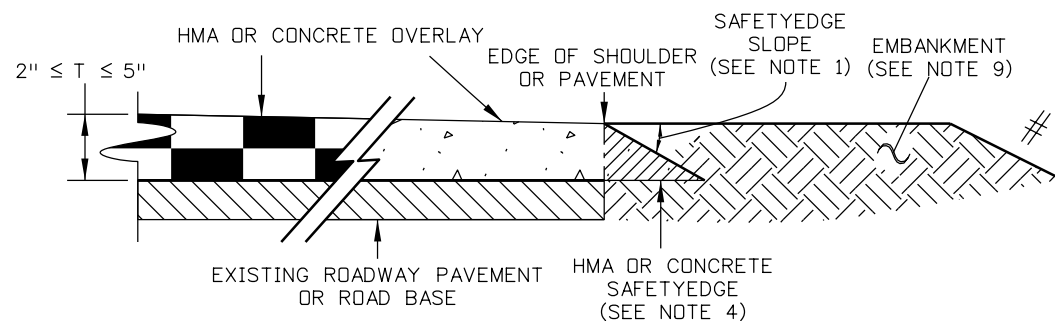
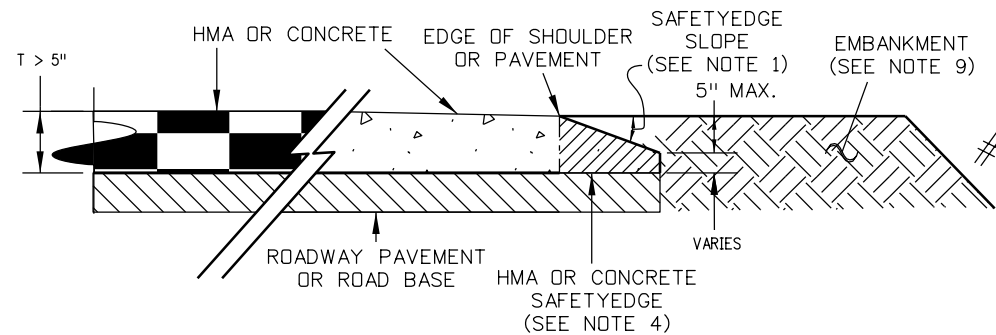


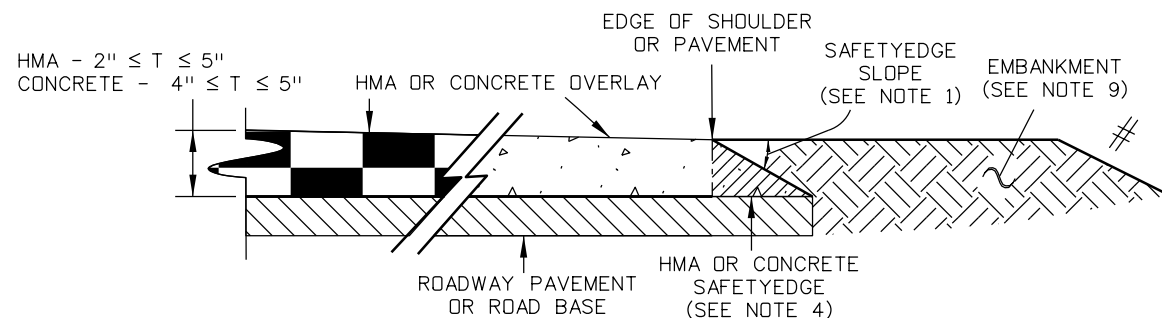
**SAFETYEDGE DETAIL FOR HOT MIX ASPHALT OR CONCRETE RESURFACING
GREATER THAN 5 INCHES**



