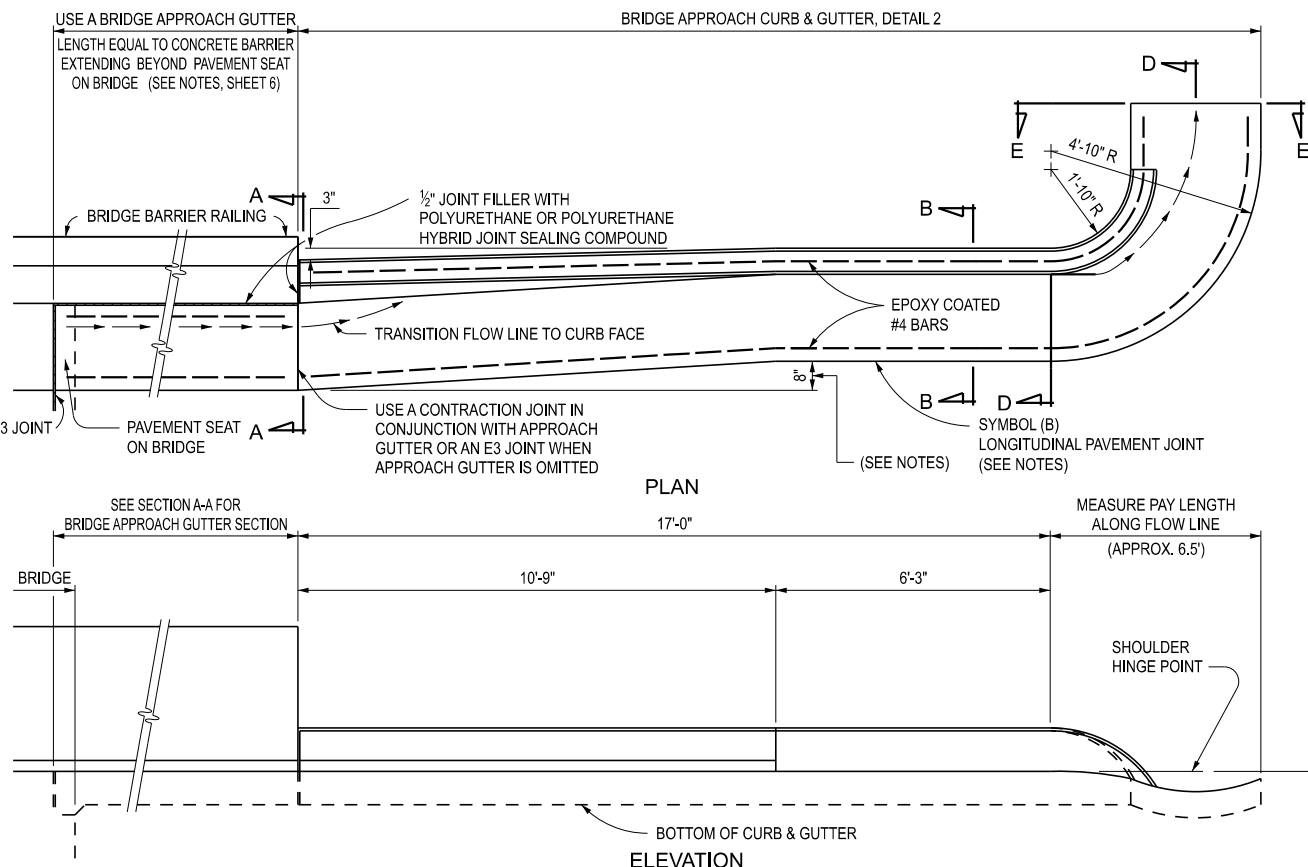
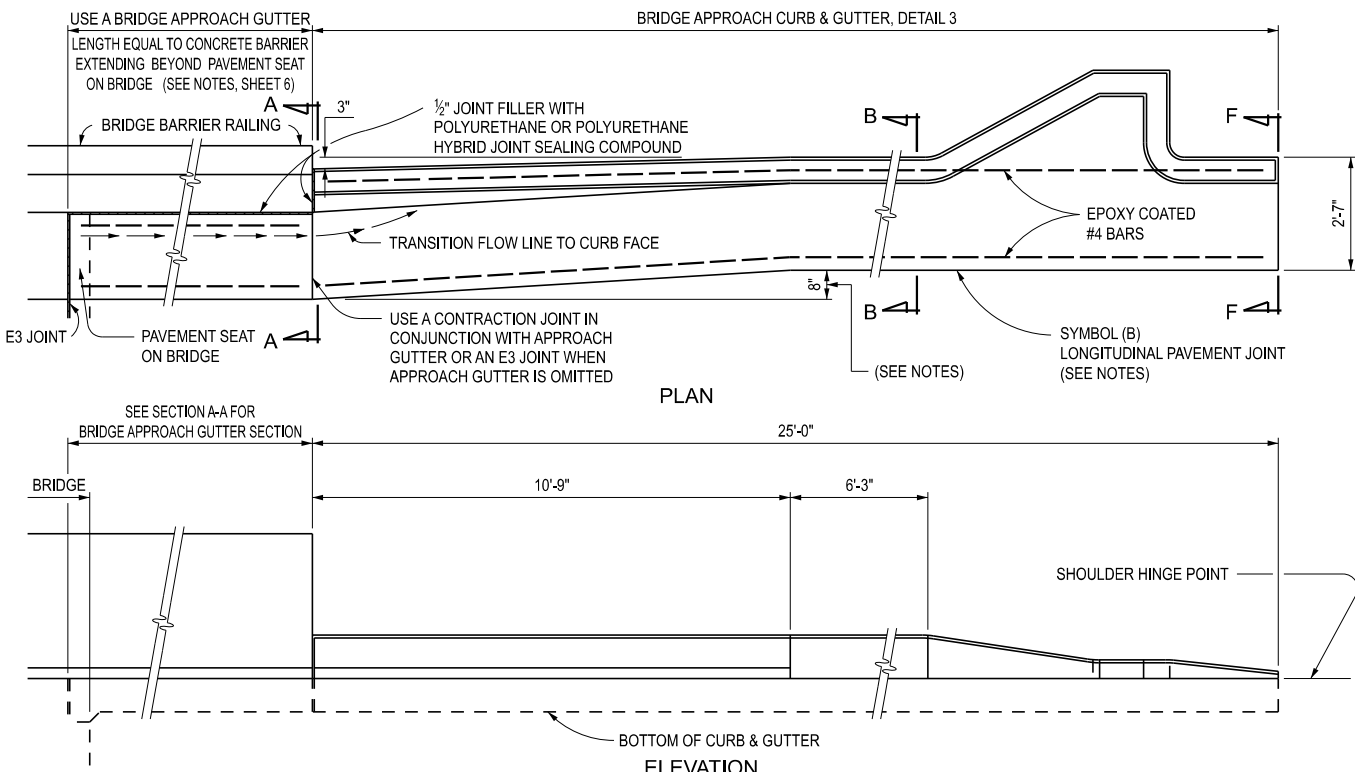


