

BRIDGE APPROACH CURB & GUTTER, DETAIL 5

NOTE: USE WITH GUARDRAIL ANCHORAGE, BRIDGE, DETAIL M- AND THE REQUIRED NUMBER OF DRAINAGE STRUCTURES BASED ON A HYDROLOGICAL ANALYSIS OF THE AREA AND THE SIZE OF THE BRIDGE DECK. USE ALSO ON DEPARTING ENDS WITH OR WITHOUT GUARDRAIL.

APPROVED BY: _____
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: _____
DIRECTOR, BUREAU OF DEVELOPMENT



DEPARTMENT DIRECTOR
BRADLEY C. WIEFERICH, PE

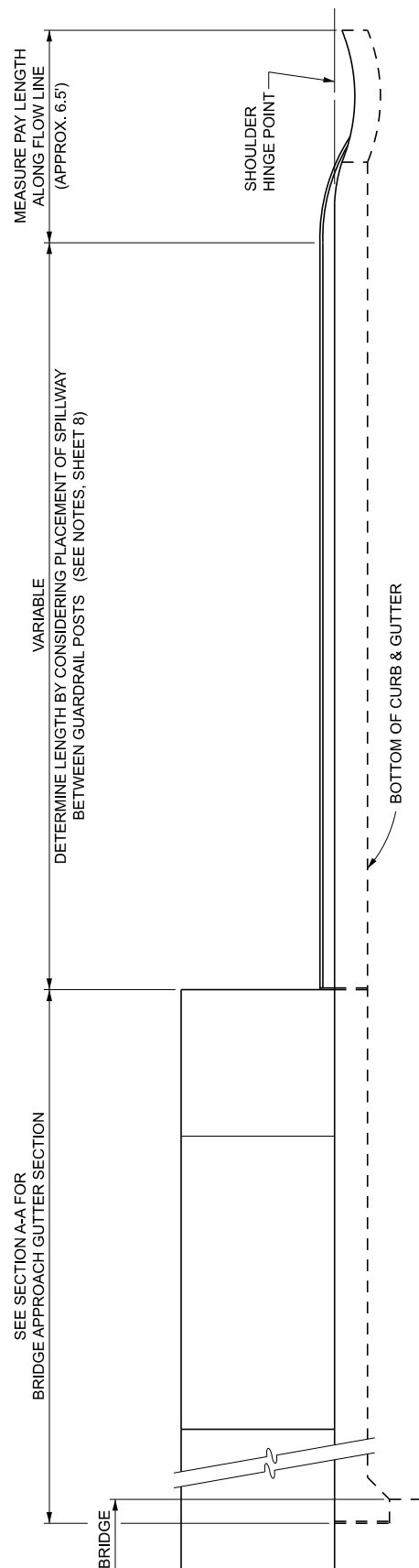
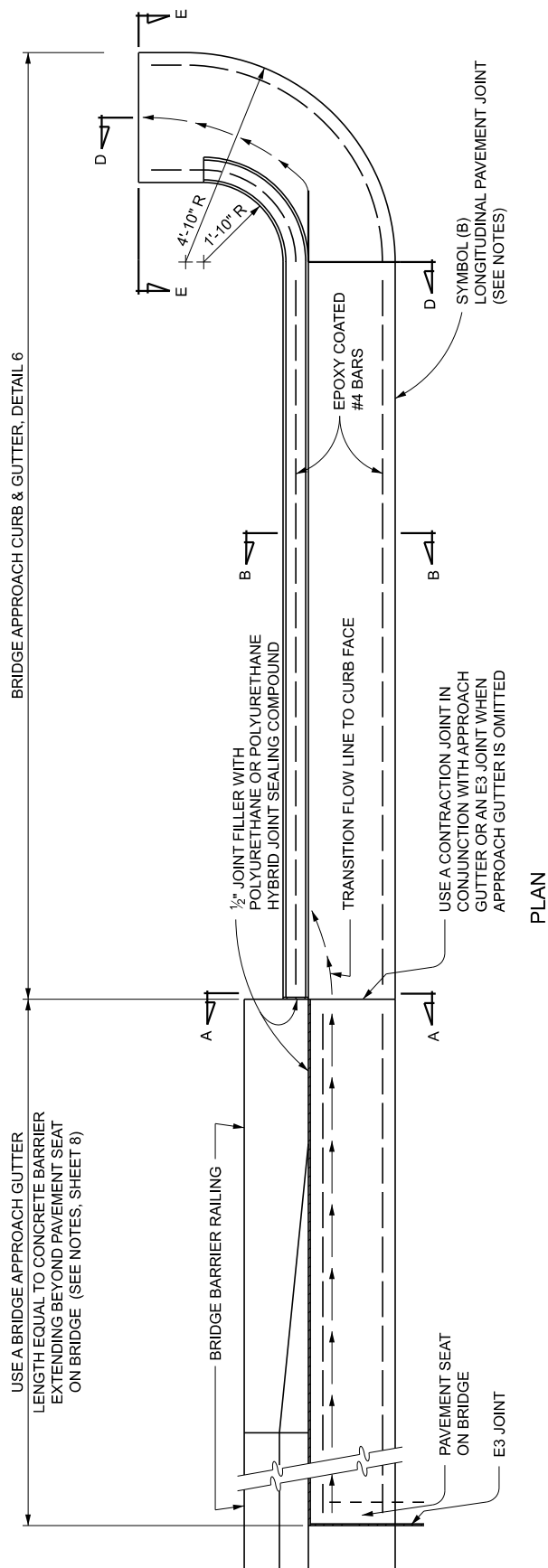
STANDARD PLAN FOR
APPROACH CURB & GUTTER DOWNSPOUTS
(FOR BRIDGE BARRIER ON RURAL HIGHWAYS)

