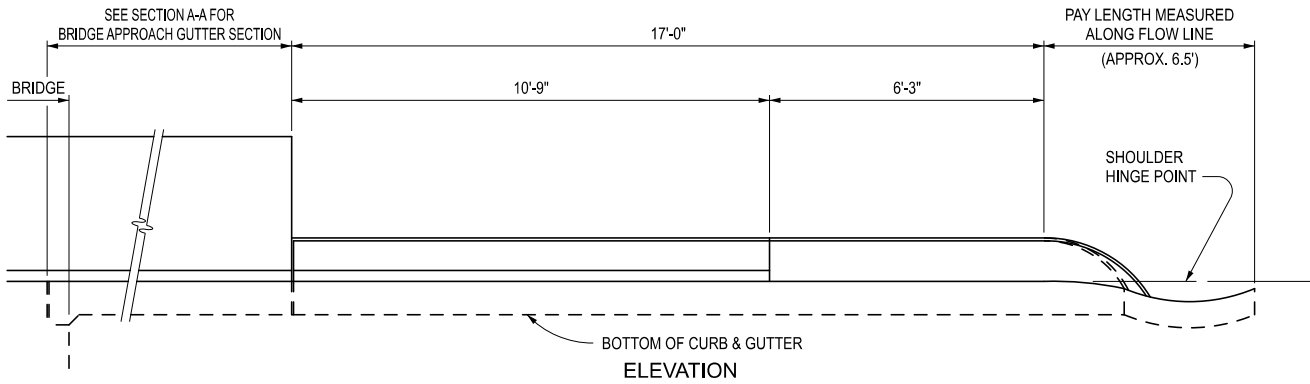
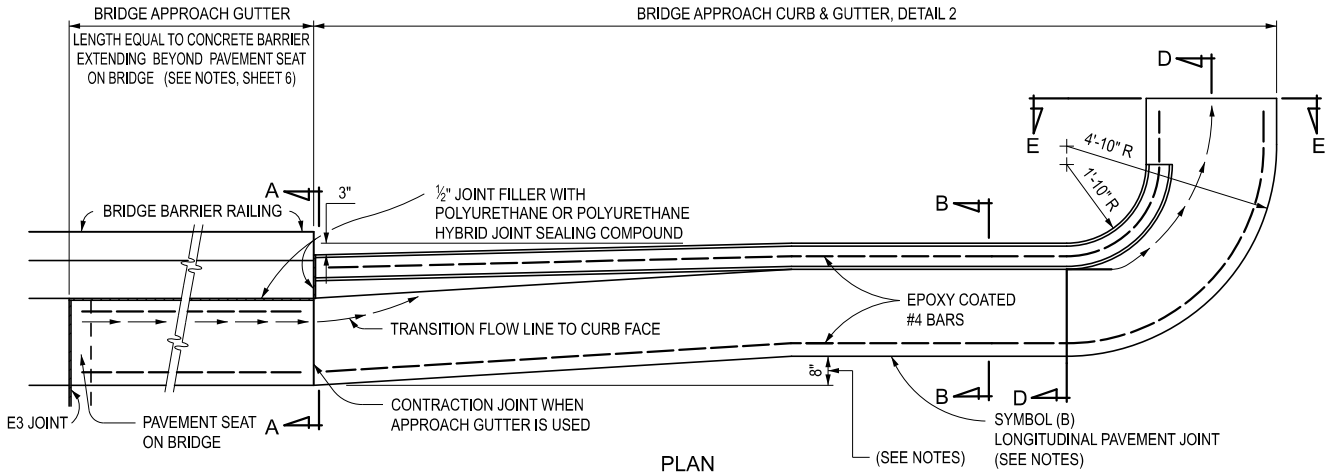