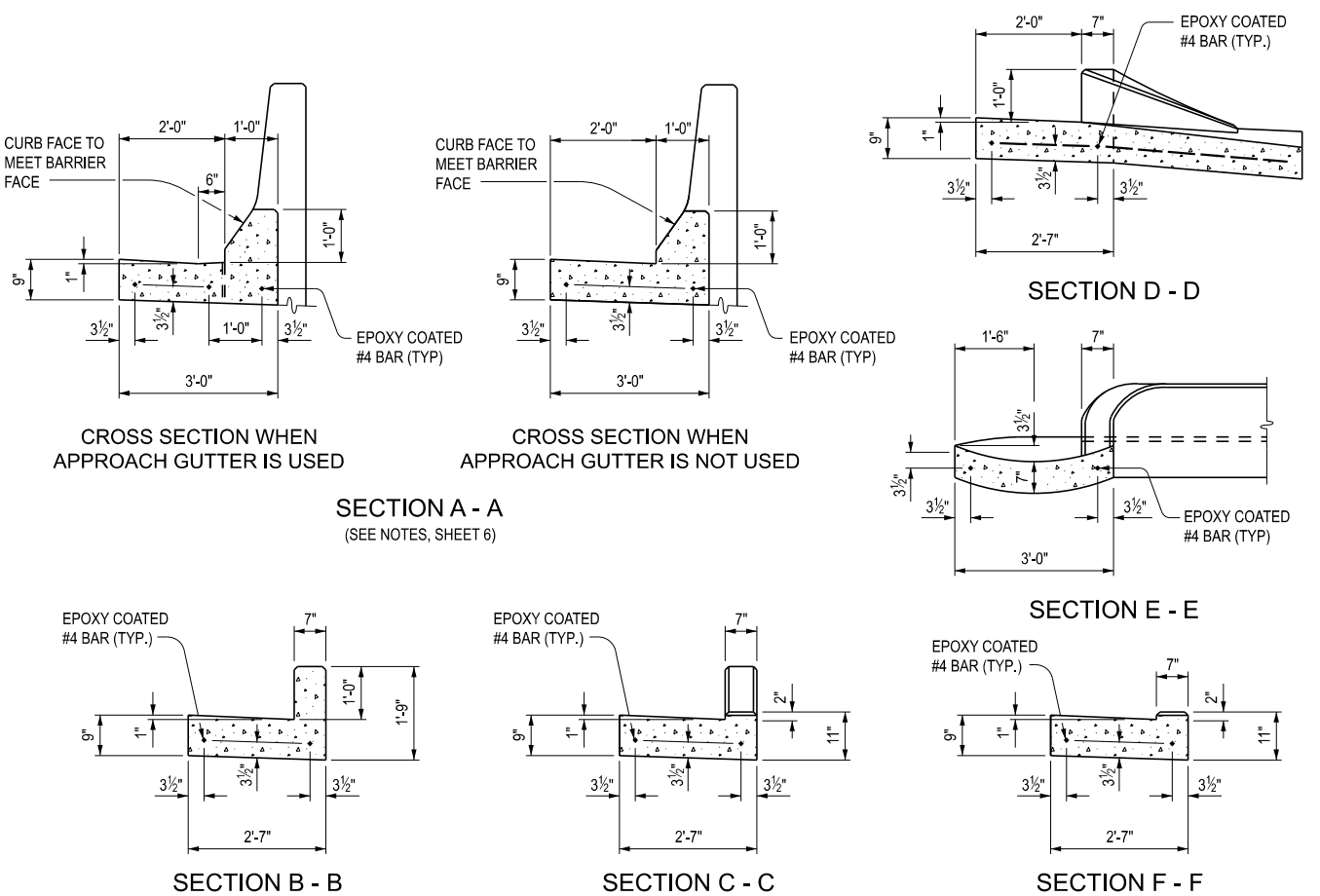
BRIDGE APPROACH CURB & GUTTER, DETAIL 1



BRIDGE APPROACH CURB & GUTTER, DETAIL 2



BRIDGE APPROACH CURB & GUTTER, DETAIL 3



APPROVED BY: _____
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: _____