**SAFETYEDGE DETAIL FOR HOT MIX ASPHALT OR CONCRETE RESURFACING
LESS THAN OR EQUAL TO 5 INCHES**



**SAFETYEDGE DETAIL FOR NEW CONSTRUCTION, WIDENING, AND RECONSTRUCTION
GREATER THAN 5 INCHES**



**SAFETYEDGE DETAIL FOR NEW CONSTRUCTION, WIDENING, AND RECONSTRUCTION
LESS THAN OR EQUAL TO 5 INCHES**

GENERAL NOTES

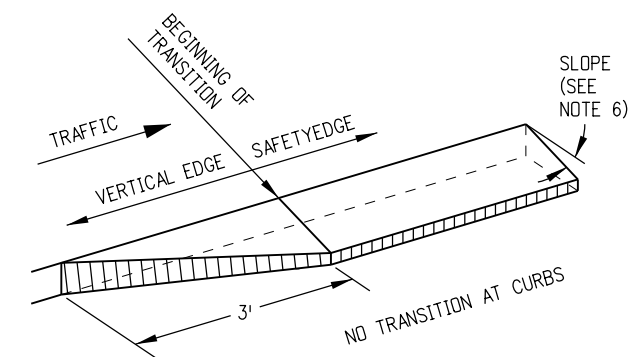
1. THE SAFETYEDGE SHALL HAVE A SLOPE OF 32°(1V:1.6H) RELATIVE TO THE PAVEMENT CROSS SLOPE WITH AN ACCEPTABLE RISE TO RUN RANGE BETWEEN 27°(1V:1.9H) AND 37°(1V:1.3H).
2. CONSTRUCTION OF THE SAFETYEDGE SHALL NOT RESULT IN A DECREASE OF PAVED SHOULDER OR LANE WIDTH FOR NEW CONSTRUCTION, WIDENING, RECONSTRUCTION, OR RESURFACING GREATER THAN 3 INCHES IN DEPTH. RESURFACING 3 INCHES OR LESS IN-DEPTH MAY RESULT IN A DECREASE IN PAVED SHOULDER OR LANE WIDTH DURING CONSTRUCTION OF THE SAFETY EDGE. SEE APPROPRIATE TYPICAL SECTIONS DETAILS IN THE PLANS.
3. THE SAFETYEDGE SHALL BE CONSTRUCTED MONOLITHICALLY WITH THE ADJACENT LANE OR SHOULDER, AND SHAPED AND COMPACTED WITH A DEVICE ATTACHED TO THE PAVER. THE DEVICE MUST PRODUCE A UNIFORM SURFACE TEXTURE WITHOUT TEARING, SHOVING, OR GOUGING, AND MUST NOT LEAVE MARKS SUCH AS RIDGES AND INDENTATIONS. THE DEVICE MUST BE CAPABLE OF TRANSITION TO CROSSROADS, DRIVEWAYS, AND OBSTRUCTIONS.
4. THE EDGE OF THE ROADWAY, WHERE THE SAFETYEDGE TREATMENT IS TO BE PLACED, MUST HAVE A SOLID BASE, FREE OF DEBRIS SUCH AS: LOOSE MATERIAL, GRASS, WEEDS, OR MUD. GRADE AREAS ON WHICH THE SAFETYEDGE IS TO BE PLACED AS REQUIRED.
5. IN AREAS THAT DO NOT REQUIRE THE SAFETYEDGE, IT IS ACCEPTABLE TO SAW CUT AND REMOVE THE SAFETYEDGE AFTER PAVING OPERATIONS ARE COMPLETED OR TO CONSTRUCT A FORMED "BOX-OUT" TO PREVENT PLACEMENT DURING PAVING.
6. IN LOCATIONS WHERE A TRANSITION FROM A SAFETYEDGE SECTION TO A NON-SAFETYEDGE SECTION EXISTS, A TRANSITION SHALL BE CONSTRUCTED TO AVOID A VERTICAL EDGE PERPENDICULAR TO TRAFFIC. TRANSITIONS SHALL BE INCLUDED IN THE COST OF THE SAFETYEDGE WORK.
7. WITH THE APPROVAL OF THE ENGINEER, IN AREAS WHERE IT IS NOT POSSIBLE TO PLACE THE SAFETYEDGE IN CONJUNCTION WITH MAINLINE PAVING OPERATIONS, SHORT SECTIONS OF HANDWORK SHALL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS.
8. SITE PREPARATION AND ADDITIONAL EARTHWORK REQUIRED TO CONSTRUCT THE SAFETYEDGE WILL BE PAID AS EQUIPMENT HOURS AND EMBANKMENT OR SHOULDER MATERIALS.
9. AFTER THE SAFETYEDGE HAS BEEN PLACED, THE SHOULDER OR EMBANKMENT MATERIAL SHALL BE GRADED BACK FLUSH WITH THE PAVED LANE OR SHOULDER FACE.
10. THE SAFETYEDGE SHALL NOT BE USED WHERE THE FORESLOPE/EMBANKMENT OR THE GROUND SURFACE HAS A STEEPER SLOPE THAN THE SLOPE OF THE SAFETYEDGE.
11. THE SAFETYEDGE SHALL BE CONSTRUCTED ALONG ALL EDGES OF ROADWAY, EXCEPT AT AREAS WITH CURB AND GUTTER, AREAS WITH GUARDRAIL IMMEDIATELY ADJACENT TO THE EDGE OF THE ROADWAY, AT THE INTERSECTION OF CROSSROADS WHERE A VERTICAL EDGE IS REQUIRED, OR AREAS NOTED IN THE PLANS.

ADDITIONAL QUANTITIES REQUIRED FOR SAFETYEDGE*

CASE	PAVEMENT THICKNESS	HMA TONS**/SIDE/LF	HMA TONS**/SIDE/MILE	CONCRETE CY/SIDE/LF	CONCRETE CY/SIDE/MILE
T ≤ 5"	2"	0.002	9.3	NA	NA
	3"	0.004	20.9	NA	NA
	4"	0.007	37.2	0.003	17.0
	5"	0.011	58.2	0.005	29.7
T > 5"	6"	0.015	81.4	0.008	41.6
	7"	0.020	104.7	0.010	53.5
	8"	0.024	127.9	0.012	65.4
	9"	0.029	151.2	0.015	77.2
	10"	0.033	174.5	0.017	89.1
	11"	0.037	197.7	0.019	101.0
	12"	0.042	221.0	0.021	112.9
	13"	0.046	244.2	0.024	124.8
	14"	0.051	267.5	0.026	136.7
	15"	0.055	290.8	0.028	148.5
	16"	0.059	314.0	0.030	160.4

* FOR INFORMATION ONLY. ** ASSUME HMA DENSITY IS EQUAL TO 145 LBS PER CUBIC FOOT.

T - TOTAL THICKNESS OF PAVEMENT
 # - SEE APPROPRIATE TYPICAL SECTION DETAIL IN PLANS FOR ROADSIDE DETAILS
 SAFETY EDGE



**TRANSITION DETAIL
FOR CONCRETE ONLY**

Computer File Information		Sheet Revisions		Colorado Department of Transportation		SAFETYEDGE FOR PAVEMENT	STANDARD PLAN NO.	
Creation Date: 07/31/19		Date:	Comments	2829 West Howard Place CDDT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868	M-400-1		Standard Sheet No. 1 of 1	
Designer Initials: DLK	(R-X)	12/12/24	New M Standard Plan Sheet.				Project Sheet Number:	
Last Modification Date: 04/25/25	(R-X)	04/25/25	Revised the details and General Notes.	Construction Engineering Services		DLK	Issued by the Project Development Branch: July 31, 2019	
Detailer Initials: LTA	(R-X)							
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)							