FHWA APPROVAL

12/05/2025
PLAN DATE

R-32-F

SHEET
1 OF 8



BRIDGE APPROACH CURB & GUTTER, DETAIL 6

NOTE: USE WITH GUARDRAIL ANCHORAGE, BRIDGE, DETAIL M- AND THE REQUIRED NUMBER OF DRAINAGE STRUCTURES BASED ON A HYDROLOGICAL ANALYSIS OF THE AREA AND THE SIZE OF THE BRIDGE DECK.



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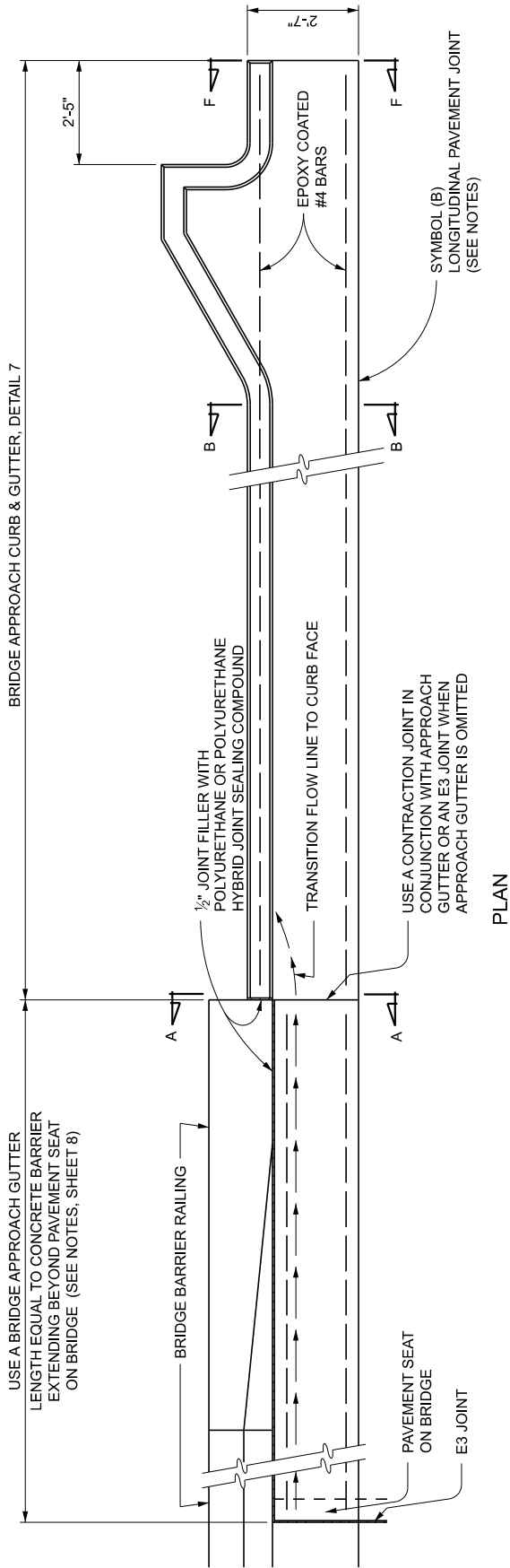
12/05/2025
PLAN DATE