DIRECTOR, BUREAU OF DEVELOPMENT



DEPARTMENT DIRECTOR
BRADLEY C. WIEFERICH, PE

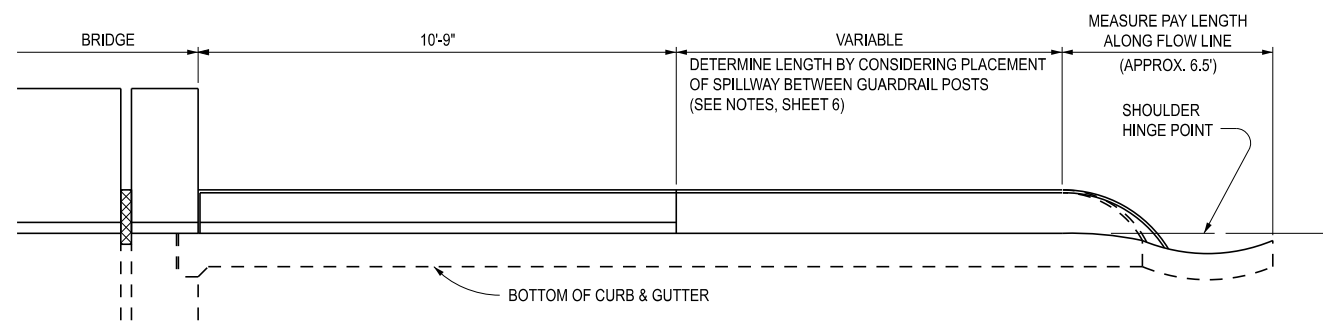
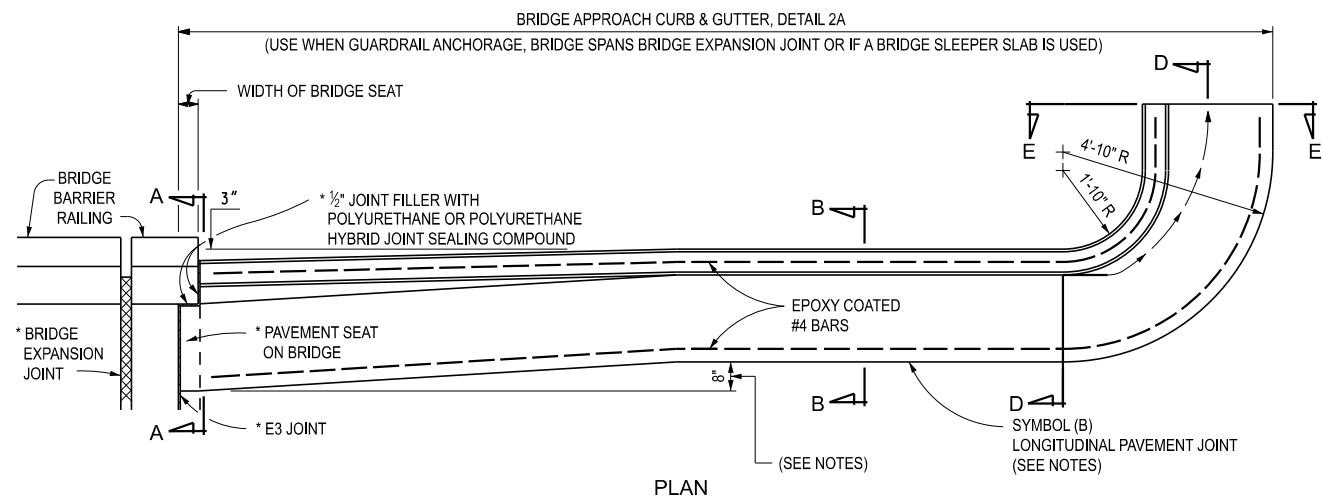
SPECIAL DETAIL FOR APPROACH CURB & GUTTER DOWNSPOUTS (FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)				
(SPECIAL DETAIL)	12/05/2025	R-32-SD	SHEET	
FHWA APPROVAL	PLAN DATE		1 OF 6	



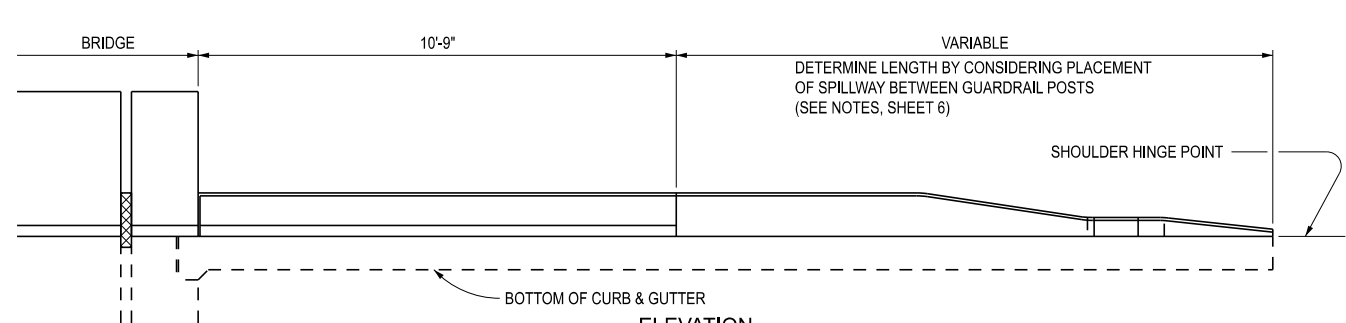
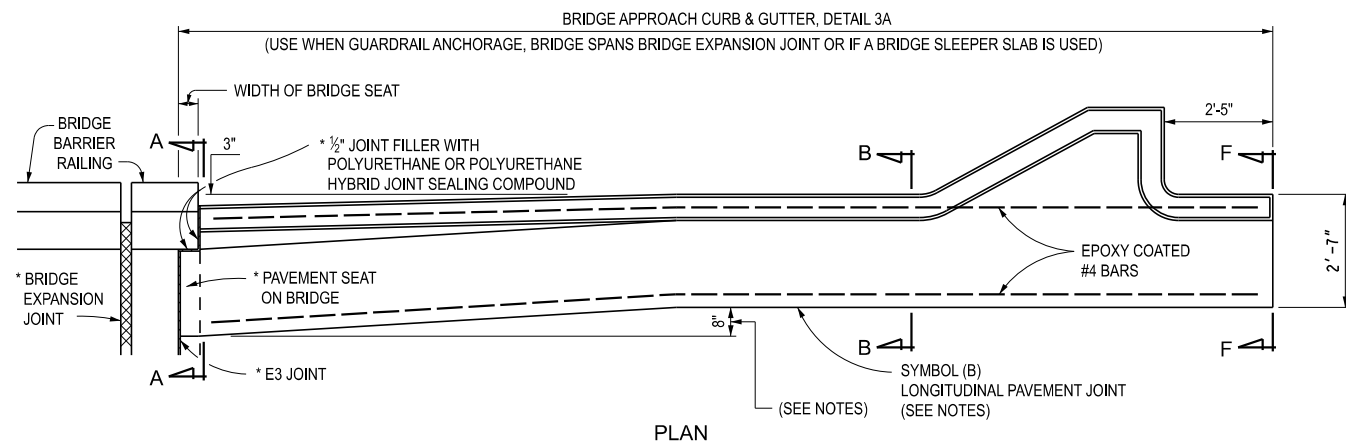
DEPARTMENT DIRECTOR
BRADLEY C. WIEFERICH, PE