BRIDGE APPROACH CURB & GUTTER, DETAIL 1



BRIDGE APPROACH CURB & GUTTER, DETAIL 2

APPROVED BY: _____
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: _____
DIRECTOR, BUREAU OF DEVELOPMENT



DEPARTMENT DIRECTOR
BRADLEY C. WIEFERICH, PE

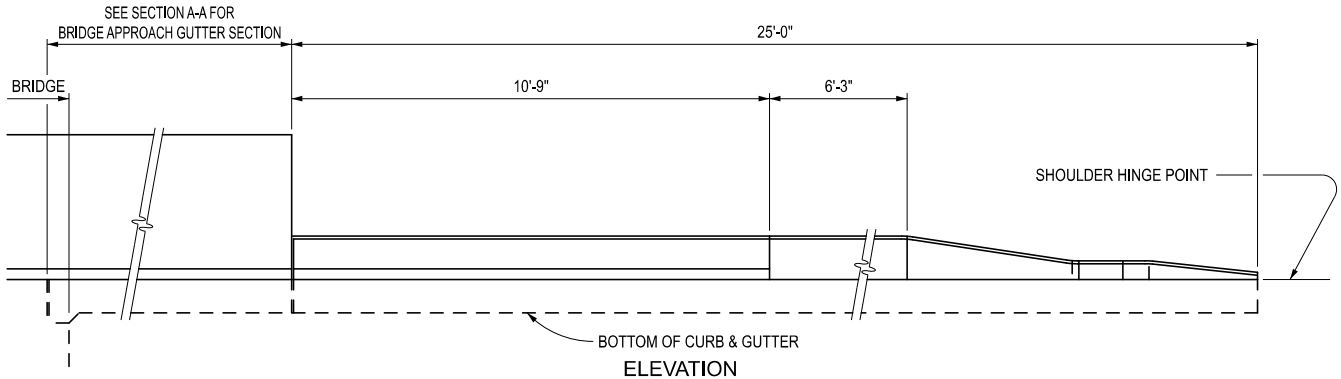
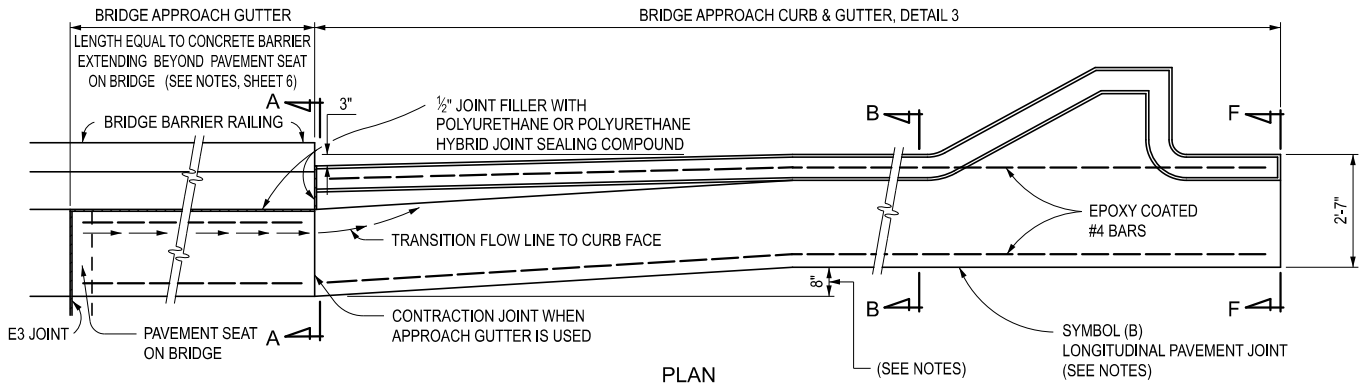
SPECIAL DETAIL FOR
APPROACH CURB & GUTTER DOWNSPOUTS
(FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)

(SPECIAL DETAIL)
FHWA APPROVAL

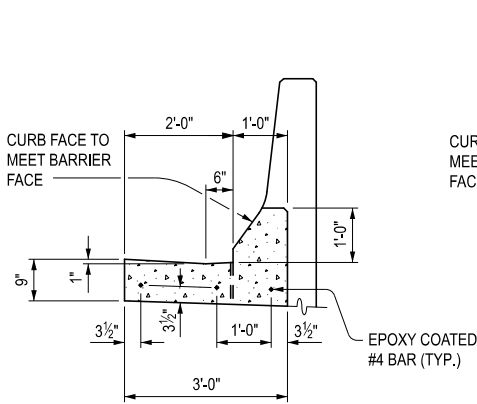
04/24/2023
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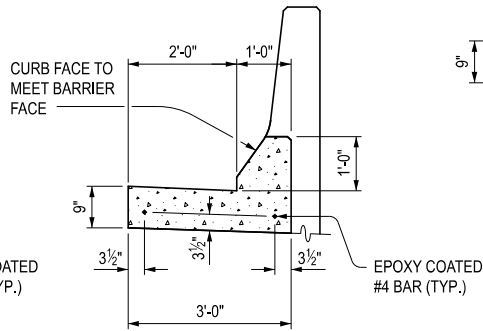
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BRIDGE APPROACH CURB & GUTTER, DETAIL 3

