Bridge Approach Curb & Gutter, Detail 1

- Bridge Approach Gutter: Length equal to concrete barrier extending beyond pavement seat on bridge (see notes, sheet 6).
- Bridge Barrier Railing:
  - 5/8" Joint filler with polyurethane or polyurethane hybrid joint sealing compound.
  - Transition flow line to approach gutter flow line.
  - Contraction joint when approach gutter is used.

Bridge Approach Gutter, Detail 2

- Bridge Approach Gutter: Length equal to concrete barrier extending beyond pavement seat on bridge (see notes).
- Bridge Barrier Railing:
  - 5/8" Joint filler with polyurethane or polyurethane hybrid joint sealing compound.
  - Transition flow line to curb face.
  - Contraction joint when approach gutter is used.

Approach Curb & Gutter Downsputs

- Hybrid joint sealing compound with polyurethane or polyurethane joint filler.
- Type 4 & Type 5 on rural highways.

Approved by: Director, Bureau of Field Services

DOWNSPOUTS

- Extending beyond pavement seat.
- Length equal to concrete barrier.

Approach Curb & Gutter

- Bottom of curb & gutter.

ELEVATION

- Shoulder hinge point.

- Expansion joint, E3 joint, and pavement seat are not used when bridge sleeper slab is used.

See section A-A for bridge approach gutter section.

- Approx. 6.5'.
Bridge Approach Gutter

Length equal to concrete barrier extending beyond pavement seat on bridge (see notes, sheet 6).

E3 Joint - Pavement seat on bridge

1/2" Joint filler with polyurethane or polyurethane hybrid joint sealing compound

Transition flow line to curb face

Contract joint when approach gutter is used

Bridge Approach Gutter, Section A - A

Bridge Approach Gutter, Section B - B

Bridge Approach Gutter, Section C - C

Bridge Approach Gutter, Section D - D

Bridge Approach Gutter, Section E - E

Bridge Approach Gutter, Section F - F

Epoxy Coated #4 Bar (Typ.)

Downspouts

Approach Curb & Gutter

Type 4 & Type 5 on rural highways

Hybrid joint sealing compound

Polyurethane or polyurethane joint filler with R-32-SD dowspouts
BRIDGE APPROACH CURB & GUTTER, DETAIL 2A

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

WIDTH OF BRIDGE SEAT

10'-9"

1'-10" R

10'-9" R

2'-5"

3"

EPOXY COATED #4 BARS

2'-7"

3"

#4 BARS

EPOXY COATED

(SEE NOTES)

LONGITUDINAL JOINT SEALING COMPOUND

HYBRID JOINT SEALING COMPOUND

HYBRID JOINT SEALING COMPOUND

POLYURETHANE OR POLYURETHANE

POLYURETHANE OR POLYURETHANE

(SEE NOTES)

WIDE EXISTING BRIDGE BARRIER RAILING

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

BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

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

BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

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

*(BRIDGE EXPANSION JOINT, 1/4" EXPANSION JOINT, E3 JOINT, AND PAVEMENT SEAT ARE NOT USED WHEN BRIDGE SLEEPER SLAB IS USED)*

BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

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

*(BRIDGE EXPANSION JOINT, 1/4" EXPANSION JOINT, E3 JOINT, AND PAVEMENT SEAT ARE NOT USED WHEN BRIDGE SLEEPER SLAB IS USED)*

BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

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

*(BRIDGE EXPANSION JOINT, 1/4" EXPANSION JOINT, E3 JOINT, AND PAVEMENT SEAT ARE NOT USED WHEN BRIDGE SLEEPER SLAB IS USED)*

BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

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BRIDGE APPROACH CURB & GUTTER, DETAIL 3A

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

*(BRIDGE EXPANSION JOINT, 1/4" EXPANSION JOINT, E3 JOINT, AND PAVEMENT SEAT ARE NOT USED WHEN BRIDGE SLEEPER SLAB IS USED)*
PLAN OF CONCRETE DOWNSPOUT HEADER

NOTE: ALL BARS ARE EPOXY COATED

<table>
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<tr>
<th>BAR</th>
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<td>1/4&quot;</td>
<td>2</td>
<td>3'-8&quot;</td>
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<tr>
<td>B1</td>
<td>1&quot;-2&quot;</td>
<td>3/8&quot;</td>
<td>1</td>
<td>3'-5&quot;</td>
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<td>2'-3&quot;</td>
<td>1/2&quot;</td>
<td>1</td>
<td>4'-1&quot;</td>
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<td>2'-4&quot;</td>
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<tr>
<td>C</td>
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TOTAL WEIGHT OF STEEL 26.7 LBS

PLAN OF ADDITIONAL CONCRETE DOWNSPOUT HEADERS

WHEN USING ADDITIONAL DOWNSPOUT HEADERS (25'-0" MIN.) (SEE NOTES, SHEET 6)

(A 5" FACED CURB & GUTTER SHALL BE PLACED BETWEEN DOWNSPOUT HEADERS)
ADJACENT CONCRETE PAVEMENT AS SPECIFIED ON STANDARD PLAN R-41-SERIES. A SYMBOL (B) JOINT SHALL BE PLACED BETWEEN CURB OR CURB AND GUTTER AND SHOULDERS, WHERE A BITUMINOUS TREATMENT WILL BE REQUIRED. WITH THE SAME MATERIAL AS THE SHOULDERS, EXCEPT IN THE CASE OF AGGREGATE THE AREA BETWEEN THE EDGE OF THE PAVEMENT AND THE GUTTER SHALL BE SURFACED DETERMINED PRIOR TO LOCATING THE SPILLWAY OR DOWNSPOUT HEADER.


ALL MATERIALS AND WORKMANSHIP SHALL BE ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONCRETE CURB AND GUTTER. FOR TYPE OF BRIDGE APPROACH CURB AND GUTTER TO USE AT A SPECIFIC LOCATION, SEE STANDARD PLAN R-27-SERIES FOR BRIDGE APPROACH CURB AND GUTTER USING EXISTING CATCH BASIN. ALL MATERIALS AND WORKMANSHIP SHALL BE ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONCRETE CURB AND GUTTER.

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

FOR TYPE OF BRIDGE APPROACH CURB AND GUTTER TO USE AT A SPECIFIC LOCATION, SEE STANDARD PLAN R-30-SERIES.

SEE STANDARD PLAN R-32-SD 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". 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-61-SERIES. THE LOCATION OF GUARDRAIL POSTS SHOULD BE DETERMINED PRIOR TO LOCATING THE SPILLWAY OR DOWNSPOUT HEADER.


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 3/8".

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.