

NOTES:

LANE, EDGE AND CENTERLINES

1. MAKE ALL LANE LINES, EITHER SOLID OR BROKEN WHITE, 4" MINIMUM WIDE WHEN ADDITIONAL LANES ARE ADDED TO WHAT IS OTHERWISE A TWO-LANE, TWO-WAY HIGHWAY AND 6" WIDE ON ALL MULTI-LANE HIGHWAYS.
2. LANE LINES ON AN APPROACH TO A SIGNALIZED INTERSECTION SHALL BE SOLID WHITE FOR A DISTANCE OF 150' MEASURED FROM THE STOP BAR.
3. LANE LINES THAT DELINEATE THE EDGE OF A TURNING LANE ARE TO BE SOLID WHITE LINES WITH A LENGTH EQUAL 2X/3, BUT NOT LESS THAN 1/3 THE LENGTH OF THE TURN LANE, MEASURED FROM THE STOP BAR.
4. MAKE EDGE LINES SOLID WHITE LINES 4" WIDE, EXCEPT USE SOLID YELLOW LINES WHEN ADJACENT TO A MEDIAN WHICH SEPARATES OPPOSING DIRECTIONS OF VEHICULAR TRAFFIC FLOW.
5. ON TWO-LANE, TWO-WAY HIGHWAYS, THE CENTER LINES ARE YELLOW, 4" WIDE EITHER SOLID, BROKEN OR A COMBINATION THEREOF. A SOLID BARRIER LINE SHALL PRECEDE ALL CONTROLLED INTERSECTIONS BY THE MINIMUM DISTANCE NOTED IN TABLE A.
6. ON FOUR (4) OR MORE LANE UNDIVIDED HIGHWAYS, FOR CENTER LINES USE THE TWO-WAY BARRIER LINES.
7. "CENTER LANE LEFT TURN ONLY" MARKINGS ARE TWO (2) SETS OF ONE-WAY BARRIER LINES WITH BROKEN YELLOW LINES INSIDE OF THE SOLID YELLOW LINES.
8. EXTEND THE LANE LINES, EDGE LINES AND/OR CENTER LINES A DISTANCE OF 150' FROM THE STOP BAR ON MINOR APPROACHES, WHERE CONDITIONS PERMIT.

STOP LINE

9. STOP LINES ARE SOLID WHITE LINES THAT COMPLETELY TRAVERSE EACH TRAFFIC LANE. AT AN INTERSECTION WITH A STOP SIGN, THE STOP LINE SHOULD BE PLACED AT A LOCATION NO LESS THAN 4', OR MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY TO ENSURE MAXIMUM SIGHT DISTANCE TO VEHICLES ON THE CROSSING ROUTE. WHEN USED ON MULTI-LANE APPROACH TO A SIGNALIZED INTERSECTION, THE STOP LINE MAY BE STAGGERED TO ASSIST TURNING VEHICLES AND TO IMPROVE SIGHT DISTANCE FOR MOTORIST DESIRING TO MAKE A TURN ON RED.
10. LOCATE STOP LINES AT A MINIMUM OF 4' IN ADVANCE OF AND PARALLEL TO THE CROSSWALK LINES UNLESS OTHERWISE NOTED.

YIELD LINE FOR DETAILS SEE SHEET 5.

11. YIELD LINES ARE TO CONSIST OF A ROW OF SOLID WHITE ISOSCELES TRIANGLES POINTING TOWARD APPROACHING VEHICLES EXTENDING ACROSS APPROACH LANES TO INDICATE THE POINT AT WHICH THE YIELD IS INTENDED OR REQUIRED TO BE MADE.

MEDIAN MARKINGS

12. TRANSVERSE MEDIAN MARKINGS ARE 24" WIDE YELLOW LINES SPACED AS INDICATED ON SHEET 4, WITHIN TWO (2) SETS OF TWO-WAY BARRIER LINES. USE TRANSVERSE LINES ONLY WHEN REQUIRED TO PROVIDE EMPHASIS IF THE SIGHT DISTANCE OR VISIBILITY IS RESTRICTED.

GORE MARKINGS

13. EDGE LINES ARE 4" SOLID WHITE LINES. USE TRANSVERSE OR DIAGONAL LINES ONLY WHEN REQUIRED TO PROVIDE ADDITIONAL EMPHASIS IF THE SIGHT DISTANCE OR VISIBILITY OF GORE IS RESTRICTED.

PAVEMENT LEGENDS

14. WORD AND SYMBOL MARKINGS SHOULD NOT EXCEED THREE LINES OF INFORMATION. IF A PAVEMENT MARKING WORD MESSAGE CONSISTS OF MORE THAN ONE LINE OF INFORMATION, IT SHOULD READ IN THE DIRECTION OF TRAVEL. THE FIRST WORD OF THE MESSAGE SHOULD BE NEAREST TO THE ROAD USER. THE LONGITUDINAL SPACE BETWEEN WORD OR SYMBOL MESSAGE MARKINGS, INCLUDING ARROW MARKINGS, 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. ON ALL APPROACHES, CENTER THE LEGENDS WITHIN THE LANE.

