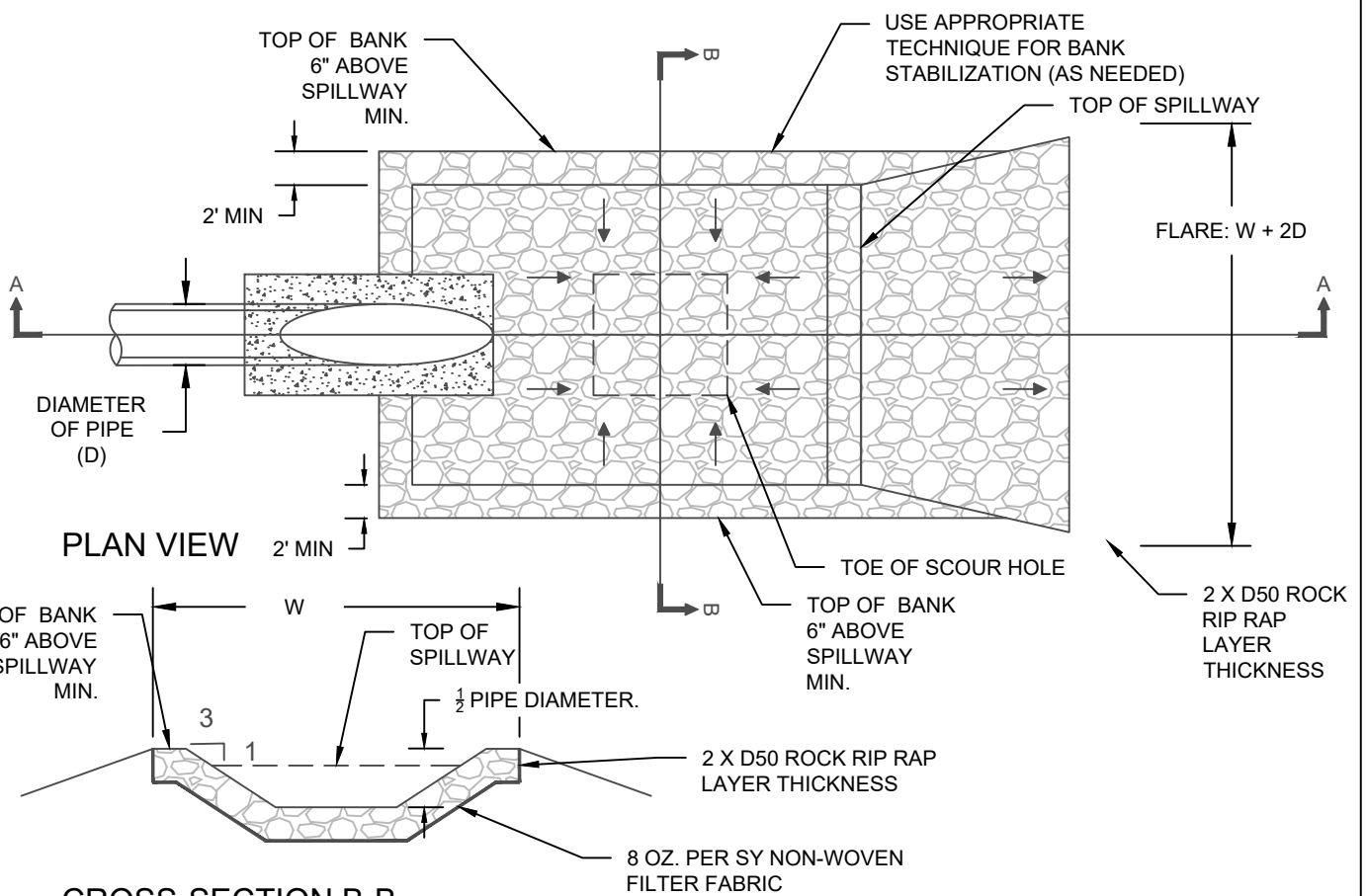


CROSS-SECTION A-A



CROSS-SECTION B-B

$La = 0.5V * D$

La = LENGTH OF RIP RAP APRON, FT
 V = CULVERT DISCHARGE VELOCITY, FT/S
 D = DIAMETER OR HEIGHT OF CULVERT, FT

* MIN. APRON LENGTH IS 6 FT

NOTES:

1. ROCK RIP RAP SHALL BE SOUND MATERIAL AND GRADED PER REQUIREMENTS SPECIFIED
2. ROCK RIP RAP D50 AND CLASS SIZE SHALL BE NOTED ON THE PLANS. GRADATION SHALL BE STABLE FOR THE DESIGN HYDRAULIC CONDITIONS AND IN ACCORDANCE WITH THE TECHNICAL MANUAL'S RIP RAP SIZE SELECTION, OR OTHER ENGINEERING STANDARD OF PRACTICE FOR SIZING ROCK RIP RAP.

LOWER COLORADO RIVER AUTHORITY

SCOUR HOLE OUTFALL DETAIL

DATE:
03-2023

SHEET:
1 OF 1