FEBRUARY 19, 1999

MEMORANDUM TO GROUP LEADERS & CONSULTANTS

SUBJECT: Bridge End Drainage Details

This memorandum replaces the previous Design Memorandums DM0488 and DM0189 dated October 17, 1988 and February 22, 1989 respectively.

Bridge Design has received reports of erosion problems at bridge ends and ends of approach slabs on bridges without deck drains. The field engineers have requested that the concrete curb and gutter with flume be detailed, in the bridge plans, for these projects. The concrete curb and gutter with flume should be detailed on bridges that have no bridge deck drains regardless of the slope coming off the bridge.

Bridges with bridge deck drains and a slope coming off the bridge less than 1% can continue to use the road department's standard concrete curb and gutter. Bridges with bridge deck drains and a slope coming off the bridge more than 1%, should be detailed in the bridge plans, with the concrete curb and gutter with flume.

The attached drawings "BCGFLUME" and "BCGFLUME A" detailing the concrete curb and gutter at the end of approach slab, with or without asphalt approaches, should be revised as necessary to fit each project.

The attached drawing "BCGFLUME1" detailing the concrete curb and gutter at the end of bridge, with or without asphalt approaches, should be revised as necessary to fit each project.

All of the above drawings can be found in the Bridge Standards File under the file name BCGFLUME.STD.

Randy R. Cannon, P.E.
Bridge Design Engineer

Attachments:
cc: Assistant Bridge Design Engineers
File: PC/REL