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INSTRUCTIONAL BULLETIN 95-14

- SUBJECT:** 1. CURB RAMPS
2. BRIDGE END BITUMINOUS CURB AND FLUME
3. ALTERNATE PIPE BID AND BEVELED END SECTIONS

**Superseded
by 1996-12**

EFFECTIVE DATE: OCTOBER 17, 1995

SUPERSEDES: MEMORANDUM TO ROAD DESIGN PERSONNEL DATED FEBRUARY 13, 1989 AND ITEM 2 ON PAGE 13-1 OF THE PLAN PREPARATION GUIDE

1. On all projects where curb and gutter and sidewalk are to be constructed, a general note will be placed on each typical section sheet as follows:

Note: Curb ramps are to be constructed in accordance with Standard Drawing No. 720-6.

2. Use "Bridge End Bituminous Curb and Flume" on all bridge ends where concrete curb and gutter with flume is not provided by bridge plans. Bid items as shown on Standard Drawing No. 721-1 should be calculated and included in the General Construction Note.

Asphalt Concrete Surface Course of the same type used on the roadway shall be used for shoulder paving at an application rate of 275 kg/m² (500 lbs/SY).

Asphalt Cement in Paving Mixture is included in Asphalt Concrete Surface Course For Ditch Paving.

EXAMPLE FOR TWO BRIDGE ENDS (FOUR CORNERS) ON TANGENT - NORMAL CROWN

Inclusion Note:

Bituminous Curb	8 m (26 LF) for Bridge Ends
Hand Placed Rip Rap	40 t (40 Tons) for Bridge Flume Ends
Geotextile for Erosion Control Under Rip Rap (Class 2) Type __	80 m ² (80 S. Y.) to be placed under Hand Placed Rip Rap
*Asphalt Concrete Surface Course	51 t (54 Tons) for Drives 15t (16), Leveling 23 t (25) and Bridge Ends 13 t (13)
*Asphalt Cement in Paving Mixture Ends	3 t (3 Tons) for Drives, Leveling & Bridge
#Asphalt Conc. Surf. Course For Ditch Paving	3 t (3 Tons) For Flumes

*These quantities vary according to shoulder width

#This quantity varies according to fill height and slope

Note For Plan Sheet (to Be Placed On One Corner Only)

Construct Shoulder Paving, Bridge End
Bituminous Curb And Flume With Riprap
^Erect Thrie Beam Bridge Connector and MELT
(Typical Four Corners)

^Bridge end protection note may be modified to fit varying end treatment conditions

**EXAMPLE FOR TWO BRIDGE ENDS (FOUR CORNERS) ON CURVE -
SUPERELEVATED**

Inclusion Note:

Bituminous Curb	4 m (13 LF) for Bridge Ends
Hand Placed Rip Rap	20 t (20 Tons) for Bridge Flume Ends
Geotextile for Erosion Control Under Rip Rap (Class 2) Type __	40 m ² (40 S. Y.) to be placed under Hand Placed Rip Rap
*Asphalt Concrete Surface Course	51 t (54 Tons) for Drives 15t (16), Leveling 23 t (25) and Bridge Ends 13t (13)
*Asphalt Cement in Paving Mixture Ends	3 t (3 Tons) for Drives, Leveling & Bridge
#Asphalt Conc. Surf. Course For Ditch Paving	2 t (2 Tons) For Flumes

*These quantities vary according to shoulder width

#This quantity varies according to fill height and slope

Note For Plan Sheet (to Be Placed On One Corner Only)

Construct Shoulder Paving, Bridge End
Bituminous Curb And Flume With Riprap
^Erect Thrie Beam Bridge Connector and MELT
(Typical Four Corners)

^Bridge end protection note may be modified to fit varying end treatment conditions

Do not place "Bridge End Bituminous Curb and Flume" on the high side of a superelevated bridge.
Paved shoulder will be included on high side of superlevation

3. The Federal Highway Administration has recommended the use of "Beveled End Pipe" on all
crossline and sideline installations within the 9 m (30') clear zone on federally funded projects.

In the case of a stub pipe behind a curb and gutter section, it will not be necessary to use "Beveled End Pipe" where a vehicle is not likely to come into contact with the pipe. Another situation might be a crossline under a high fill protected by guardrail. These situations need to be determined on a case by case basis.

Alternate sideline pipe bids will also be used and set up as follows:

Example for General Construction Note for additional pipe:

_____mm or (") Alternate Pipe --- _____m or (') for side lines (includes two beveled end pipes per location) No separate payment will be made for the beveled end pipes.

A note will be shown on the General Construction Note as follows:

ALTERNATE PIPE SELECTION NOTE:

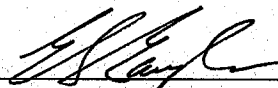
When Corrugated Aluminum Alloy Pipe is selected, the diameters will be one standard pipe size larger than Reinforced Concrete Pipe.

Example of pipe note on plan sheets:

Place _____m or (LF) of _____mm or (") Alternate Pipe (includes _____ Beveled End Sections)

When using alternate sideline pipe, place a note on the outside of the cover notifying the Specification and Estimate Group to include an explanation in the Contract Special Provisions.

APPROVED:



E. S. Eargle
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