



**SECTION BETWEEN ROCK SILLS**

**SECTION THROUGH ROCK SILL**

**NOTES:**

1. ELEVATION CONTROL POINTS SHALL BE DESIGNATED AT THE UPSTREAM INVERT (CENTER) OF THE CROSS VANE TO ESTABLISH PART OF THE PROFILE. POOL ELEVATION CONTROL POINTS OR EXCAVATION TO A SPECIFIED MAXIMUM POOL DEPTH SHALL BE DESIGNATED TO ESTABLISH THE REMAINING PROFILE. SURVEY OF CONTROL POINTS SHALL BE REQUIRED TO ESTABLISH ACCURATE CROSS VANE INSTALLATION WITHIN THE TOLERANCE SPECIFIED BY THE DESIGNER.
2. A FOOTER BOULDER IS REQUIRED IF BOULDER DEPTH DOES NOT EQUAL SPECIFIED BOULDER AND BACKFILL DEPTH.
3. THESE STRUCTURES SHALL TYPICALLY BE USED TO TIE-IN STORM DRAINAGE PIPES AND CHANNELS TO STREAMS ON STEEP SLOPES. FISH PASSAGE IS NOT A CONCERN. IF FISH PASSAGE IS A CONCERN HOWEVER, THE DROPS BETWEEN EACH STRUCTURE SHALL BE LIMITED AS SPECIFIED BY THE DESIGNER.

**DESIGN VARIABLES**

	EXAMPLE	REACH	REACH
BOULDER DIMENSIONS	1'x2'x2'	--	--
BACKFILL MATERIAL <sup>1</sup>	B, 57, E	--	--
SILL AND BACKFILL DEPTH	2'	--	--
EMBEDDED LENGTH INTO SOIL	3'	--	--
OUTLET APRON LENGTH	6'	--	--
STEP SPACING	3'	--	--
MAX. DROP OVER ROCK SILL <sup>2</sup>	0.2'	--	--

<sup>1</sup> WELL MIXED GRADATION (APPROXIMATELY 80% STONE, 20% EARTH) STONE MIX TO BE COMPRISED OF THE SPECIFIED MATERIALS: A = CLASS A RIP-RAP, B = CLASS B RIP-RAP, 57 = #57 STONE E = EARTH. #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> TYPICAL 0.1' - 0.2', NOT TO EXCEED 0.4'. IF NOT BOULDER STEP THEN DROP IS DETERMINED BASED ON HEAD OF DOWNSTREAM RIFFLE.

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

NOT TO SCALE



CHARLOTTE-MECKLENBURG  
STORM WATER SERVICES  
GENERIC DETAIL REQUIREMENTS

**ROCK DROP STRUCTURE**

DRAFT - NOT TO BE USED FOR CONSTRUCTION

SHEET NUMBER

1 OF 1

STD. NO. REV.

XX.XX