = LENGTH OF MEDIAN OPENING, IN FEET MEASURED NORMAL TO THE CROSSROAD			R1 FOR TYPE I IN FEET
		SEMICIRCULAR TYPE "G"	BULLET NOSE SYMMETRICAL TYPE "H"	ASYMMETRICAL TYPE "I"	
90	10	90	62	-	-
	20	80	44	-	-
	30	70	40 MIN	-	-
	40	60	40 MIN	-	-
	50	50	40 MIN	-	-
	60	40	40 MIN	-	-
80	10	106	80	77	70
	20	94	58	54	68
	30	82	45	40 MIN	65
	40	71	40 MIN	40 MIN	63
	50	60	40 MIN	40 MIN	61
	60	47	40 MIN	40 MIN	59
70	10	121	97	90	97
	20	107	74	65	92
	30	94	59	48	86
	40	81	48	40 MIN	82
	50	68	40 MIN	40 MIN	76
	60	54	40 MIN	40 MIN	71
60	10	135	114	105	140
	20	120	91	77	130
	30	104	75	58	120
	40	90	62	42	110
	50	76	51	40 MIN	100
	60	60	40	40 MIN	90
50	10	148	127	118	210
	20	131	106	90	193
	30	115	90	68	174
	40	98	77	51	156
	50	81	64	40 MIN	139
	60	64	51	40 MIN	121

TABLE IS TAKEN FROM TABLE IX-19 (PAGE 814).

NOTE: IN GENERAL MEDIAN OPENINGS LONGER THAN 80 OR 100 FEET SHOULD BE AVOIDED, REGARDLESS OF SKEW. THIS MAY CALL FOR SPECIAL CHANNELIZATION, LEFT TURN LANES, OR ADJUSTMENT TO REDUCE THE CROSSROAD SKEW, ALL OF WHICH RESULT IN ABOVE MINIMUM DESIGNS.

MEDIAN WIDTH IN FEET	DIMENSIONS ( IN FEET )					
	R1=90'		R1=150'		R1=230'	
	L	b	L	b	L	b
	TYPE "L "	TYPE "M "	TYPE "M "	TYPE "N "	TYPE "N "	TYPE "N "
20	58	65	66	78	71	90
30	48	68	57	85	63	101
40	40	71	50	90	57	109
50	-	-	44	95	51	115
60	-	-	-	-	46	122
70	-	-	-	-	41	128

THIS DETAIL AND TABLE ARE TAKEN FROM FIGURE IX-62 (PAGE 816).

MINIMUM DESIGNS FOR U-TURNS - TYPE "J"							
TYPE OF MANEUVER		M - MINIMUM WIDTH OF MEDIAN (IN FEET) FOR DESIGN VEHICLE					
		P	WB-40	SU	BUS	WB-50	WB-60
		LENGTH OF DESIGN VEHICLE					
		19'	50'	30'	40'	55'	65'
INNER LANE TO INNER LANE		30	61	63	63	71	71
INNER LANE TO OUTER LANE		18	49	51	51	59	59
INNER LANE TO SHOULDER		8	39	41	41	49	49

TABLE IS TAKEN FROM FIGURE IX-67 (PAGE 825).

NOTE: WHERE OCCASIONAL U-TURNS ARE MADE IN EITHER DIRECTION, A SYMMETRICAL OPENING SHOULD BE USED AND THE LENGTH OF THE OPENING SHOULD BE FOR THE DESIGN VEHICLE USED. WHEN FREQUENT U-TURNS IN BOTH DIRECTIONS ARE ANTICIPATED, INCREASE THE LENGTH OF THE OPENING OR PROVIDE SEPARATE ONE WAY OPENINGS.