R-32-F

SHEET
2 OF 8

BRIDGE APPROACH CURB & GUTTER, DETAIL 7

USE A BRIDGE APPROACH GUTTER LENGTH EQUAL TO CONCRETE BARRIER EXTENDING BEYOND PAVEMENT SEAT ON BRIDGE (SEE NOTES, SHEET 8)

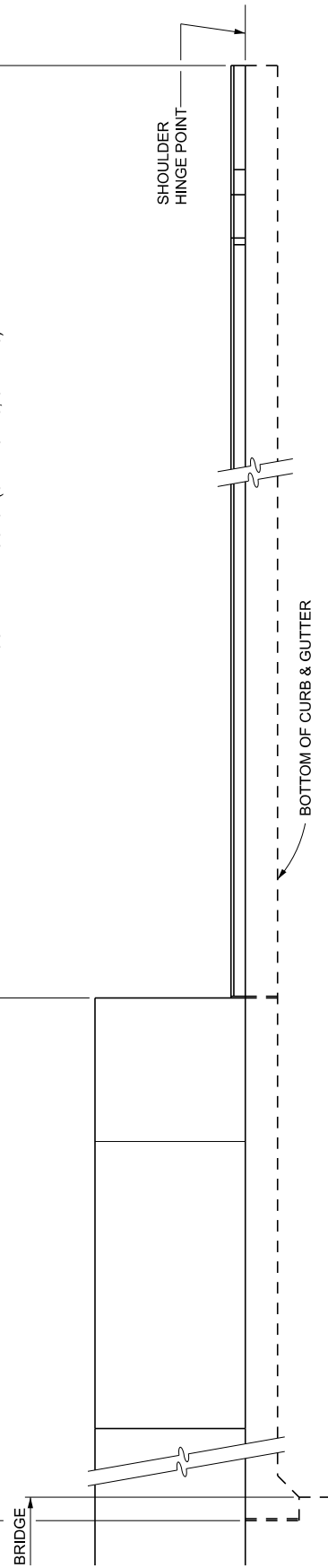


PLAN

SEE SECTION L-L FOR BRIDGE APPROACH GUTTER SECTION

VARIABLE

DETERMINE LENGTH BY CONSIDERING PLACEMENT OF SPILLWAY BETWEEN GUARDRAIL POSTS (SEE NOTES, SHEET 8)



ELEVATION

BRIDGE APPROACH CURB & GUTTER, DETAIL 7

NOTE: USE WITH GUARDRAIL ANCHORAGE, BRIDGE, DETAIL M- AND THE REQUIRED NUMBER OF DRAINAGE STRUCTURES BASED ON A HYDROLOGICAL ANALYSIS OF THE AREA AND THE SIZE OF THE BRIDGE DECK.