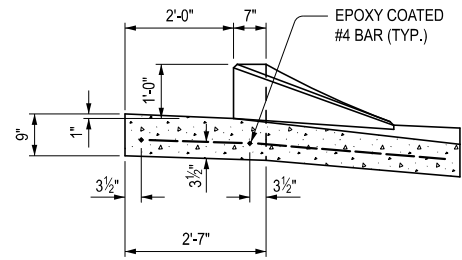


CROSS SECTION WHEN APPROACH GUTTER IS USED

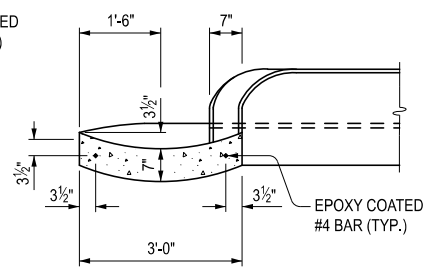


CROSS SECTION WHEN APPROACH GUTTER IS NOT USED

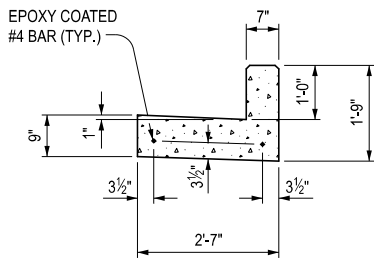
SECTION A - A
(SEE NOTES, SHEET 6)



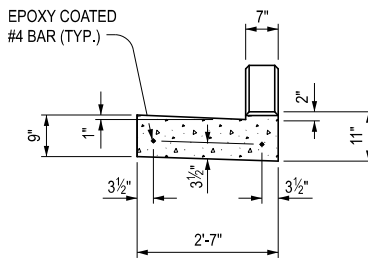
SECTION D - D



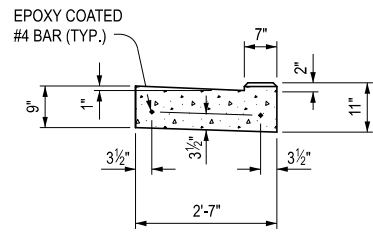
SECTION E - E



SECTION B - B



SECTION C - C



SECTION F - F



DEPARTMENT DIRECTOR
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SPECIAL DETAIL FOR
APPROACH CURB & GUTTER DOWNSPOUTS
(FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)