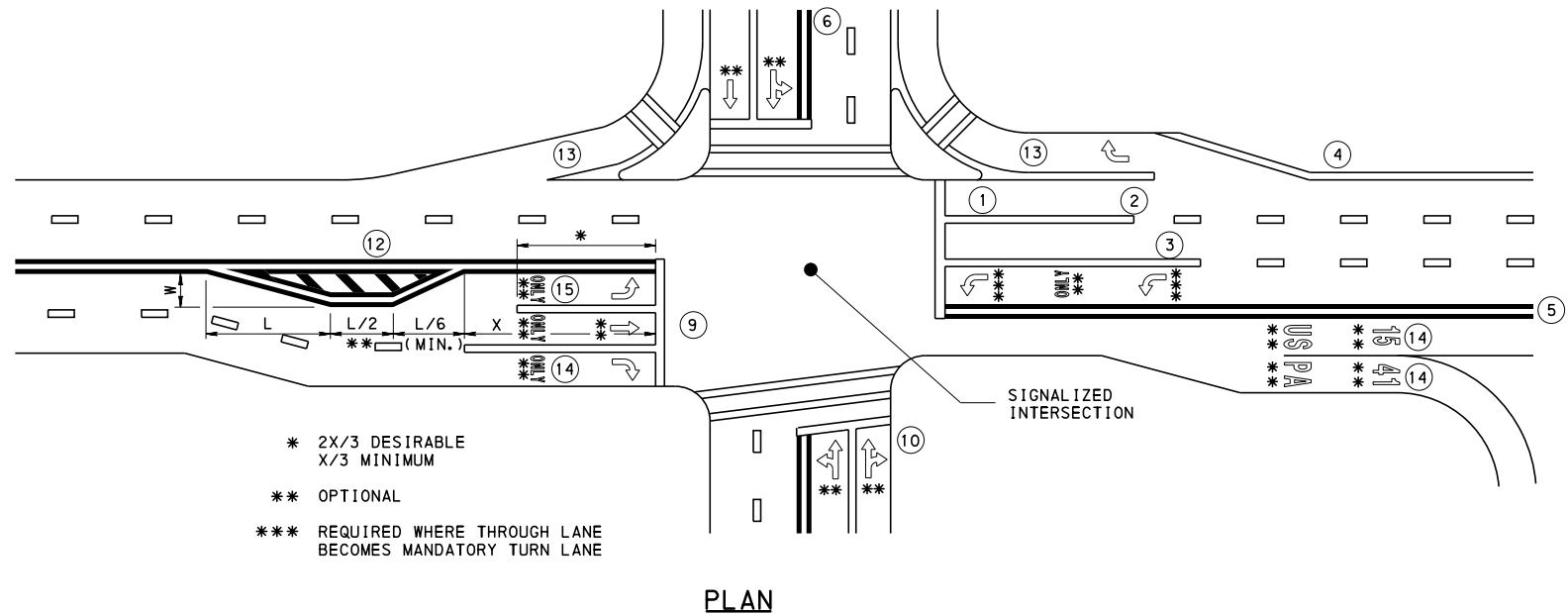
15. ALIGN THE LEGENDS TRANSVERSELY ACROSS EACH PAVEMENT. THE MINIMUM DISTANCE BETWEEN THE ARROW SYMBOL AND STOP BAR IS 20'.

DOTTED EXTENSION LINES

16. DOTTED EXTENSION LINES MAY BE USED TO DELINEATE TRAVEL PATHS FOR TURNING TRAFFIC MOVEMENTS AT OFFSET, SKEWED OR COMPLEX INTERSECTIONS AND FOR MULTIPLE TURN LANES.

LANE REDUCTION ARROW (LRA)

17. FOR DETAILS SEE SHEET 10.

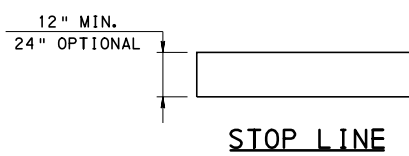


- * 2X/3 DESIRABLE
X/3 MINIMUM
- ** OPTIONAL
- *** REQUIRED WHERE THROUGH LANE BECOMES MANDATORY TURN LANE

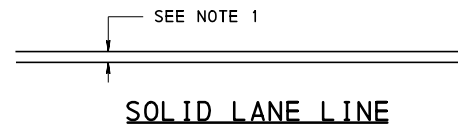
OFFSET TABLE	
$L = \frac{WS^2}{60}$	FOR CONVENTIONAL ROADWAYS WHERE THE 85 TH PERCENTILE SPEED IS 40 MPH OR LESS
$L = WS$	FOR CONVENTIONAL ROADWAYS WHERE THE 85 TH PERCENTILE SPEED IS 45 MPH OR GREATER AND FOR ALL FREEWAYS AND EXPRESSWAYS
WHERE:	S = 85 TH PERCENTILE SPEED (MPH) W = OFFSET
X = 25' PER 30 TURNING V.P.H. THE MINIMUM IS 75'	

SPEED LIMIT OR 85 TH PERCENTILE SPEED (MPH)	DISTANCE (FT)
35 OR LESS	300
40	350
45	400
50	450
55	500

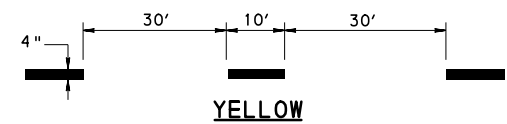
TABLE A
(SEE NOTE 5)



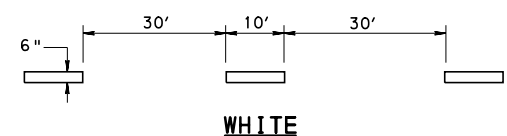
STOP LINE



SOLID LANE LINE

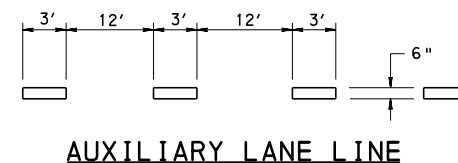


YELLOW

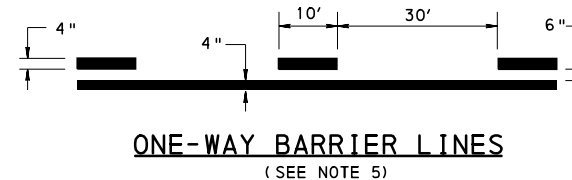


WHITE

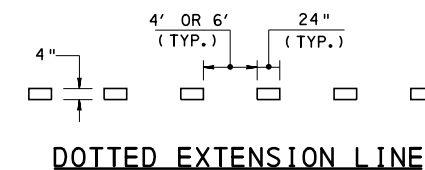
BROKEN LANE LINE



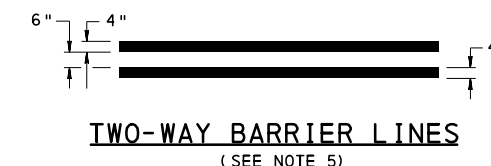
AUXILIARY LANE LINE



ONE-WAY BARRIER LINES
(SEE NOTE 5)



