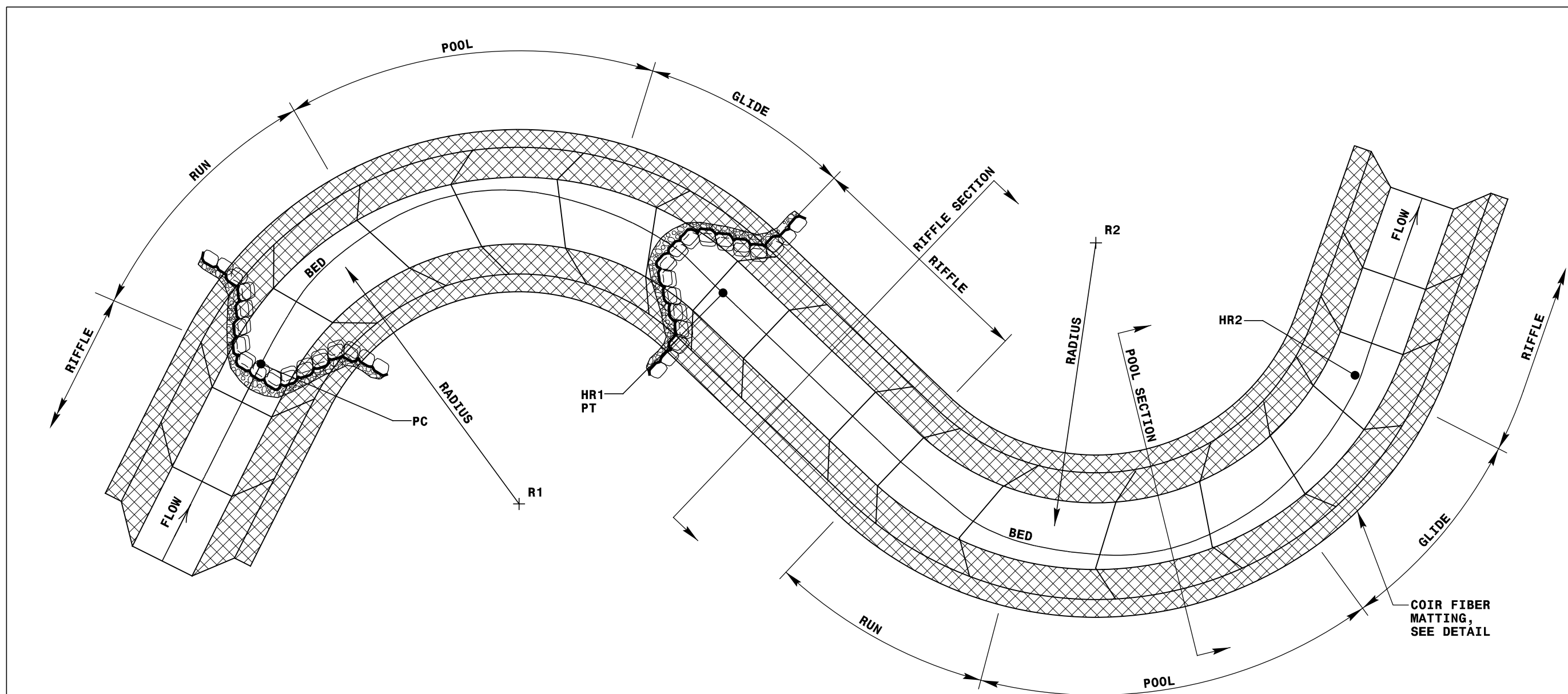
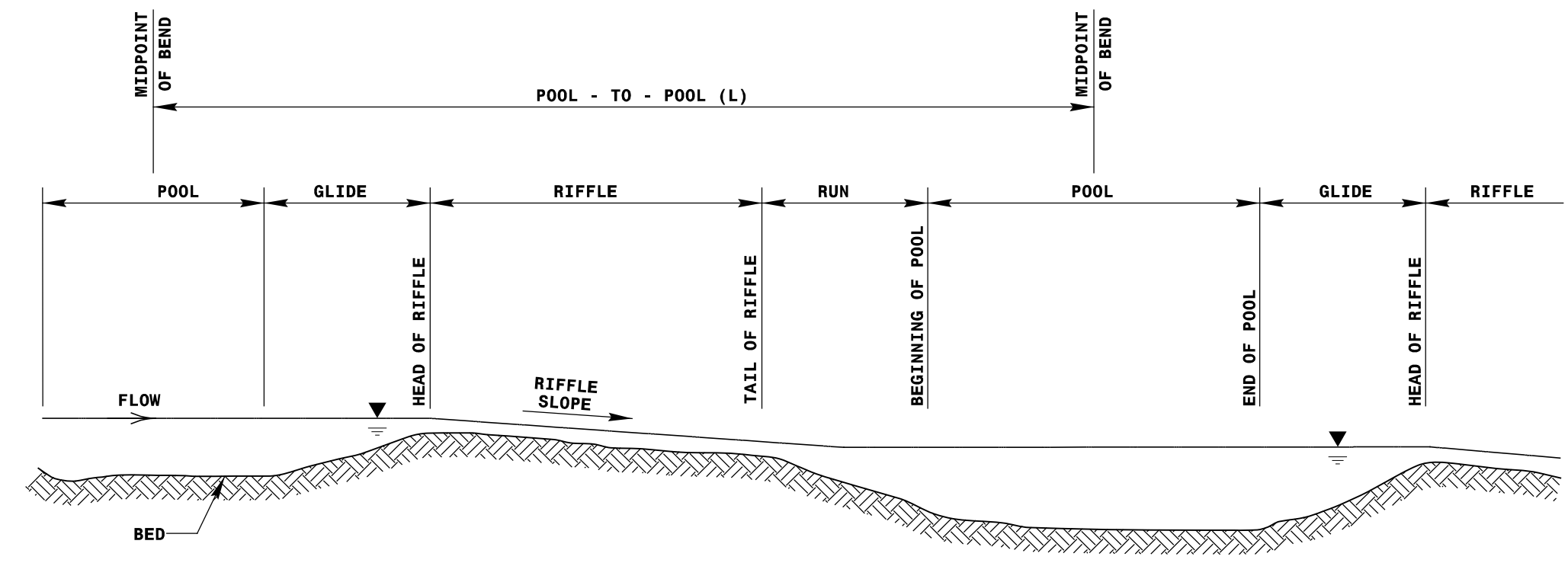