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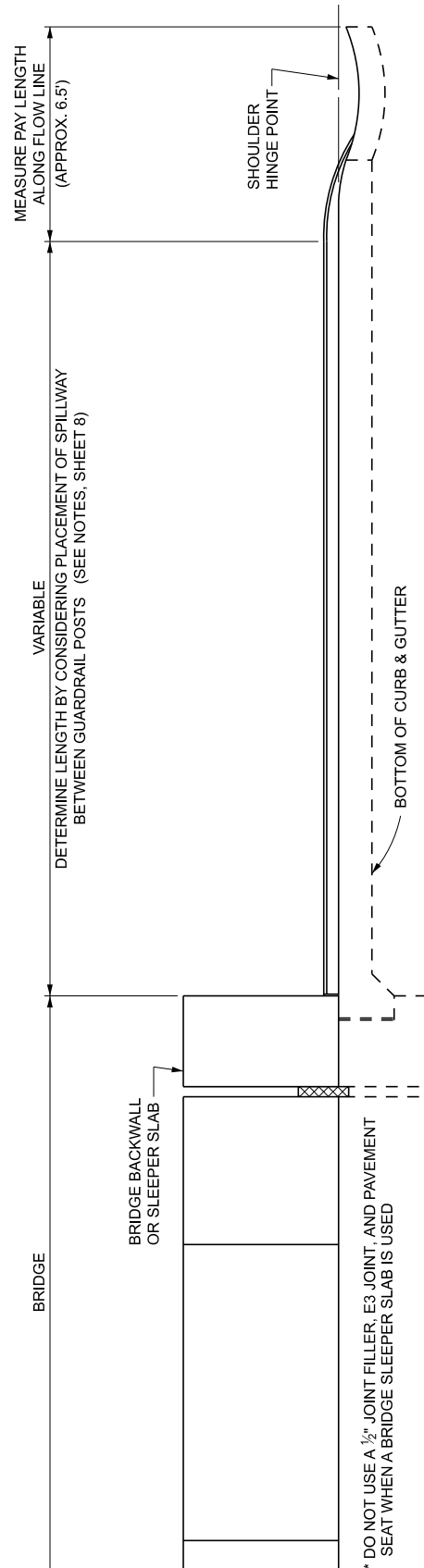
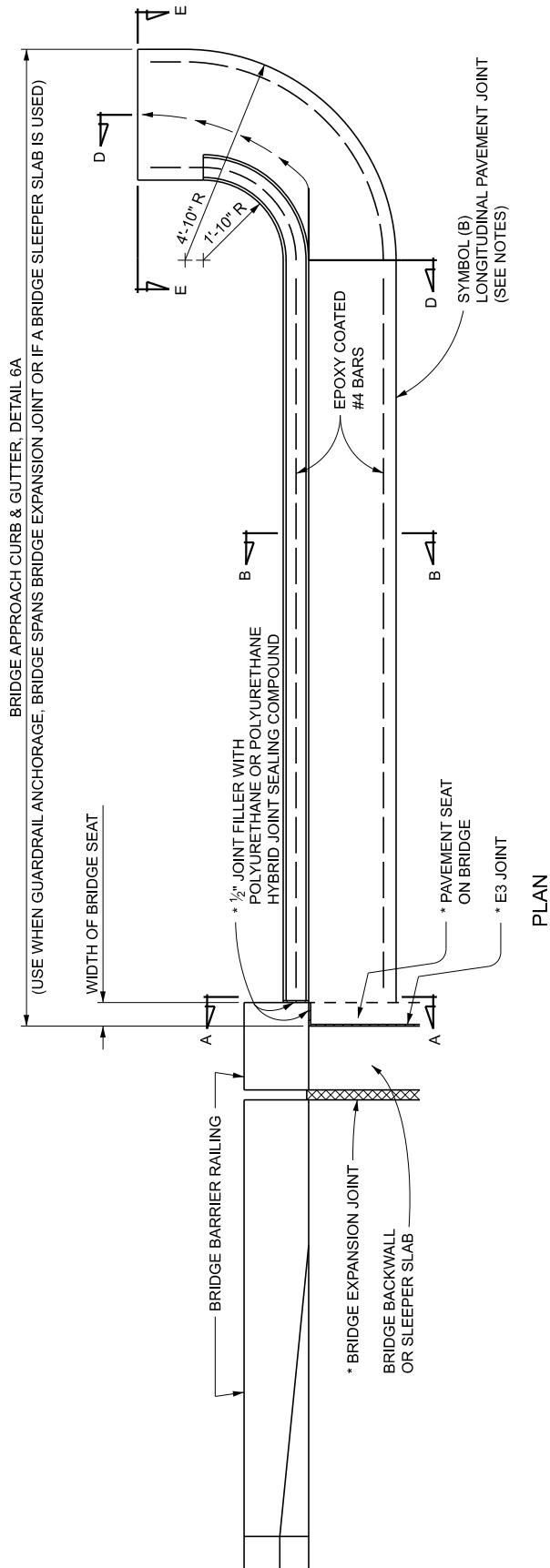
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PLAN DATE

R-32-F

SHEET
3 OF 8



ELEVATION

BRIDGE APPROACH CURB & GUTTER, DETAIL 6A

NOTE: USE WITH GUARDRAIL ANCHORAGE, BRIDGE, DETAIL M- AND THE REQUIRED NUMBER OF DRAINAGE STRUCTURES BASED ON A HYDROLOGICAL ANALYSIS OF THE AREA AND THE SIZE OF THE BRIDGE DECK.