DOTTED EXTENSION LINE



TWO-WAY BARRIER LINES
(SEE NOTE 5)

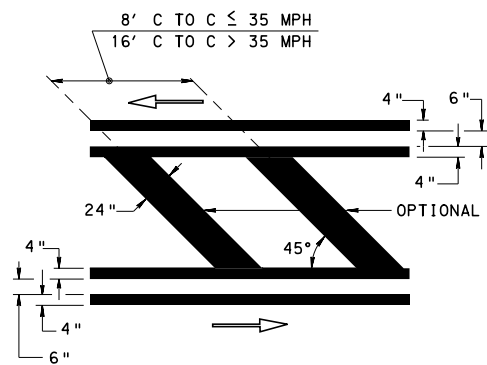
LEGEND	
	WHITE
	YELLOW
	DIRECTION OF TRAVEL
	NOTE REFERENCE NUMBER

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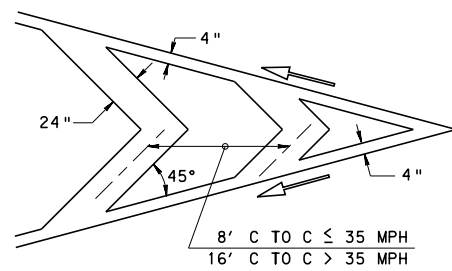
PAVEMENT MARKINGS

CONVENTIONAL

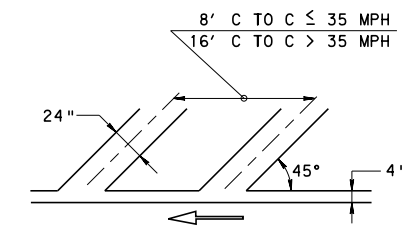
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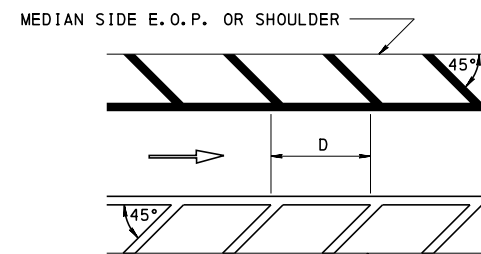
TRANSVERSE MEDIAN MARKING



CHEVRON GORE MARKING
(OPTIONAL)

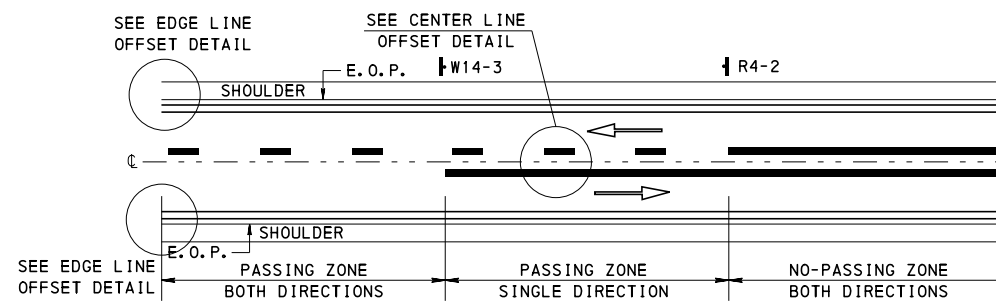


ONE-WAY BARRIER GORE MARKING
(OPTIONAL)

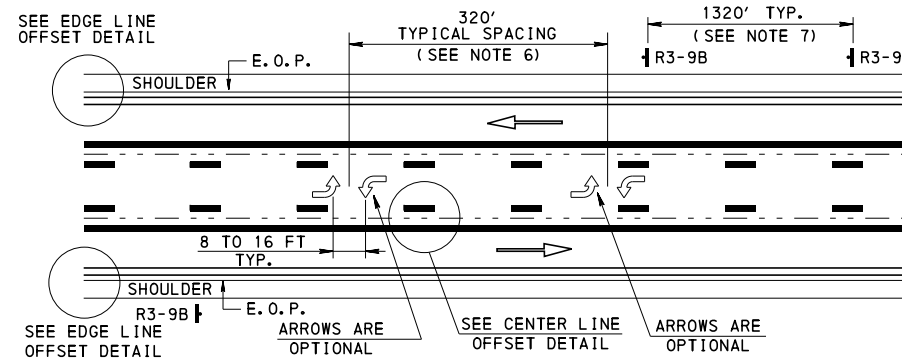


D = SPACING OF DIAGONAL LINES (TYPICALLY EQUAL IN FEET TO THE POSTED SPEED LIMIT). INCREASE SPACING OF DIAGONALS TO 200' OR MORE ON INTERSTATE ROADWAYS.

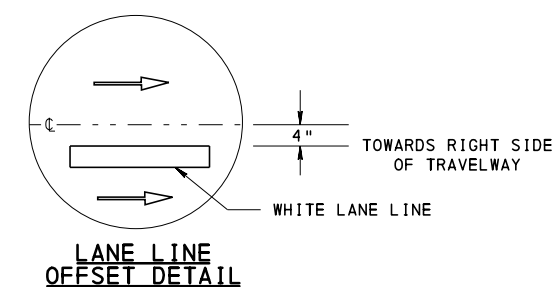
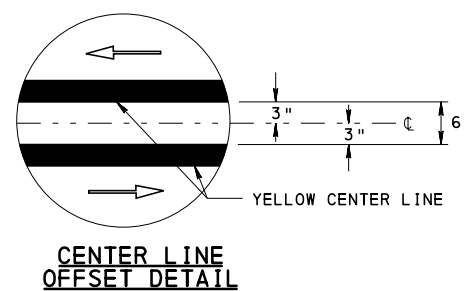
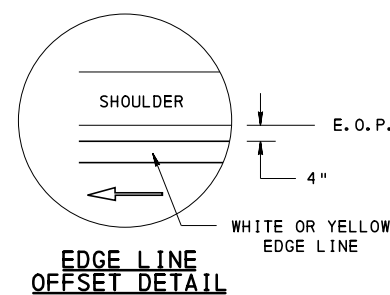
EDGE OF PAVEMENT OR SHOULDER ISLAND