SPECIAL DETAIL FOR APPROACH CURB & GUTTER DOWNSPOUTS (FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)				
(SPECIAL DETAIL)	12/05/2025	R-32-SD	SHEET	
FHWA APPROVAL	PLAN DATE		2 OF 6	

SECT




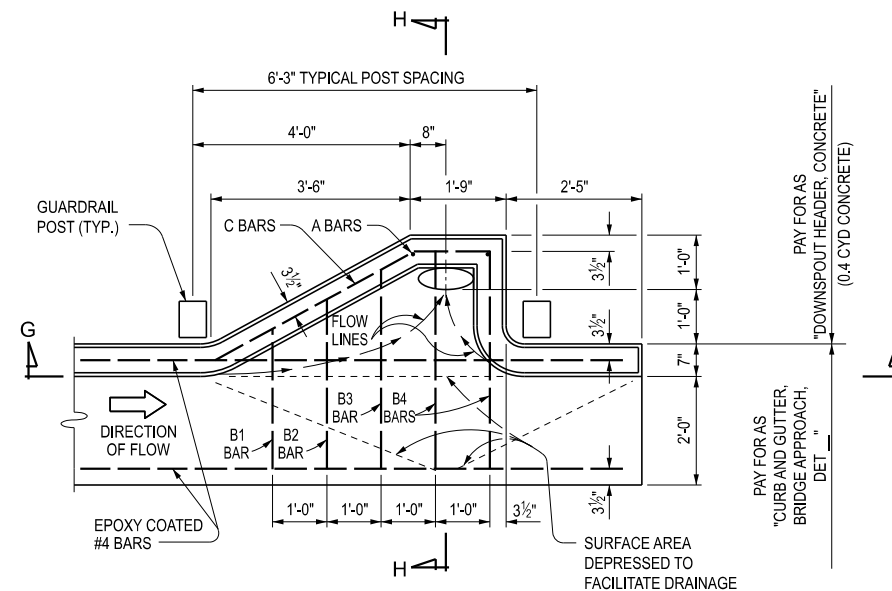
ELEVATION
BRIDGE APPROACH CURB & GUTTER, DETAIL 2A



ELEVATION
BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

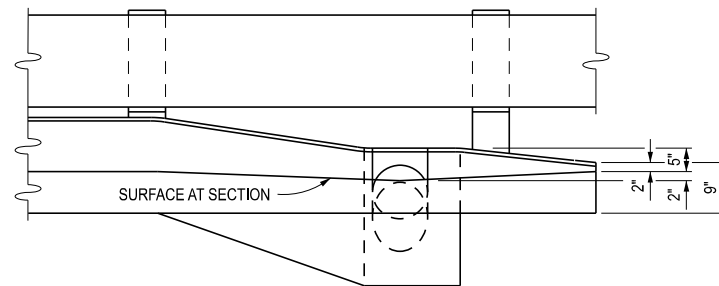
* DO NOT USE 1/2" EXPANSION JOINT, E3 JOINT, AND PAVEMENT SEAT WHEN A BRIDGE SLEEPER SLAB IS USED