PROJECT REFERENCE NO. U-2707	SHEET NO. NS-5
RW SHEET NO.	
HYDRAULICS ENGINEER 2/19/2016 NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036254 EMMETT PERDUE DocuSign Emmett Perdue 177E39AC42947D	

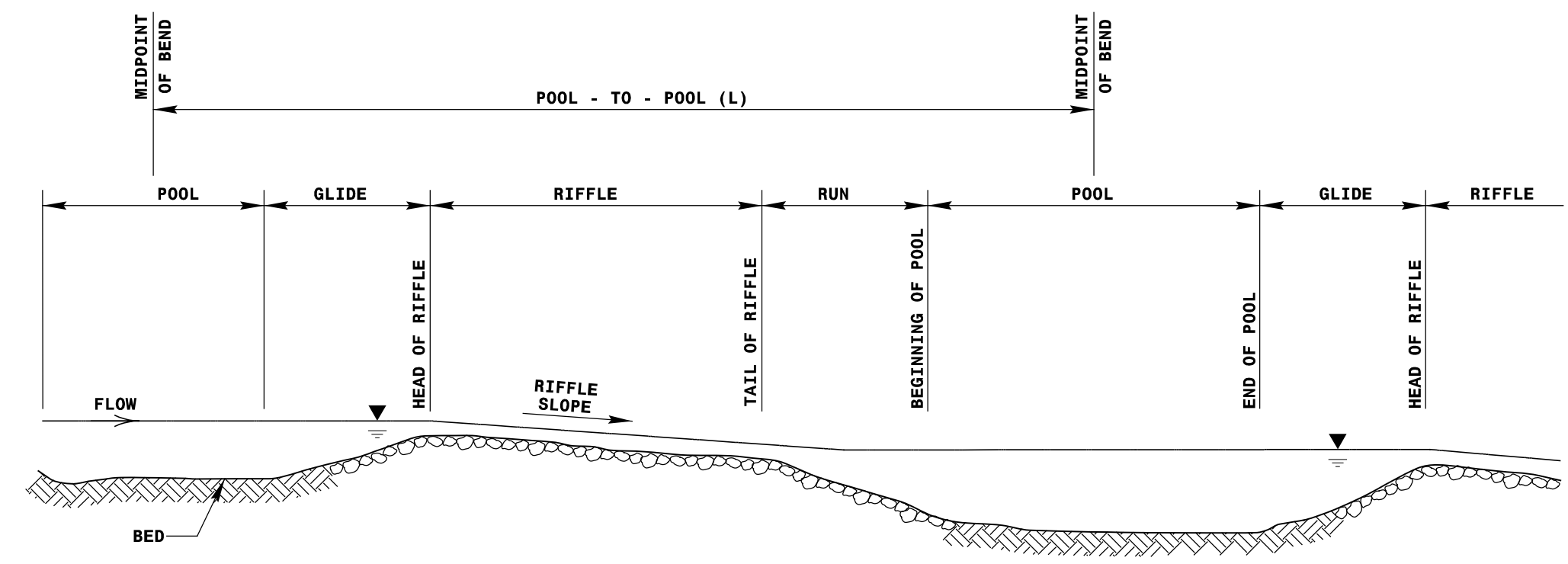
REVISIONS



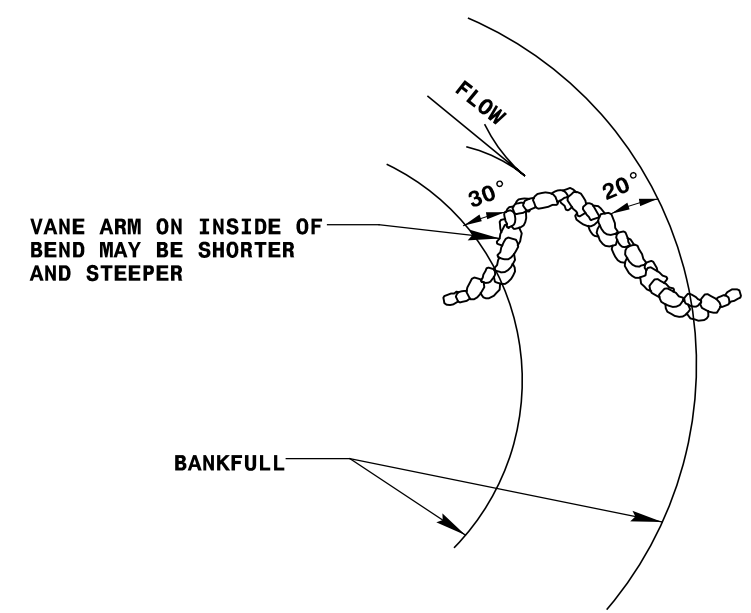
TYPICAL PLAN



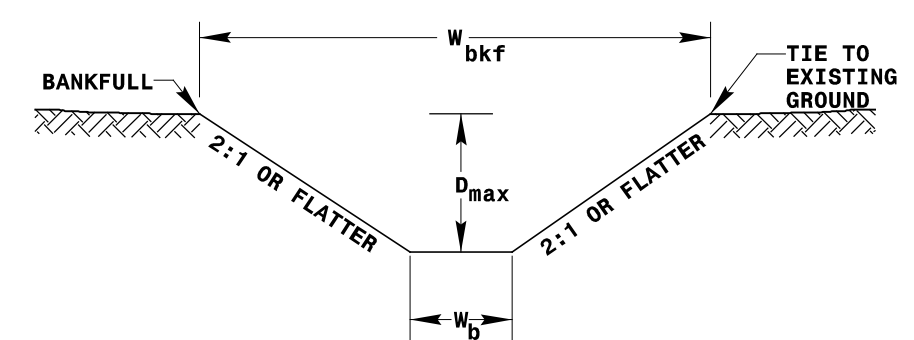
TYPICAL PROFILE



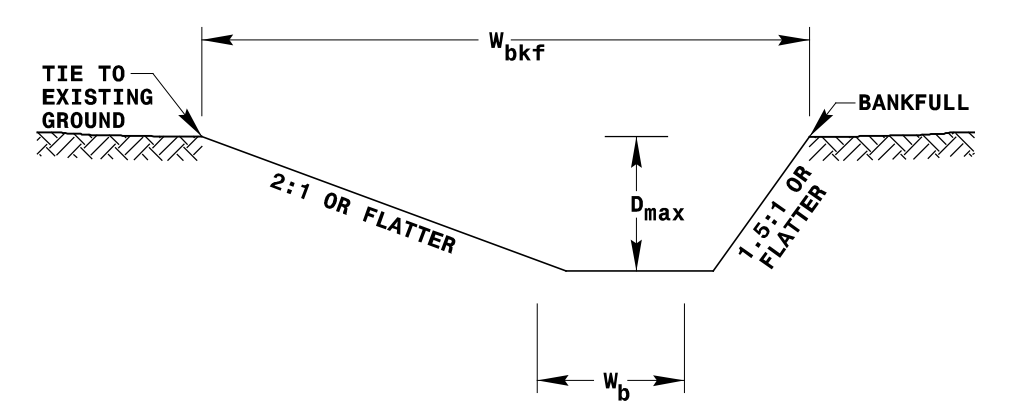