TWO-LANE, TWO-WAY UNDIVIDED ROADWAY



TWO-LANE, TWO-WAY UNDIVIDED ROADWAY WITH TWO-WAY LEFT TURN LANE



LEGEND

- ==== WHITE
- ==== YELLOW
- ➔ DIRECTION OF TRAVEL

NOTES:

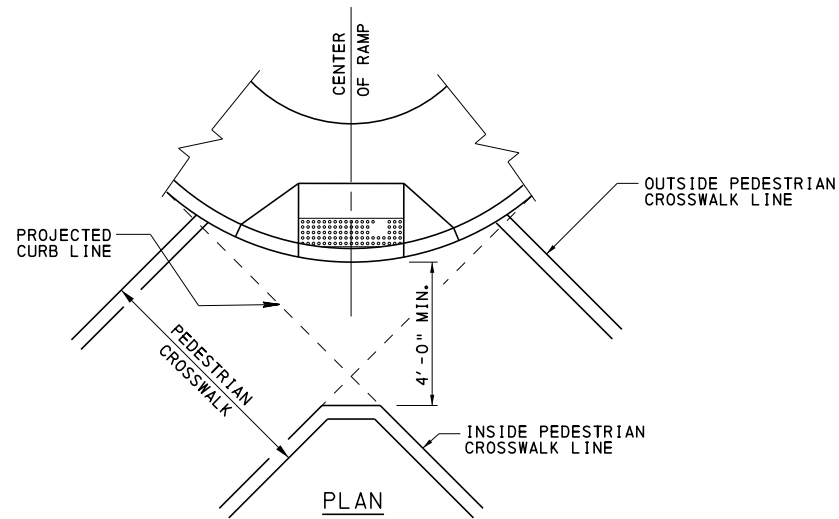
1. OFFSET PAVEMENT MARKING LINES 4" FROM LONGITUDINAL PAVEMENT CONSTRUCTION JOINTS, AS DETERMINED BY THE ENGINEER OR AS INDICATED BELOW:
 - YELLOW SKIP LINES ON TWO-LANE, TWO-WAY ROADWAYS (WHERE PASSING IS ALLOWED IN BOTH DIRECTIONS) CAN BE OFFSET 3" FROM THE CENTER LINE TO ALLOW FOR FUTURE REPAINTING OF THE LINES WITH COMPATIBLE DEPARTMENT EQUIPMENT.
 - OFFSET DOUBLE YELLOW CENTER LINES 3" ON EACH SIDE OF THE CENTER LINE TO ALLOW FOR PLACEMENT OF PAVEMENT MARKERS (PRESENT OR FUTURE PLACEMENT).
2. PASSING - NO PASSING ZONES WILL BE DETERMINED BY THE ENGINEER.
3. EDGE LINES ARE NOT REQUIRED ALONG CURB AND GUTTER LOCATIONS.
4. DO NOT CONTINUE EDGE LINES THRU INTERSECTIONS, AND DO NOT BREAK EDGE LINES AT DRIVEWAYS.
5. PLACE EDGE LINES AT RAISED ISLAND LOCATIONS, OUTLINING THE SHAPE OF THE RAISED ISLAND.
6. 320' TYPICAL SPACING BETWEEN SETS OF ARROW SYMBOLS CAN BE INCREASED OR DECREASED AS DETERMINED BY THE ENGINEER.
7. 1320' TYPICAL DISTANCE BETWEEN CENTER LANE - LEFT TURN ONLY SIGNS (R3-9B) CAN BE INCREASED OR DECREASED AS DETERMINED BY THE ENGINEER.

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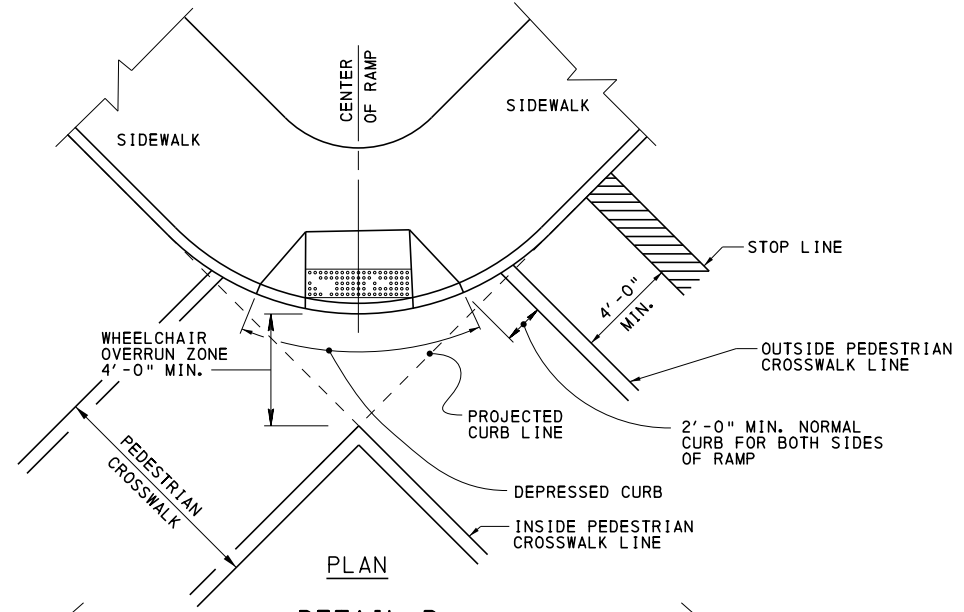
PAVEMENT MARKINGS

