

1. PLAN: build riffle crest across the stream with large diameter boulders, back up with next largest stone downstream.

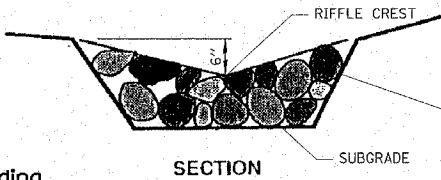
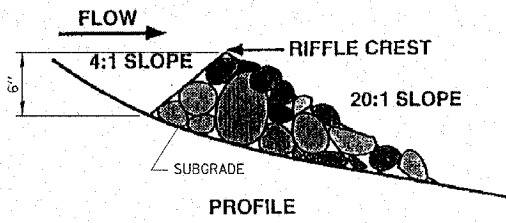
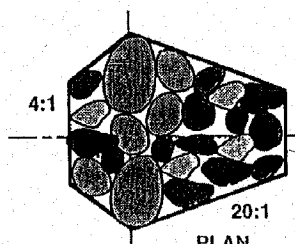
2. PROFILE: construct downstream face of riffle at 20:1 slope and upstream face at 4:1 slope.

3. CROSS-SECTION: V-shape crest down towards the centre of channel.

4. SURFACE: space large surface rocks 8" to 12" apart on the downstream face of the riffle to form low flow fish passage channels.

5. BANKS: rip-rap banks with embedded rock to the floodplain level on both sides of the riffle.

6. RIFFLES: construction of riffles including stone riprap class A4 is to be considered as incidental to Earth Excavation.



RIFFLE LOCATION	
STA.	79+38.00 LT.
STA.	81+20.00 RT.
STA.	82+87.00 RT.

A.R. STA. 82+70
 PIPE CULVERT TYPE 2 R.C.C.P. 24"
 115 FT. LONG
 U.S.F.L. AT END OF FLARED END SECTION
 53.9' LT. STA. 82+70 ELEV. 381.27
 D.S.F.L. AT END OF FLARED END SECTION
 73.0' RT. STA. 82+70 ELEV. 380.49
 END SECTIONS 24" = 2 EACH
 C.L.S.M. = 217.8 CU.YD.

HLR
 Rice, Berry and Associates
 A Division of Hampton,
 Lenzini and Renwick, Inc.
 Civil & Structural Engineers
 801 S. Durkin Drive
 Springfield, Illinois 62704
 217-546-3400

Account Number
 03-47-0001-1
 Date: 03-19-07
 DESIGNED: L.F.S. CHECKED: S.W.M. DRAWN: W.J.S.

STREAM PLAN
 SECTION 99-02118-00-FP
 F.A.U. 9713 / EAST PLEASANT HILL ROAD
 JACKSON COUNTY

Revised 5/29/07