(SPECIAL DETAIL)
FHWA APPROVAL

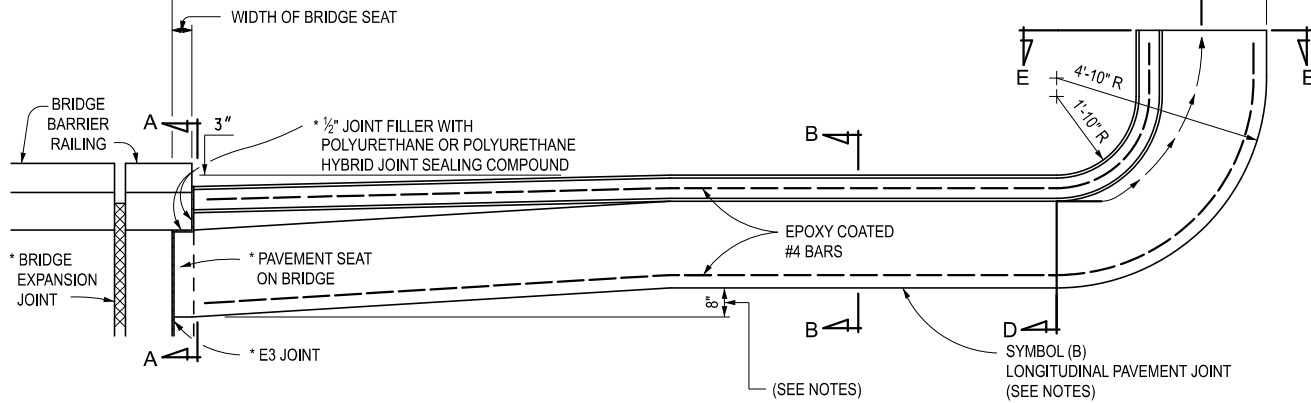
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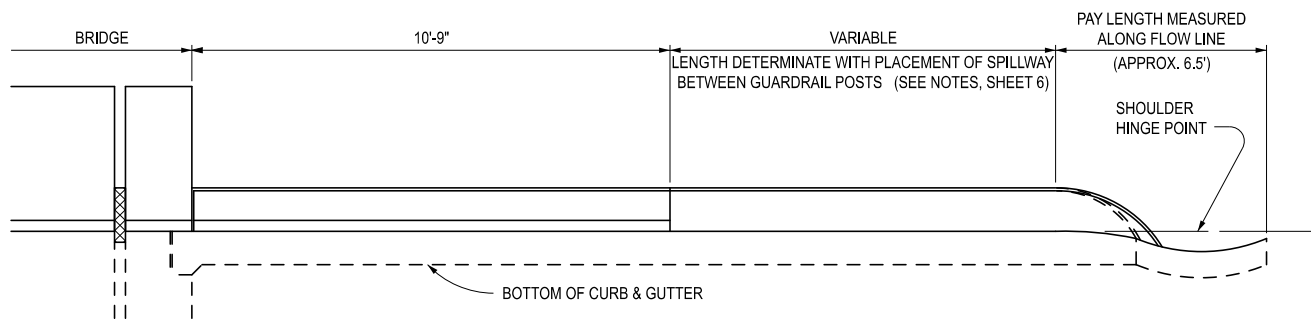
SHEET
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BRIDGE APPROACH CURB & GUTTER, DETAIL 2A

(USED WHEN GUARDRAIL ANCHORAGE, BRIDGE SPANS BRIDGE EXPANSION JOINT OR IF A BRIDGE SLEEPER SLAB IS USED)