CONVENTIONAL

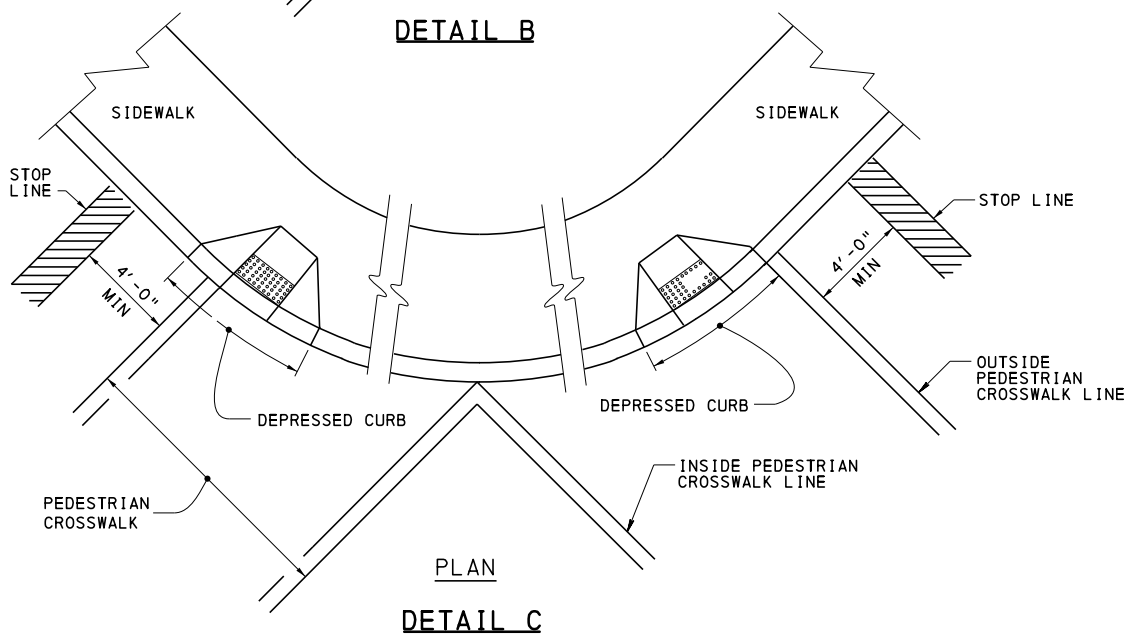
DETAILS ARE FOR CROSSWALK PAVEMENT MARKINGS ONLY



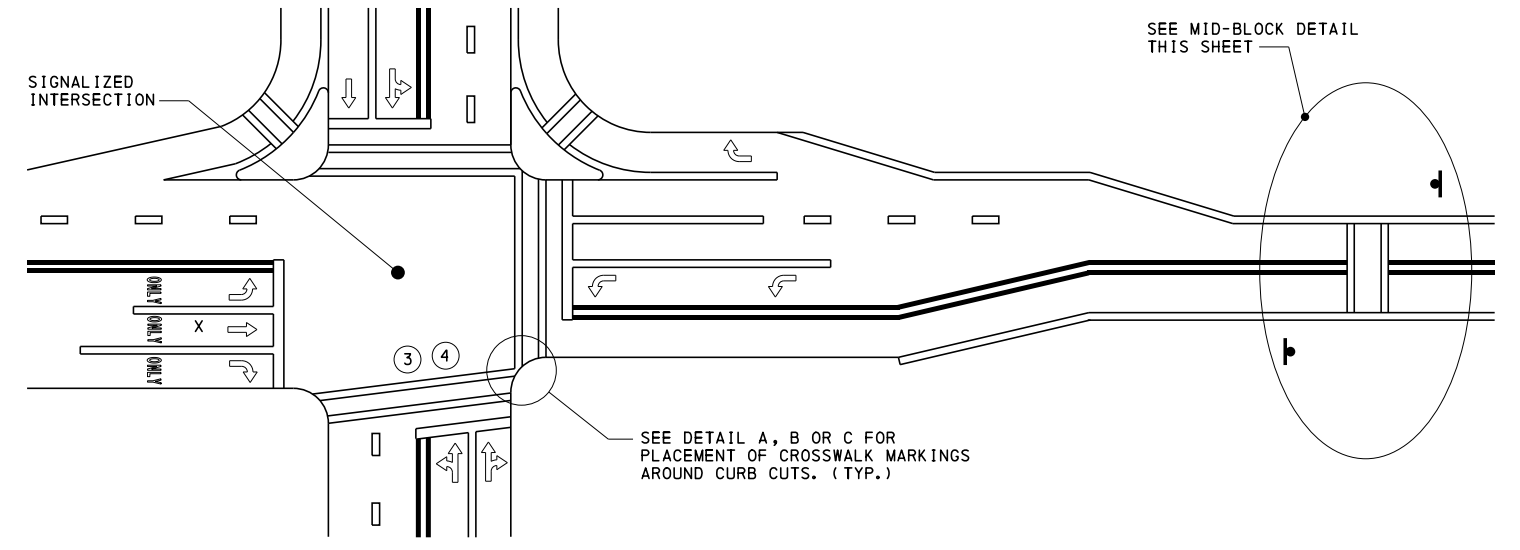
**PLAN
DETAIL A**



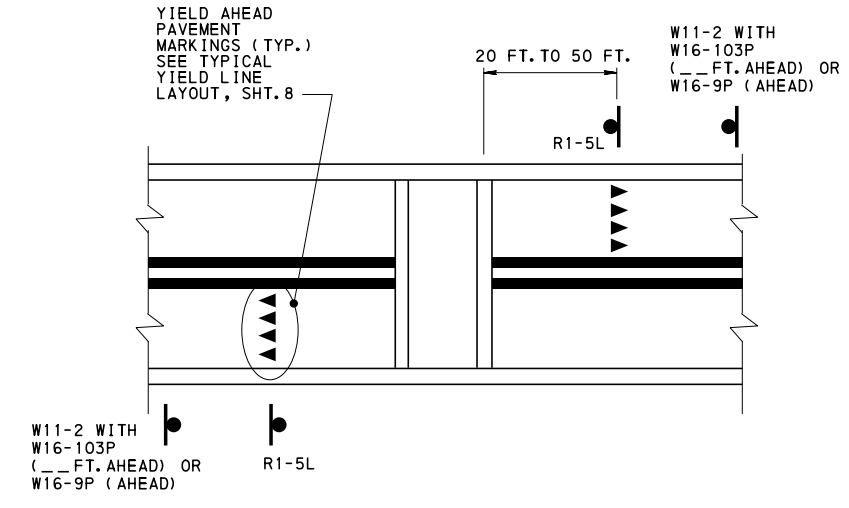
**PLAN
DETAIL B**



**PLAN
DETAIL C**



PLAN

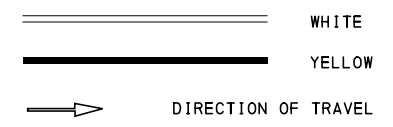


**PLAN - CROSSWALK WITH ADVANCE WARNING
PAVEMENT MARKINGS**

MID-BLOCK CROSSWALK DETAIL

REFER TO PUBLICATION 46 CHAPTER 11.9 AND MUTCD PART 3B.17 FOR MORE DETAILS.

LEGEND



NOTES:

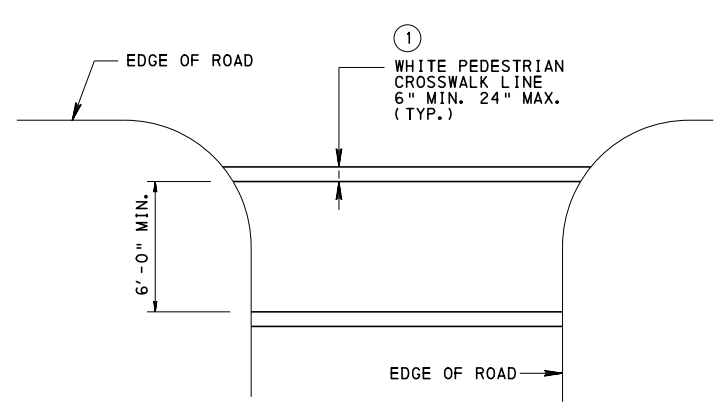
