PLAN VIEW

- 2' MIN.
- TYPE II FABRIC
- BANKFULL
- TOE OF SLOPE
- FLOW
- TOE OF SLOPE
- BANKFULL
- CONSTRUCTED RIFFLE, SEE SEPARATE DETAIL
- BACKFILL MATERIAL
- RIP RAP SCOUR PROTECTION 2' DOWNSTREAM
- POOL
- HEADER BOULDER SEE PLANS FOR ELEVATION
- FOOTER BOULDER
- EMBED SILL INTO BANK PER TABLE

SECTION B-B

- HEADER BOULDER SEE PLANS FOR ELEVATION
- FLOW
- TYPE II FABRIC
- BOULDER OFFSET
- GLIDE
- RIFFLE
- POOL
- CONSTRUCTED RIFFLE, SEE SEPARATE DETAIL
- SILL AND BACKFILL DEPTH
- BACKFILL MATERIAL
- 2' MIN.
- 6" SCOUR PROTECTION
- FOOTER BOULDER
- BOULDER SHOULD NOT BE GAPPED OR HAVE ANY SIGNIFICANT SPACES, FILL VOIDS WITH STONE

SECTION A-A

- TOP OF BANK
- TOE OF SLOPE
- THALWEG
- HEADER BOULDER
- FOOTER BOULDER
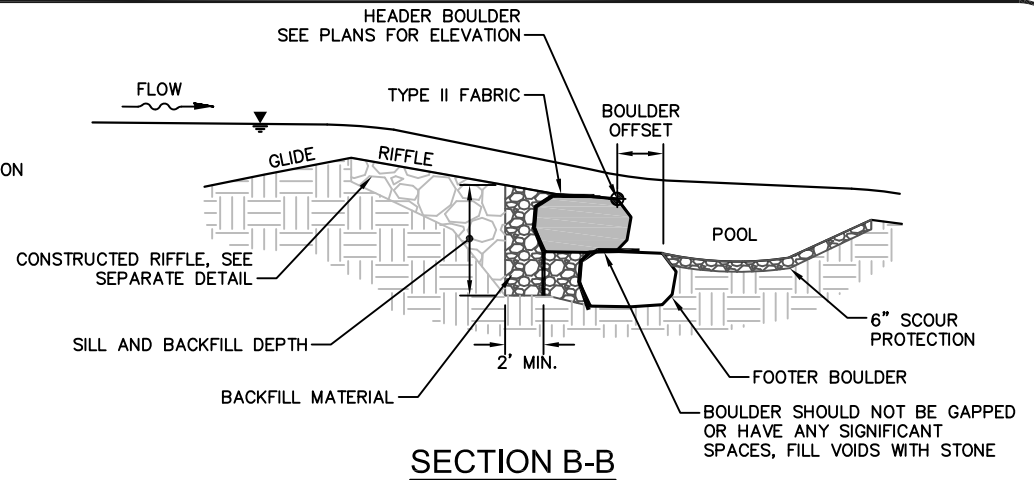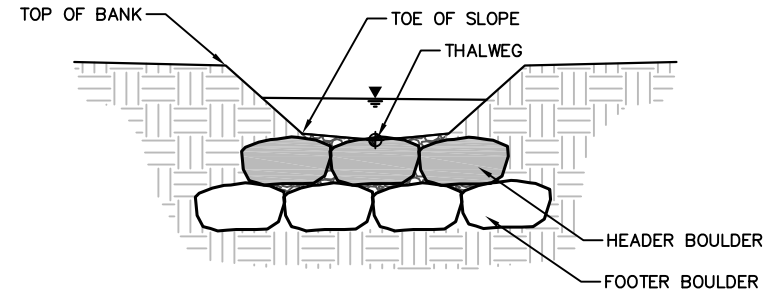
NOTES:

1. A ROCK SILL MAY BE USED ALONE OR IN COMBINATION WITH A CONSTRUCTED RIFFLE.
2. NO PART OF THE SILL SHALL BE PLACED ABOVE THE ELEVATION OF THE UPSTREAM AND/OR ADJACENT STREAM BED.
3. A FOOTER BOULDER IS NOT REQUIRED IF THE HEADER BOULDER DEPTH EXCEEDS SPECIFIED SILL DEPTH.
4. THE ROCK SILL IS GENERALLY CONSTRUCTED AS FOLLOWS:
   A. OVER-EXCAVATE STREAM BED TO A DEPTH EQUAL TO THE TOTAL THICKNESS OF THE HEADER AND FOOTER BOULDERS.
   B. PLACE FOOTER BOULDERS. THERE SHALL BE NO GAPS BETWEEN BOULDERS.
   C. INSTALL FILTER FABRIC.
   D. PLACE BACKFILL MATERIAL UPSTREAM OF THE FOOTER BOULDERS AND FILTER FABRIC.
   E. INSTALL HEADER BOULDERS ON TOP OF AND SET SLIGHTLY BACK FROM THE FOOTER BOULDERS (SUCH THAT PART OF THE HEADER BOULDER IS RESTING ON THE BACKFILL MATERIAL). HEADER BOULDERS SHALL SPAN THE SEAMS OF THE FOOTER BOULDERS. THERE SHALL NOT BE A SEAM IN THE CENTER OF THE STREAM BED (AT THE THALWEG). THERE SHALL BE NO GAPS BETWEEN BOULDERS OR THALWEG SEAM BETWEEN HEADERS.
   F. INSTALL FILTER FABRIC.
   G. PLACE BACKFILL MATERIAL BEHIND HEADER BOULDERS ENSURING THAT ANY VOIDS BETWEEN THE BOULDERS ARE FILLED.

DESIGN VARIABLES

	EXAMPLE	REACH _	REACH _
BOULDER DIMENSIONS	1'x2'x2'	– –	– –
BACKFILL MATERIAL [1]	B, 57, E, W	– –	– –
SILL AND BACKFILL DEPTH	2' MIN	– –	– –
BOULDER OFFSET	3"	– –	– –
EMBEDDED LENGTH INTO BANK	3' MIN	– –	– –

[1] WELL MIXED GRADATION (APPROXIMATELY 70% STONE, 20% EARTH, AND 10% WOOD/MULCH). STONE MIX TO BE COMPRISED OF THE SPECIFIED MATERIALS: A = CLASS A RIP-RAP, B = CLASS B RIP-RAP, 57 = #57 STONE. #57 STONE NOT TO EXCEED 10% OF THE STONE MIX, THE REMAINDER OF THE MIX SHALL BE EQUAL PARTS CLASS A AND CLASS B RIP-RAP IF BOTH ARE SPECIFIED OR AS DIRECTED BY THE ENGINEER.

*ENGINEER TO ADJUST AS NECESSARY, MINIMUMS CANNOT BE ADJUSTED WITHOUT CITY APPROVAL

NOT TO SCALE