PLAN

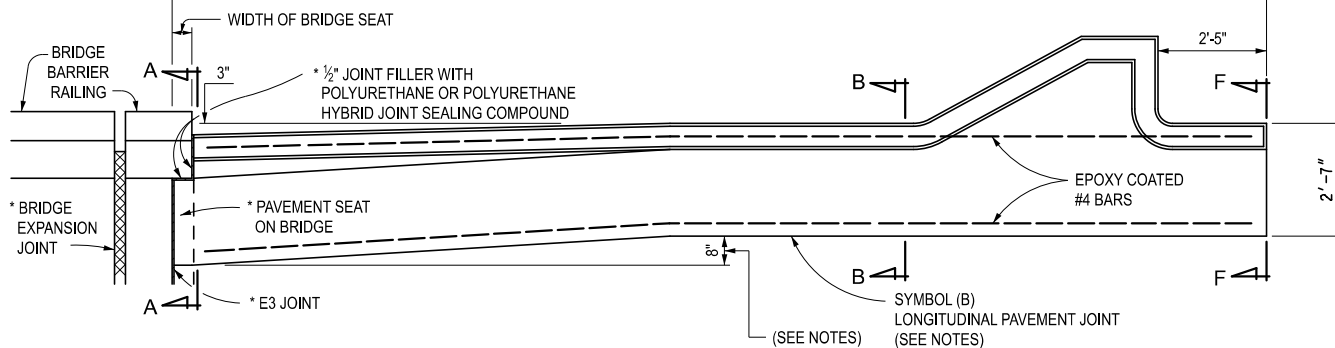


ELEVATION

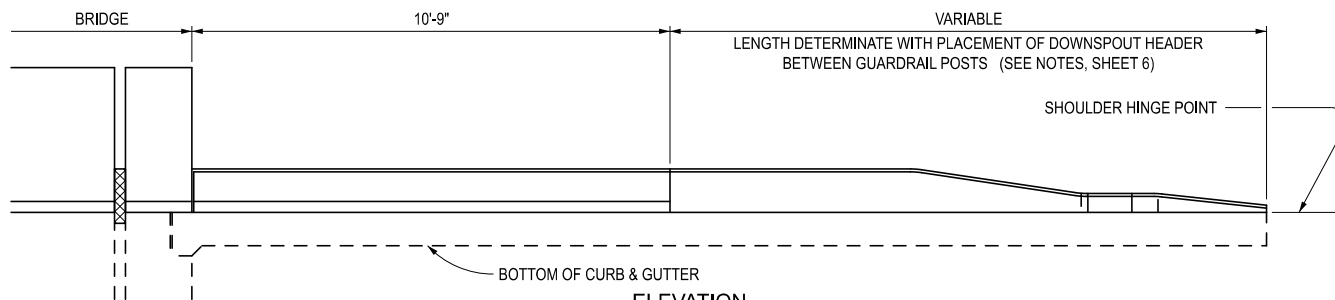
BRIDGE APPROACH CURB & GUTTER, DETAIL 2A

BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

(USED WHEN GUARDRAIL ANCHORAGE, BRIDGE SPANS BRIDGE EXPANSION JOINT OR IF A BRIDGE SLEEPER SLAB IS USED)



PLAN

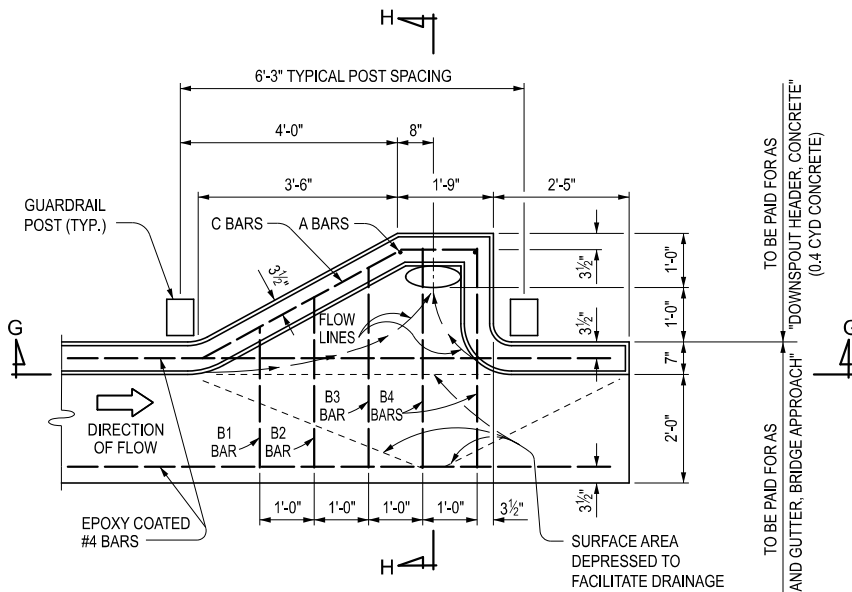


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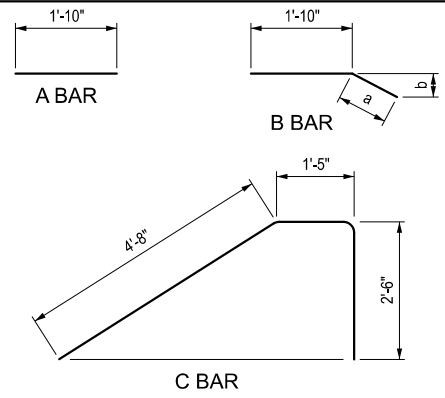
BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

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

<p>DEPARTMENT DIRECTOR BRADLEY C. WIEFERICH, PE</p>	SPECIAL DETAIL FOR APPROACH CURB & GUTTER DOWNSPOUTS (FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)			SHEET 3 OF 6
	(SPECIAL DETAIL) FHWA APPROVAL	04/24/2023 PLAN DATE	R-32-SD	