### SEPARATE U-TURN MEDIAN OPENINGS MAY FIT AT THE FOLLOWING LOCATIONS

- BEYOND INTERSECTIONS TO ACCOMMODATE MINOR TURNING MOVEMENTS NOT OTHERWISE PROVIDED IN THE INTERSECTION OR INTERCHANGE AREA.
- JUST AHEAD OF AN INTERSECTION TO ACCOMDATE U-TURN MOVEMENTS THAT WOULD INTERFERE WITH THROUGH AND OTHER TURNING MOVEMENTS AT THE INTERSECTION.
- OCCURRING IN CONJUNCTION WITH MINOR CROSSROADS WHERE TRAFFIC IS NOT PERMITTED TO CROSS THE MAJOR HIGHWAY BUT INSTEAD IS REQUIRED TO TURN RIGHT, ENTER THE THROUGH TRAFFIC STREAM, WEAVE TO THE LEFT, U-TURN, THEN RETURN.
- OCCURRING WHERE REGULARLY SPACED OPENINGS FACILITATE MAINTENANCE OPERATIONS, POLICING, REPAIR SERVICE OF STALLED VEHICLES, OR OTHER HIGHWAY-RELATED ACTIVITIES.
- OCCURRING ON HIGHWAYS WITHOUT ACCESS CONTROL WHERE MEDIAN OPENINGS AT OPTIMUM SPACING ARE PROVIDED TO SERVE EXISTING FRONTAGE DEVELOPMENTS AND AT THE SAME TIME MINIMIZE PRESSURE FOR FUTURE MEDIAN OPENINGS.

### GENERAL NOTES

- FOR SPECIFIC CONDITIONS NOT COVERED ON THIS SHEET, REFERENCE SHOULD BE MADE TO " A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS ", 1990.
- PAGE NUMBERS REFERRED TO ON THIS DRAWING ARE FROM THE ABOVE REFERENCE.

DESIGN VEHICLE DIMENSIONS ( IN FEET )											
DESIGN VEHICLE		OVERALL			OVERHANG		WHEELBASES			S	T
TYPE	SYMBOL	HEIGHT	WIDTH	LENGTH	FRONT	REAR	WB1	WB2	WB3		
PASSENGER CAR	P	4.25	7	19	3	5	11	-	-	-	-
SINGLE UNIT TRUCK	SU	13.5	8.5	30	4	6	20	-	-	-	-
INTERMEDIATE SEMITRAILER COMBINATION	WB-40	13.5	8.5	50	4	6	13	27	-	-	-
LARGE SEMITRAILER COMBINATION	WB-50	13.5	8.5	55	3	2	20	30	-	-	-
DOUBLE SEMITRAILER	WB-60	13.5	8.5	65	2	3	9.7	20	20.9	4	5.4
INTERSTATE SEMITRAILER	WB-62	13.5	8.5	69	3	3	20	40-42	-	-	-
INTERSTATE SEMITRAILER	WB-67	13.5	8.5	74	3	3	20	45-47	-	-	-

FOR ADDITIONAL DESIGN VEHICLES SEE TABLE II-1 (PAGE 21).  
S IS THE DISTANCE FROM THE REAR EFFECTIVE AXLE TO THE HITCH POINT.  
T IS THE DISTANCE FROM THE HITCH POINT TO THE LEAD EFFECTIVE AXLE OF THE FOLLOWING UNIT.

REV. 7-1-72: CHANGED DEPARTMENT NAME.

REV. 7-1-76: CHANGED DWG. NO. FROM M-0-1 (68) TO RP-M-1.

REV. 3-15-76: DELETED REFERENCE TO OLD DWG. NO., SUBSTITUTED NEW DWG. NO.

REV. 10-17-86: CHANGED C-43 TO WB-40 AND MEDIAN OPENING LENGTH. CHANGED U-TURN CHART AND NOTES. CHANGED CHARTS FOR DESIGN CONTROL FOR MINIMUM MEDIAN OPENINGS AND FOR DESIGN VEHICLE DIMENSIONS. ELIMINATED TYPICAL MEDIAN OPENING DETAIL AND TYPE "K" OPENING. ADDED TYPES "L", "M" & "N" OPENINGS.

- ☒ REV. 10-26-93: REDREW AND REORGANIZED SHEET. CHANGED DWG. NO. FROM RP-M-1 TO RP-DHO-1. UPDATED TO CONCUR WITH AASHTO PUBLICATION " A POLICY ON GEOMETRIC DESIGN FOR HIGHWAYS AND STREETS " - 1990 EDITION.

### DESIGN CONTROLS FOR MINIMUM MEDIAN OPENINGS

DESIGN VEHICLES ACCOMMODATED		CONTROL RADIUS (FT.)
PREDOMINANT	OCCASIONAL	
P	SU	40
SU	WB-40	50
WB-40	WB-50	75

TABLE IS TAKEN FROM TABLE IX-20 (PAGE 815).

☒ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

MEDIAN OPENINGS  
ON 4-LANE  
DIVIDED HIGHWAY