1. THE MINIMUM WIDTH OF CROSSWALKS SHALL BE 6' AND MAKE THE CROSSWALK LINES SOLID WHITE NOT LESS THAN 6" WIDE, THE LINES FORMING A CROSSWALK SHALL BE PARALLEL TO EACH OTHER AND EXTEND ACROSS THE ROADWAY FROM FACE OF CURB TO FACE OF CURB OR EDGE OF SHOULDER AS APPLICABLE.
2. FOR STANDARD CROSSWALK MARKINGS AND APPROVED DECORATIVE CROSSWALK PATTERN CONFIGURATION AND COLORS SEE SHEET 6.

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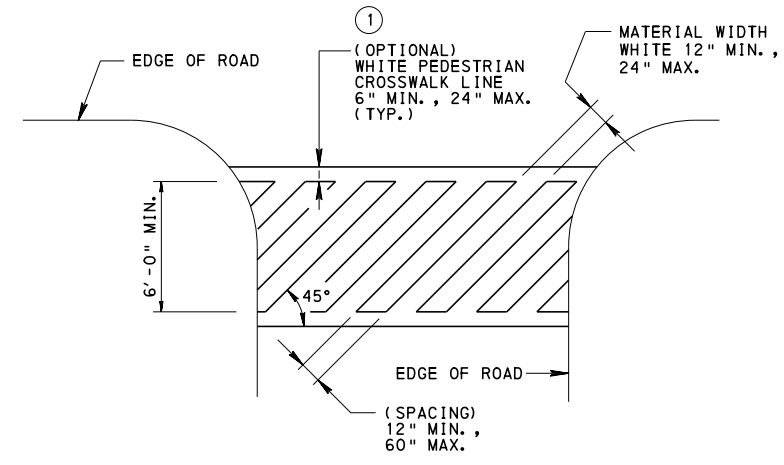
PAVEMENT MARKINGS

CROSSWALKS

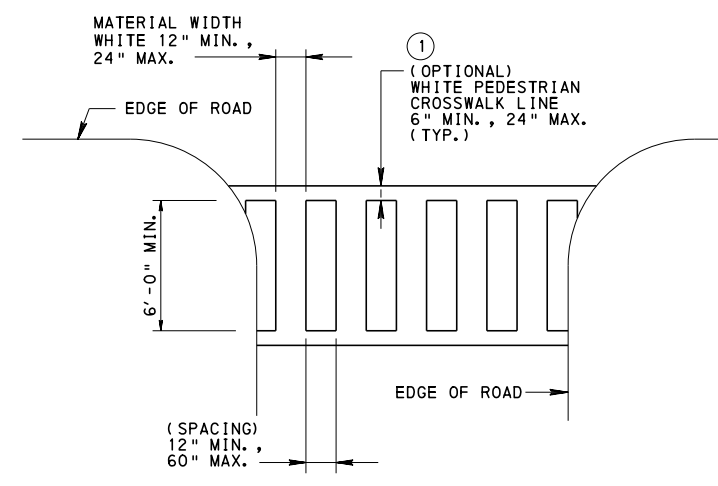
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TYPE A - PARALLEL