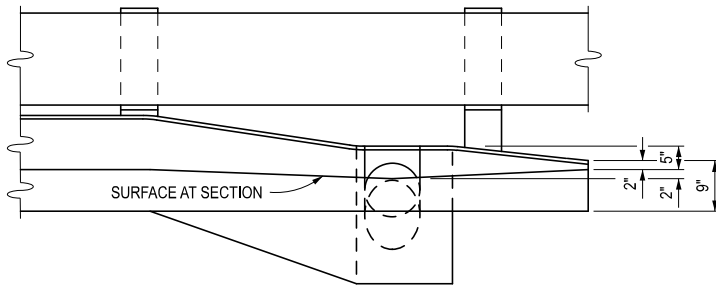


PLAN OF CONCRETE DOWNSPOUT HEADER

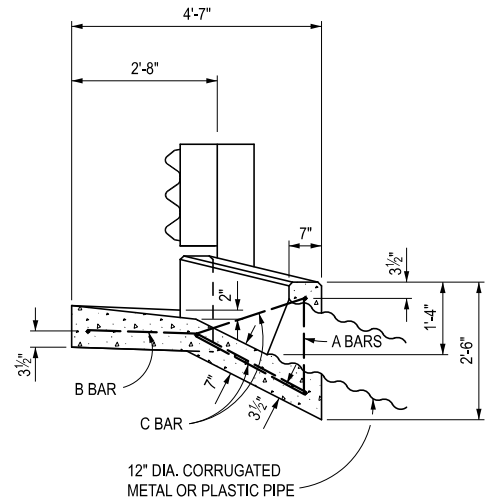


NOTE: ALL BARS ARE EPOXY COATED

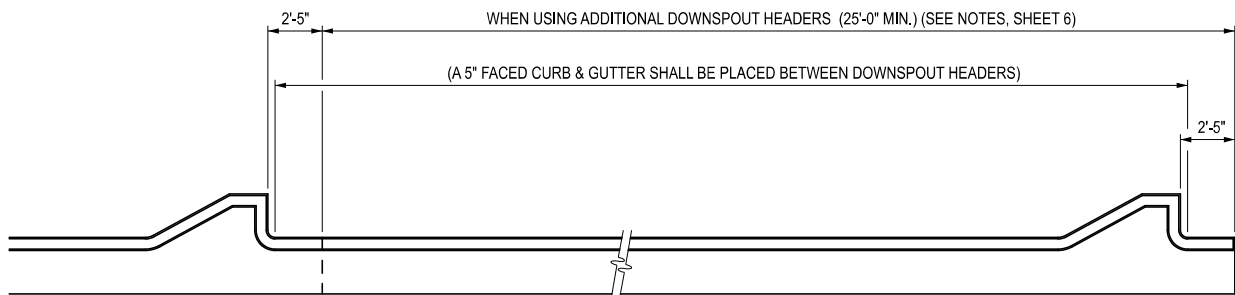
DOWNSPOUT STEEL REINFORCEMENT					
BAR	DIMENSIONS		BAR SIZE	NUMBER REQUIRED	TOTAL LENGTH
	a	b			
A			#4	2	3'-8"
B1	11"	5"	#4	1	2'-9"
B2	1'-7"	8 1/2"	#4	1	3'-5"
B3	2'-3"	1'-0"	#4	1	4'-1"
B4	2'-7"	1'-2"	#4	2	8'-10"
C			#4	2	17'-2"
TOTAL WEIGHT OF STEEL 26.7 LBS					