 Michigan Department of Transportation	SPECIAL DETAIL FOR APPROACH CURB & GUTTER DOWNSPOUTS (FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)			
	FHWA APPROVAL	12/05/2025 PLAN DATE	R-32-SD	SHEET 3 OF 6

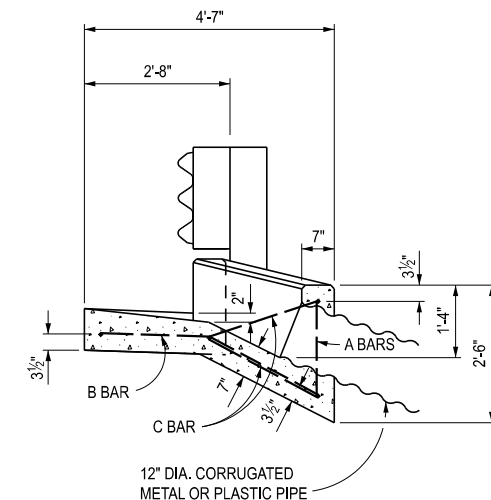


PLAN OF CONCRETE DOWNSPOUT HEADER
POUR CONCRETE FOR THE CONCRETE DOWNSPOUT HEADER (PIPE, CURB AND GUTTER, AND DOWNSPOUT HEADER) MONOLITHICALLY

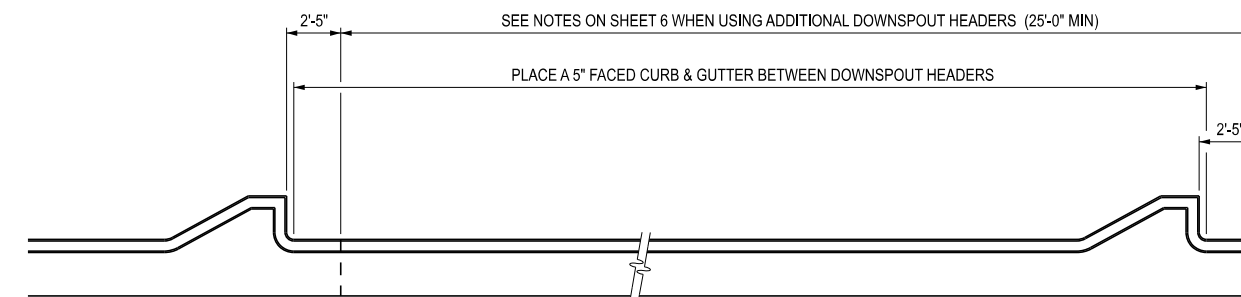
EPOXY COATED STEEL REINFORCEMENT FOR DOWNSPOUT				
BAR	DIMENSIONS		BAR SIZE	NUMBER REQUIRED
	a	b		
A			#4	2
B1	11"	5"	#4	1
B2	1'-7"	8 1/2"	#4	1
B3	2'-3"	1'-0"	#4	1
B4	2'-7"	1'-2"	#4	2
C			#4	2
TOTAL WEIGHT OF STEEL 26.7 LBS				




