



### DESIGN VARIABLES

	EXAMPLE	REACH	REACH
RIFFLE MATERIAL <sup>1</sup>	B, 57, E, W	--	--
RIFFLE DEPTH <sup>2</sup>	12"	--	--
RIFFLE BOTTOM WIDTH	4'	--	--
DISTANCE ALONG TOE	18"	--	--
BOULDER DIMENSIONS	1.5' X 1.5' X 1.5'	--	--

<sup>1</sup> WELL MIXED GRADATION (APPROXIMATELY 70% STONE, 20% EARTH AND 10% WOODY MATERIAL) STONE MIX TO BE COMPRISED OF THE SPECIFIED MATERIALS: A = CLASS A RIP-RAP, B = CLASS B RIP-RAP, 57 = #57 STONE E = EARTH, M = MULCH, W = WOODY MATERIAL, L = LOGS. #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.

<sup>2</sup> DEPTH OF 12" TYPICAL

### NOTES:

- MAJORITY OF WOODY MATERIAL SHOULD BE 0.5"-2.0" IN DIAMETER WITH LOGS NO LARGER THAN 6" AND EXTEND INTO THE BANK 2 FEET ON EACH SIDE. WOODY MATERIAL SHALL BE VARYING DIAMETER TO ALLOW MATERIAL TO BE COMPACTED.
- PLACE LOGS AND WOODY MATERIAL WITH MINIMAL GAPS. A LAYER OF ON-SITE CHANNEL MATERIAL SHOULD BE APPLIED TO FILL VOIDS IN WOODY MATERIAL PRIOR TO THE INSTALLATION OF ADDITIONAL LAYERS.
- THE WOODY MATERIAL SHALL BE DESIGNED TO BE SUBMERGED OR COVERED AT LOW FLOWS.

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

NOT TO SCALE



CHARLOTTE-MECKLENBURG  
STORM WATER SERVICES  
GENERIC DETAIL REQUIREMENTS

## VARIABLE CONSTRUCTED RIFFLE

DRAFT - NOT TO BE USED FOR CONSTRUCTION

SHEET NUMBER

1 OF 1

STD. NO. REV.

XX.XX