DETAIL SHOWS RELATIONSHIP OF GUARDRAIL WITH DOWNSPOUT HEADER
SECTION G - G



SECTION H - H



PLAN OF ADDITIONAL CONCRETE DOWNSPOUT HEADERS



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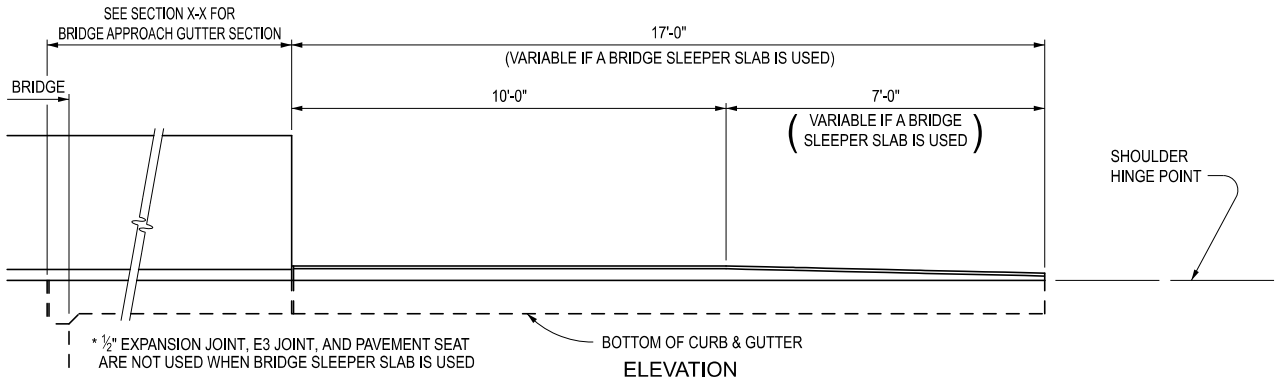
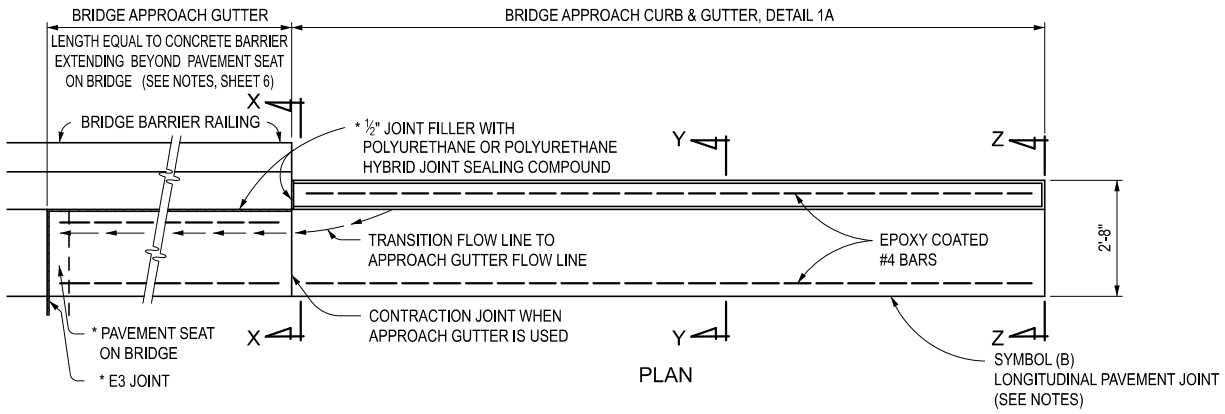
SPECIAL DETAIL FOR
APPROACH CURB & GUTTER DOWNSPOUTS
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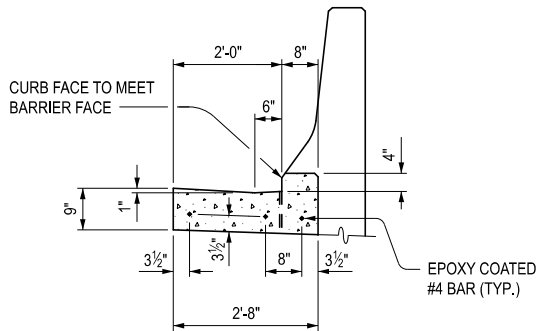
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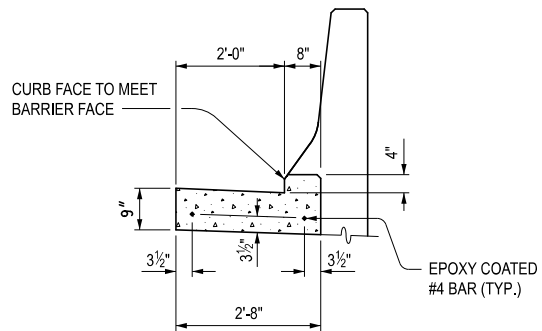


BRIDGE APPROACH CURB & GUTTER, DETAIL 1A

NOTE: FOR USE PRIMARILY WHEN GUARDRAIL IS NOT NEEDED ON DEPARTING ENDS, BUT CAN BE USED WITH GUARDRAIL WHEN DRAINAGE CONDITIONS ALLOW.