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PLAN DATE

R-32-F

SHEET
4 OF 8

BRIDGE APPROACH CURB & GUTTER, DETAIL 7A

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

WIDTH OF BRIDGE SEAT

2'-5"

BRIDGE BARRIER RAILING

* 1/2" JOINT FILLER WITH POLYURETHANE OR POLYURETHANE HYBRID JOINT SEALING COMPOUND

* BRIDGE EXPANSION JOINT
BRIDGE BACKWALL OR SLEEPER SLAB

* PAVEMENT SEAT ON BRIDGE

* E3 JOINT

2'-7"

EPOXY COATED #4 BARS

SYMBOL (B) LONGITUDINAL PAVEMENT JOINT (SEE NOTES)

PLAN

BRIDGE

VARIABLE

DETERMINE LENGTH BY CONSIDERING PLACEMENT OF SPILLWAY BETWEEN GUARDRAIL POSTS (SEE NOTES, SHEET 8)

BRIDGE BACKWALL OR SLEEPER SLAB

STANDARD PLAN FOR

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

SHOULDER HINGE POINT

BOTTOM OF CURB & GUTTER

ELEVATION

BRIDGE APPROACH CURB & GUTTER, DETAIL 7A

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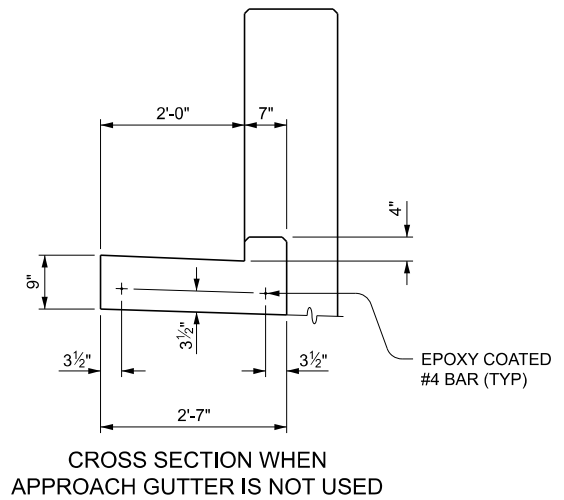
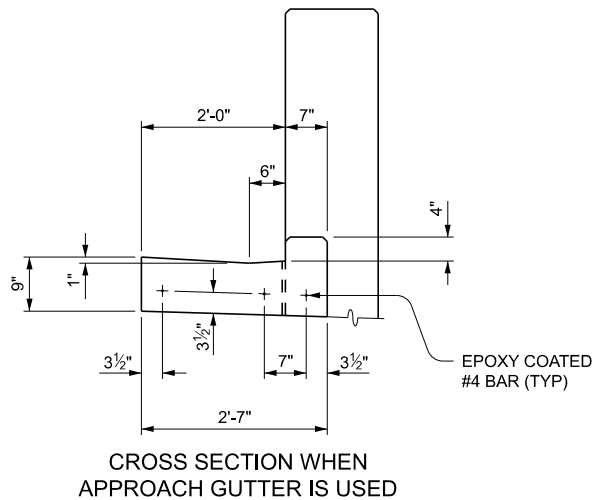
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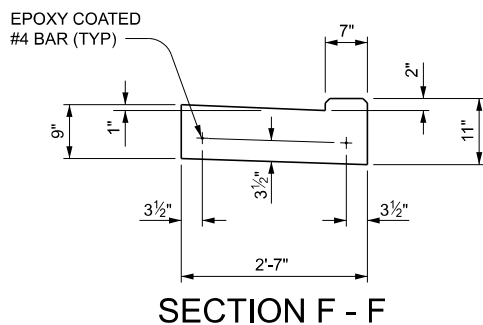
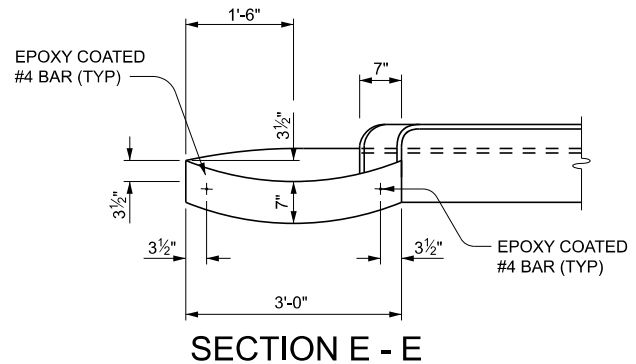
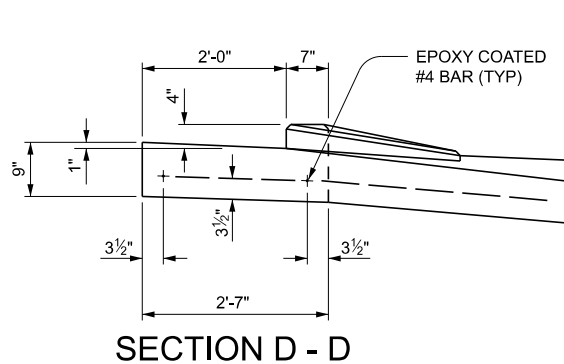
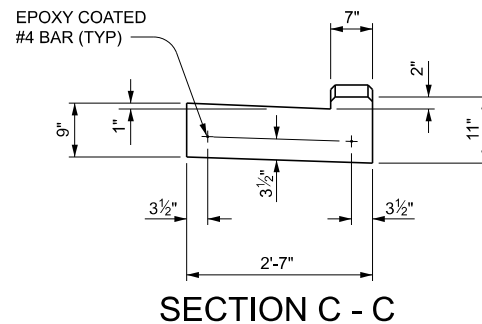
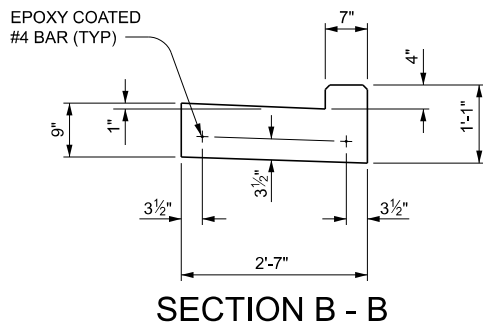
R-32-F