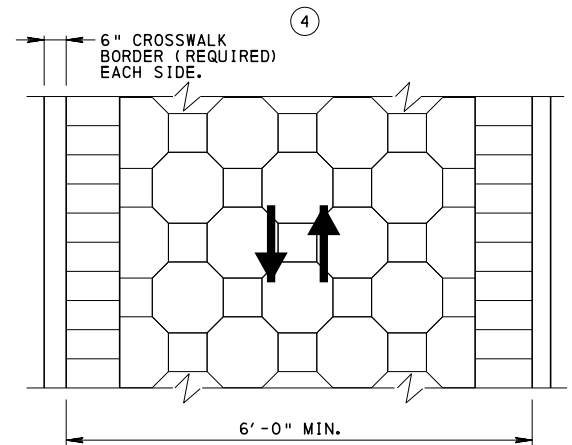
TYPE B - DIAGONAL



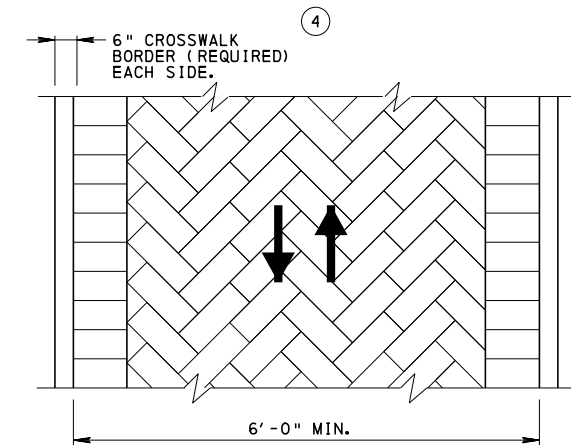
TYPE C - PERPENDICULAR

STANDARD CROSSWALK MARKINGS

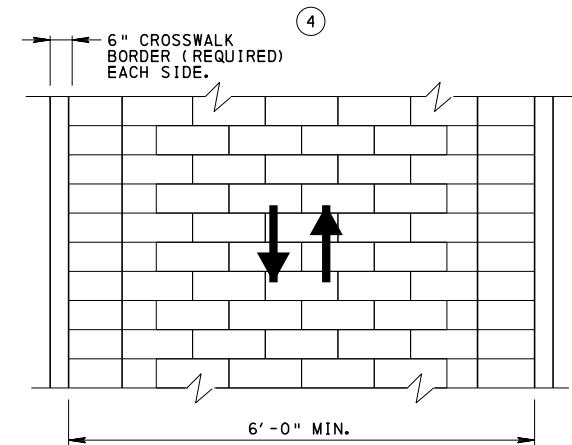
DECORATIVE CROSSWALK



TYPE D - COURTYARD



TYPE E - HERRINGBONE



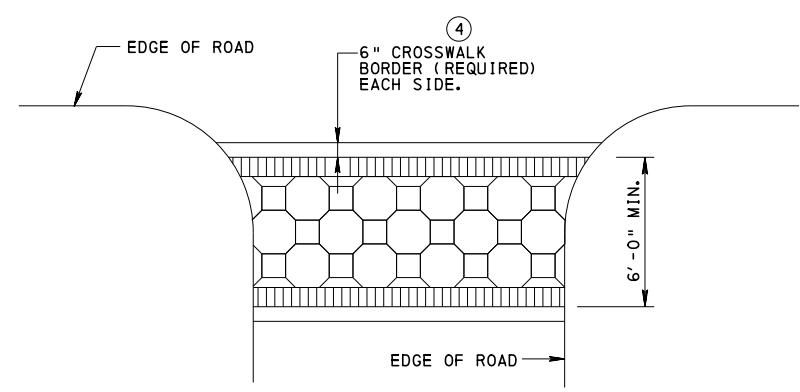
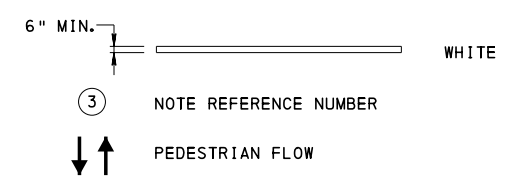
TYPE F - OFFSET BRICK

APPROVED NON-REFLECTIVE COLORS: WHITE, BLACK, BROWN, SILVER-GRAY, TAN AND MAROON

NOTES:

1. MAKE THE CROSSWALK LINES SOLID WHITE, NOT LESS THAN 6" WIDE.
2. EXTEND THE CROSSWALK ACROSS THE ROADWAY FROM FACE OF CURB TO FACE OF CURB OR EDGE OF SHOULDER AS APPLICABLE.
3. THE MINIMUM WIDTH OF CROSSWALKS SHALL BE 6'.
4. A WHITE BORDER, 6" WIDE, IS REQUIRED ALONG EACH SIDE OF THE DECORATIVE CROSSWALK, THE BORDERS ARE TO BE PARALLEL USING A PENNDOT APPROVED PAVEMENT MARKING MATERIAL AND EXTENDS FROM FACE OF CURB TO FACE OF CURB OR SHOULDER.

