



**CRITERIA FOR RIP RAP REPAIR OF LOTS :**

CASE 1: OVER 25% OF THE ARMOR STONE IS MISSING FROM THE TOP OF SLOPE DOWN TO 6' BELOW THE TIDE MARK, AND 10% OF THE AREA BETWEEN THE HIGH TIDE MARK AND 5' ABOVE THE TIDE MARK HAS SOIL EXPOSED, A SINGLE LAYER OF FILTER STONE EXPOSED, OR A COMBINATION OF EXPOSED SOIL AND FILTER STONE.

CASE 2: OVER 50% OF THE ARMOR STONE IS MISSING FROM THE TOP OF SLOPE DOWN TO 6' BELOW THE TIDE MARK, AND 10% OF THE AREA BETWEEN THE TIDE MARK AND 5' ABOVE THE TIDE MARK HAS EXPOSED FILTER STONE, BUT SOIL IS NOT VISIBLE UNDER THE ROCK.

NOTE: TIDE MARK IS THE LINE BETWEEN THE DARK, WATER STAINED ROCK AND THE LIGHTER COLORED, UNSTAINED ROCK.

**REPAIR PROCEDURES :**

REMOVE EXISTING ARMOR STONE AS NECESSARY IN THE AREA TO BE REPAIRED. REGRADE AS NECESSARY AND FILL TO A UNIFORM SLOPE WITH IMPORTED FILTER STONE. FILTER STONE SHALL BE A MINIMUM UNIFORM DEPTH OF 14" TO 18". RE- PLACE EXISTING ARMOR STONE AND IMPORTED ARMOR STONE OVER FILTER STONE TO A MINIMUM DEPTH OF TWO LAYERS AND INTERLOCKED. ARMOR STONE INTERSTICES SHALL BE FILED WITH COBBLE STONE.

- ARMOR STONE- 150 TO 200 POUND STONE.
- COBBLE STONE- 6 TO 12" DIAMETER STONE.
- FILTER STONE- 4" MINUS.

ALL ROCK SHALL BE AS REQUIRED BY SUBSECTIONS 200-1.1 AND 200-1.6 OF THE SSPWC AND SHALL HAVE A MINIMUM SPECIFIC GRAVITY OF 2.4.

**CITY OF SAN BUENAVENTURA**

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

**RIP-RAP STANDARD DETAIL**

STD. DET. NO.

**406**

APPROVED BY: *J.M. Serrano*  
PRINCIPAL CIVIL ENGINEER

APPROVED BY: *[Signature]*  
CITY ENGINEER R.C.E. 37064

DATE **8-2-13**

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1 of 1