SHEET
5 OF 8



SECTION A - A

(SEE NOTES, SHEET 8)



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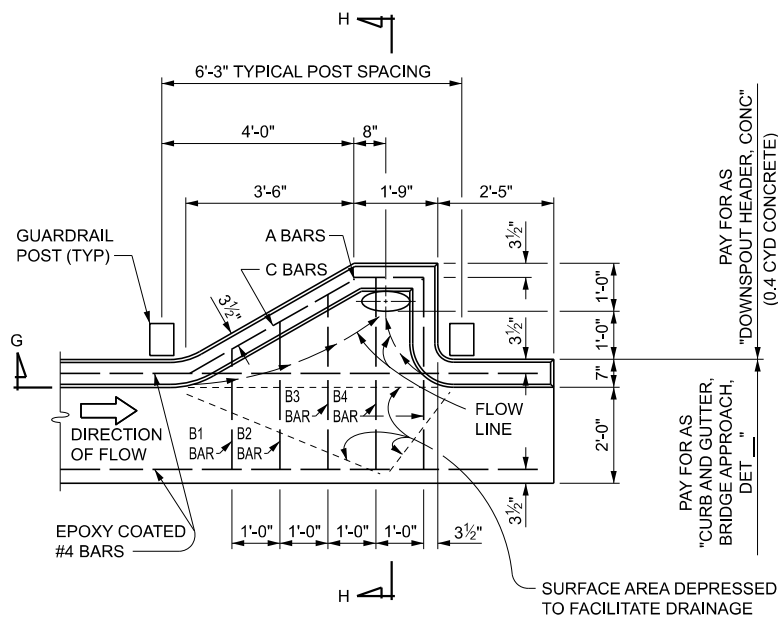
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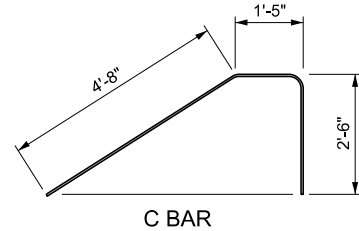
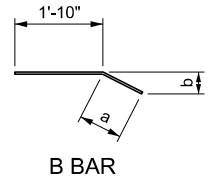
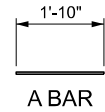
12/05/2025
PLAN DATE