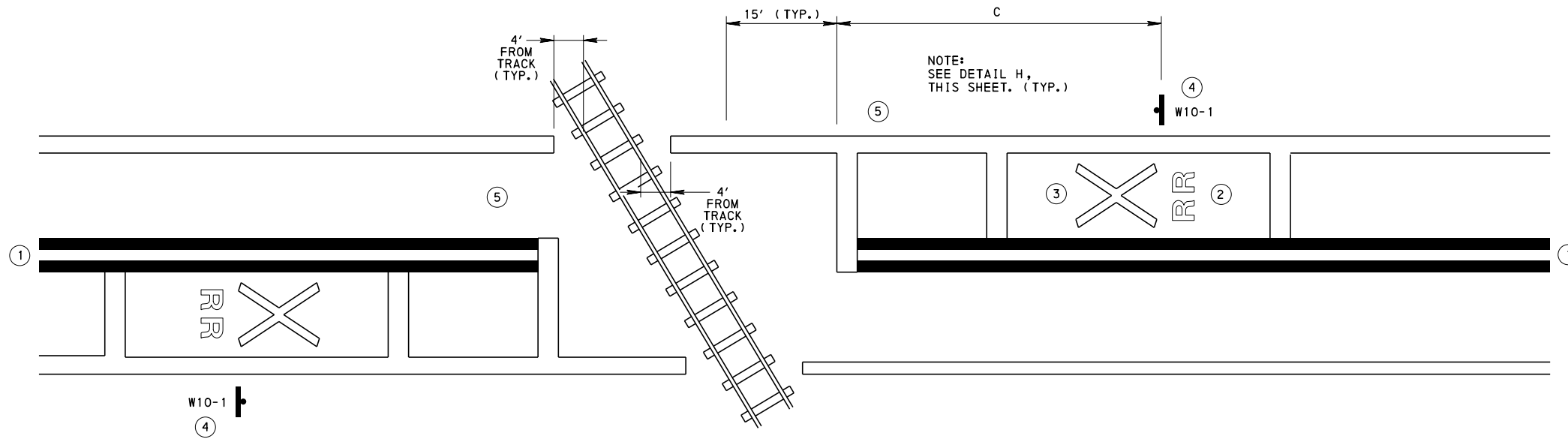
LEGEND



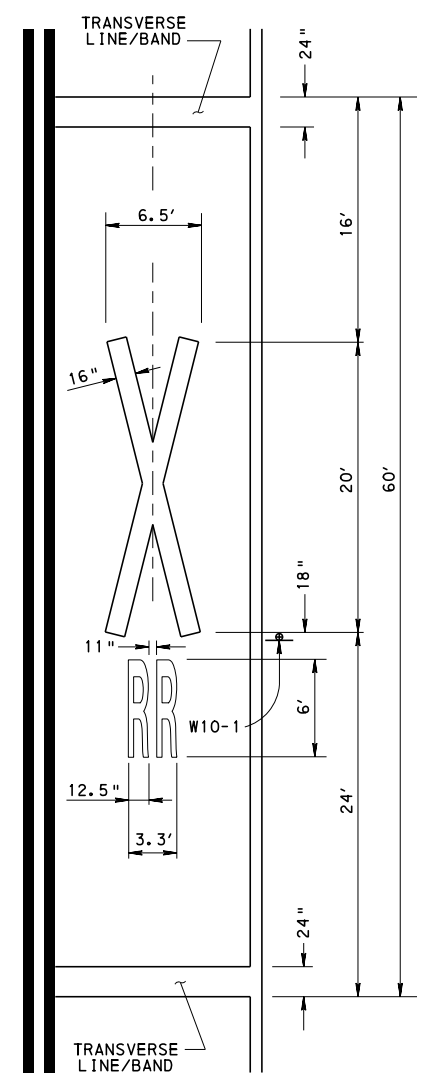
PLAN - CROSSWALK WITH DECORATIVE PATTERN

SEE DECORATIVE CROSSWALK PATTERNS. (DECORATIVE CROSSWALK PATTERN MUST BE CONTAINED WITHIN THE 6" WHITE PEDESTRIAN CROSSWALK BORDERS FORMING THE CROSSWALK)

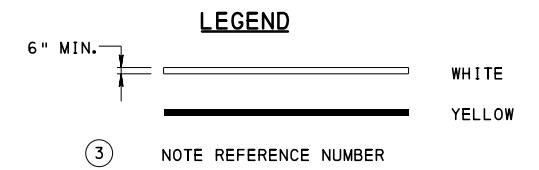
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PAVEMENT MARKINGS		
CROSSWALKS		
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RAILROAD CROSSING MARKING
 (SEE MUTCD FIG. 8B-6 AND 8B-7 FOR MORE DETAILS)



DETAIL H



SPEED LIMIT OR 85 TH PERCENTILE SPEED (MPH)	DISTANCE (FT)
35 OR LESS	300
40	350
45	400
50	450
55	500

TABLE A
SEE NOTE 1

POSTED OR 85 TH PERCENTILE SPEED (MPH)	C (FT)
20	100
25	100
30	100
35	150
40	225
45	300
50	375
55	450
60	550
65	650

LOCATION OF RAILROAD CROSSING SIGN
SEE NOTE 4

NOTES

- ON TWO-LANE, TWO-WAY HIGHWAYS, THE CENTER LINES ARE YELLOW, 4" WIDE EITHER SOLID, BROKEN OR A COMBINATION THEREOF. A SOLID BARRIER LINE SHALL PRECEDE ALL GRADE CROSSINGS BY THE MINIMUM DISTANCE NOTED IN TABLE A.
- CENTER THE RAILROAD SYMBOLS WITHIN EACH LANE ON ALL PAVED APPROACHES TO HIGHWAY-RAIL GRADE CROSSINGS. IN THOSE SITUATIONS WHERE THERE IS INADEQUATE SPACE FOR THE PAVEMENT MARKINGS OR WHERE THE INSTALLATION WOULD CREATE OPERATIONAL PROBLEMS WITH TURNING LANES OR OTHER SPECIAL CONDITIONS, PAVEMENT MARKINGS ARE NOT REQUIRED PROVIDING AN ENGINEERING STUDY INDICATES THAT OTHER TRAFFIC CONTROL DEVICES PROVIDE SUITABLE WARNING AND CONTROL.
- ON MULTI-LANE ROADS EXTEND THE TRANSVERSE LINES ACROSS ALL TRAFFIC LANES ON EACH APPROACH AND USE INDIVIDUAL SYMBOLS IN EACH APPROACH LANE.
- LOCATE A PORTION OF RAILROAD PAVEMENT MARKING SYMBOL DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN W10-1. USE DIMENSION "C" FOR PLACEMENT OF ADVANCE WARNING SIGN W10-1.
- LOCATE STOP LINES 8' FROM THE GATE (IF PRESENT), BUT NO CLOSER THAN 15' FROM THE NEAREST RAIL.

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PAVEMENT MARKINGS

RAILROAD CROSSING

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