SECTION G - G

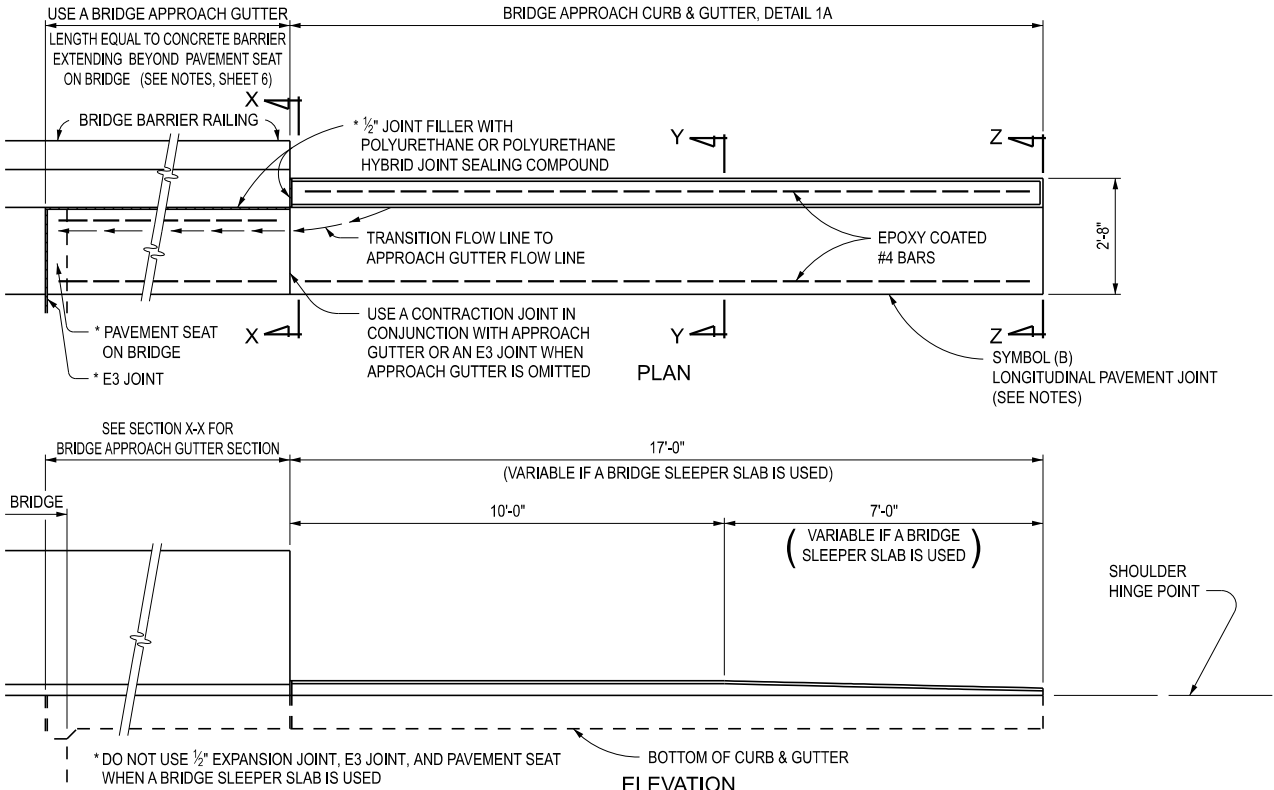


SECTION H - H

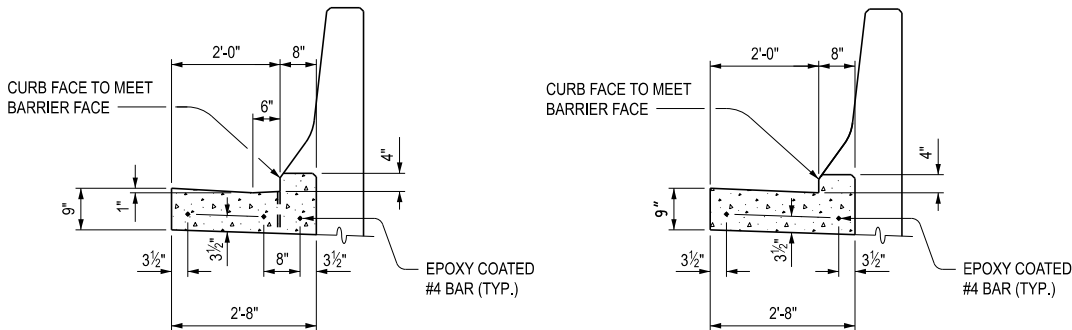


PLAN OF ADDITIONAL CONCRETE DOWNSPOUT HEADERS

 Michigan Department of Transportation	SPECIAL DETAIL FOR APPROACH CURB & GUTTER DOWNSPOUTS (FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)			
	FHWA APPROVAL	12/05/2025 PLAN DATE	R-32-SD	SHEET 4 OF 6



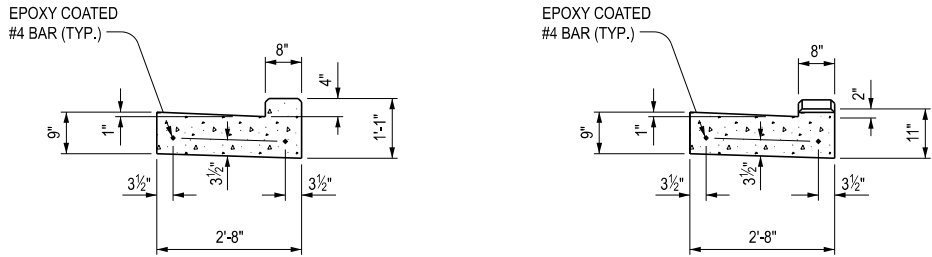
BRIDGE APPROACH CURB & GUTTER, DETAIL 1A
NOTE: USE PRIMARILY WHEN GUARDRAIL IS NOT NEEDED ON DEPARTING ENDS,
BUT CAN BE USED WITH GUARDRAIL WHEN DRAINAGE CONDITIONS ALLOW.