TYPICAL PROFILE FOR ARMORED RIFFLE SECTION



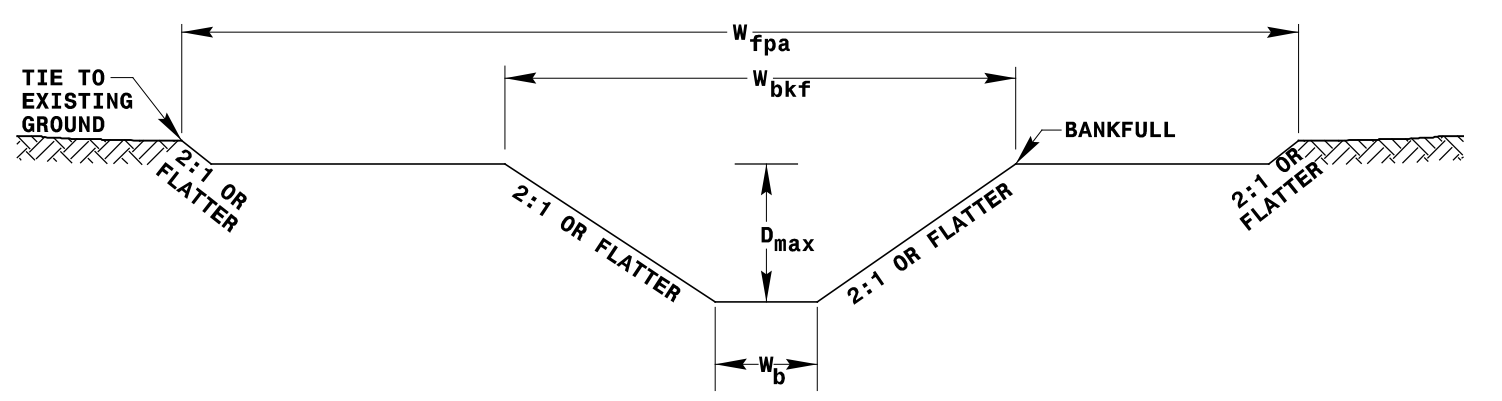
CROSS VANE CONSTRUCTION IN MEANDER-BEND PLAN VIEW



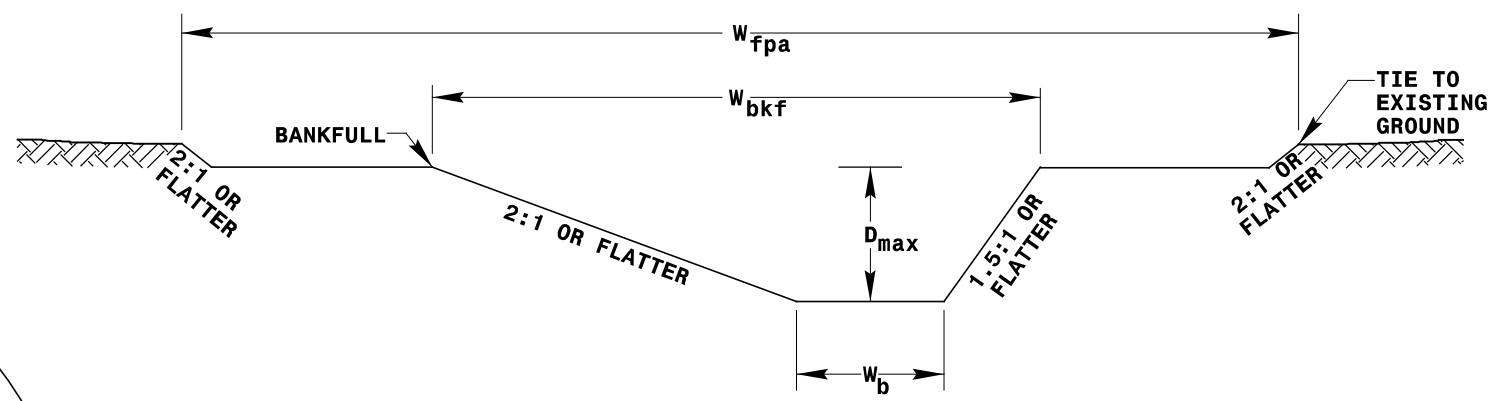
TYPICAL RIFFLE



TYPICAL POOL



TYPICAL RIFFLE WITH BANKFULL BENCH



TYPICAL POOL WITH BANKFULL BENCH

W_{bkf} = BANKFULL WIDTH
 D_{max} = MAXIMUM DEPTH
 W_b = BOTTOM WIDTH
 W_{fpa} = FLOOD PRONE AREA WIDTH

REACH	RIFFLE				POOL				Width/Depth Ratio
	W_{bkf}	D_{max}	W_b	W_{fpa}	W_{bkf}	D_{max}	W_b	W_{fpa}	
REACH R1									
Sta. 0+00 - Sta. 9+20	12.0	1.40	2.40	>35	12.0	1.83	1.00	>35	14.4
Sta. 9+20 - Sta. 18+00	14.0	1.76	3.00	>35	14.0	2.40	2.00	>35	13.0
REACH R2									
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTES:
 1. THE COORDINATES FOR EACH CENTER OF RADIUS (EX. "R1", "R2") AND EACH HEAD OF RIFFLE (EX. "HR1", "HR2") ARE INDICATED ON THE PLAN SHEETS.

CHANNEL TYPICAL DETAIL
NOT TO SCALE