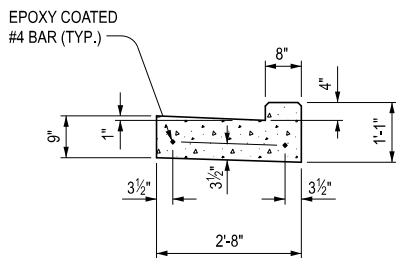


CROSS SECTION WHEN DEPARTING GUTTER IS USED

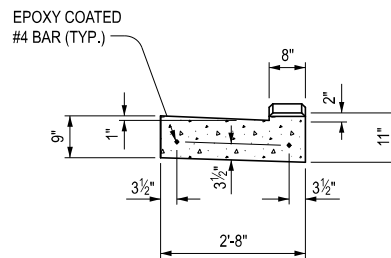


CROSS SECTION WHEN DEPARTING GUTTER IS NOT USED

SECTION X - X
(SEE NOTES, SHEET 6)



SECTION Y - Y



SECTION Z - Z



DEPARTMENT DIRECTOR
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SPECIAL DETAIL FOR
APPROACH CURB & GUTTER DOWNSPOUTS
(FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)

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NOTES:

ALL MATERIALS AND WORKMANSHIP SHALL BE ACCORDING TO THE STANDARD SPECIFICATIONS FOR CONSTRUCTION FOR CONCRETE CURB AND GUTTER.

FOR TYPE OF BRIDGE APPROACH CURB AND GUTTER TO USE AT A SPECIFIC LOCATION, SEE BRIDGE APPROACH PLANS.

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

THE LENGTH OF BRIDGE APPROACH GUTTER (USED WHEN THE BRIDGE BARRIER RAILING EXTENDS BEYOND PAVEMENT SEAT ON BRIDGE) SHALL BE INCLUDED IN THE PAY ITEM "CURB AND GUTTER, BRIDGE APPROACH, DET __". OMIT BRIDGE APPROACH GUTTER WHEN CONCRETE BARRIER ENDS AT PAVEMENT SEAT ON BRIDGE. (SEE SECTION A-A)

THE CURB AND GUTTER SHALL BE ALIGNED WITH THE BEAM GUARDRAIL AS SPECIFIED ON STANDARD PLAN R-67-SERIES. THE LOCATION OF GUARDRAIL POSTS SHOULD BE DETERMINED PRIOR TO LOCATING THE SPILLWAY OR DOWNSPOUT HEADER.

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

ALL EXPANSION JOINTS REQUIRED WILL BE INCLUDED IN THE PAY ITEM FOR BRIDGE APPROACH CURB AND GUTTER.

JOINTS SHALL BE AS SPECIFIED ON STANDARD PLAN R-30-SERIES.

ALL EXPOSED EDGES SHALL BE CHAMFERED $\frac{3}{4}$ ".

THE CONCRETE DOWNSPOUT HEADER SHALL BE USED IN CONJUNCTION WITH BRIDGE APPROACH CURB AND GUTTER, DETAILS 3 AND 3A.

CORRUGATED PIPE WILL BE PAID FOR SEPARATELY.

WHEN THE DRAINAGE AREA REQUIRES ADDITIONAL CONCRETE DOWNSPOUT HEADERS, SPACING OF THE SECOND AND/OR ADDITIONAL DOWNSPOUT HEADERS SHOULD BE DETERMINED ACCORDING TO THEIR INDIVIDUAL DRAINAGE AREAS. ADDITIONAL DOWNSPOUT HEADERS ARE TO BE LOCATED BETWEEN GUARDRAIL POSTS AS SPECIFIED ON THE PLAN OF CONCRETE DOWNSPOUT HEADER.

A SYMBOL (B) JOINT SHALL BE PLACED 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.



DEPARTMENT DIRECTOR
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SPECIAL DETAIL FOR
APPROACH CURB & GUTTER DOWNSPOUTS
(FOR SAFETY SHAPE BRIDGE BARRIERS & RAILINGS)

(SPECIAL DETAIL)
FHWA APPROVAL

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