**CROSS SECTION WHEN
DEPARTING GUTTER IS USED**

**CROSS SECTION WHEN
DEPARTING GUTTER IS NOT USED**

SECTION X - X
(SEE NOTES, SHEET 6)



SECTION Y - Y

SECTION Z - Z

NOTES:

SEE STANDARD SPECIFICATIONS FOR MATERIALS AND WORKMANSHIP FOR CONCRETE CURB AND GUTTER.

SEE BRIDGE APPROACH PLANS FOR TYPE OF BRIDGE APPROACH CURB AND GUTTER AT SPECIFIC LOCATIONS.

SEE STANDARD PLAN R-27-SERIES FOR BRIDGE APPROACH CURB AND GUTTER USING EXISTING CATCH BASIN.

INCLUDE THE LENGTH OF BRIDGE APPROACH GUTTER (USED WHEN THE BRIDGE BARRIER RAILING EXTENDS BEYOND PAVEMENT SEAT ON BRIDGE) IN THE PAY ITEM "CURB AND GUTTER, BRIDGE APPROACH, DET ____". OMIT BRIDGE APPROACH GUTTER WHEN CONCRETE BARRIER ENDS AT PAVEMENT SEAT ON BRIDGE OR AT A SLEEPER SLAB. (SEE SECTION A-A)

ALIGN THE CURB AND GUTTER WITH THE BEAM GUARDRAIL AS SPECIFIED ON STANDARD PLAN R-67-SERIES. DETERMINE THE LOCATION OF GUARDRAIL POSTS PRIOR TO LOCATING THE SPILLWAY OR DOWNSPOUT HEADER.

SURFACE THE AREA BETWEEN THE EDGE OF THE PAVEMENT AND THE GUTTER WITH THE SAME MATERIAL AS THE SHOULDERS, EXCEPT IN THE CASE OF AGGREGATE SHOULDERS, WHERE A BITUMINOUS TREATMENT IS REQUIRED.

INCLUDE ALL REQUIRED EXPANSION JOINTS IN THE PAY ITEM FOR BRIDGE APPROACH CURB AND GUTTER.

SEE STANDARD PLAN R-30-SERIES FOR JOINT DETAILS.

CHAMFER ALL EXPOSED EDGES $\frac{3}{4}$ ".


USE THE CONCRETE DOWNSPOUT HEADER IN CONJUNCTION WITH BRIDGE APPROACH CURB AND GUTTER, DETAILS 7A AND 7A.

PAY FOR CORRUGATED PIPE SEPARATELY.

WHEN THE DRAINAGE AREA REQUIRES ADDITIONAL CONCRETE DOWNSPOUT HEADERS, SPACE THE SECOND AND/OR ADDITIONAL DOWNSPOUT HEADERS ACCORDING TO THEIR INDIVIDUAL DRAINAGE AREAS. LOCATE ADDITIONAL DOWNSPOUT HEADERS BETWEEN GUARDRAIL POSTS AS SPECIFIED ON THE PLAN OF CONCRETE DOWNSPOUT HEADER.

PLACE A SYMBOL (B) JOINT BETWEEN CURB OR CURB AND GUTTER AND ADJACENT CONCRETE PAVEMENT AS SPECIFIED ON STANDARD PLAN R-41-SERIES.

THE 8" ALIGNMENT OFFSET IS REQUIRED FOR GUTTER PAN AND CURB FACE FOR BRIDGE RAILING, TYPE 4 OR TYPE 5 ONLY. OTHERWISE, ALIGN THE APPROACH CURB AND GUTTER WITH THE BARRIER FACE, BRUSH BLOCK, OR SIDEWALK CURB.

 Michigan Department of Transportation	SPECIAL DETAIL FOR APPROACH CURB & GUTTER DOWNSPOUTS (FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)			
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		PLAN DATE		

 Michigan Department of Transportation	SPECIAL DETAIL FOR APPROACH CURB & GUTTER DOWNSPOUTS (FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)			
	FHWA APPROVAL	12/05/2025	R-32-SD	SHEET 6 OF 6
		PLAN DATE		

SECT