R-32-F

SHEET
6 OF 8

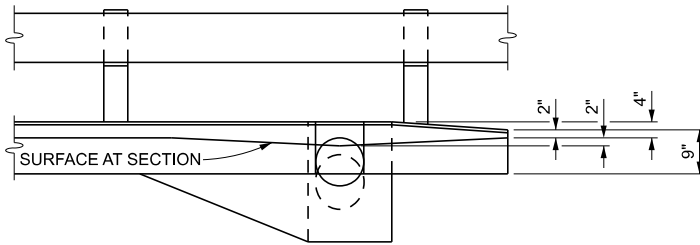


EPOXY COATED STEEL REINFORCEMENT FOR DOWNSPOUT					
BAR	DIMENSIONS		BAR SIZE	NUMBER REQUIRED	TOTAL LENGTH
	a	b			
A			#4	2	3'-8"
B1	11"	5"	#4	1	2'-9"
B2	1'-7"	8 1/2"	#4	1	3'-5"
B3	2'-3"	1'-0"	#4	1	4'-1"
B4	2'-7"	1'-2"	#4	2	8'-10"
C			#4	2	17'-2"
TOTAL WEIGHT OF STEEL 26.7 LBS					

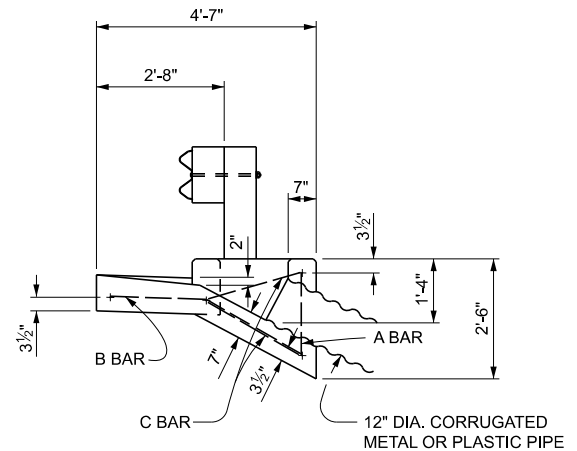


PLAN OF CONCRETE DOWNSPOUT HEADER

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

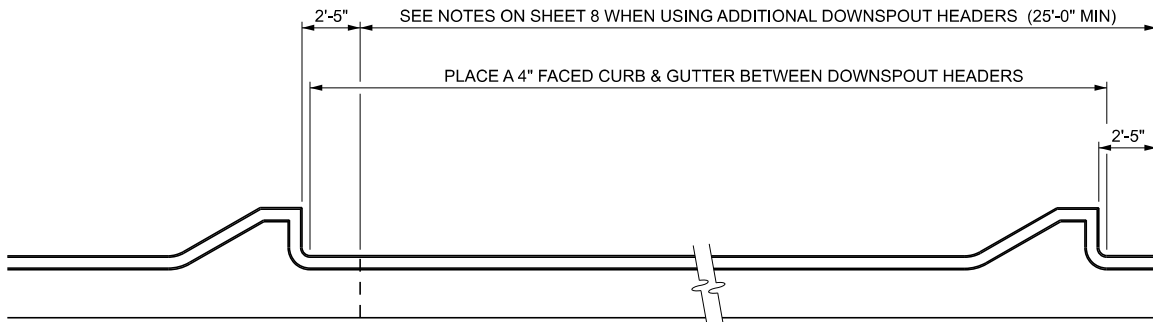


GUARDRAIL / DOWNSPOUT HEADER DETAILS



SECTION G - G

SECTION H - H



PLAN OF ADDITIONAL CONCRETE DOWNSPOUT HEADERS



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R-32-F

SHEET
7 OF 8

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 7AND 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.



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SHEET
8 OF 8