

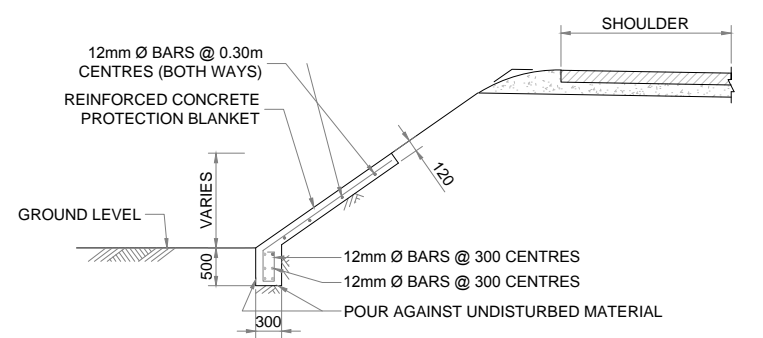
GRouted RIPRAP SLOPE PROTECTION
FOR HEIGHT OF PROTECTION < 1.00m

SECTION
GRouted RIPRAP SLOPE PROTECTION
FOR HEIGHT OF PROTECTION ≥ 1.00m AND ≤ 2.00m.

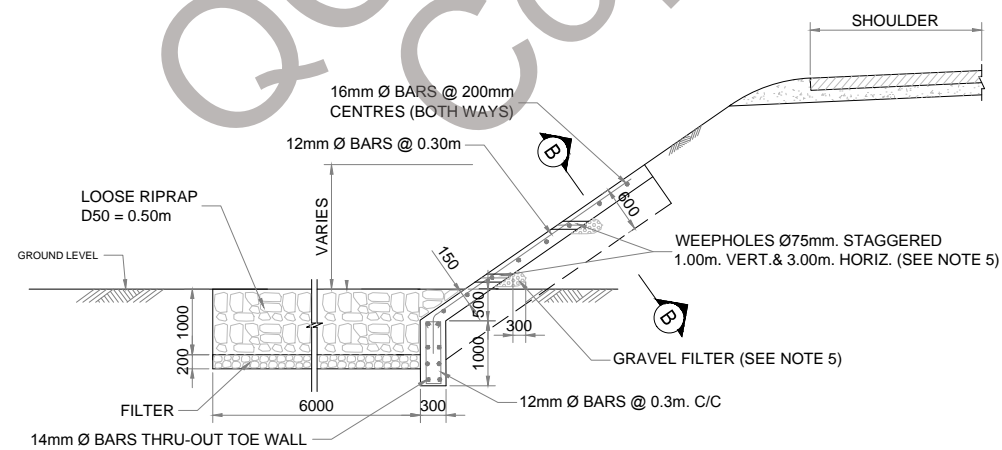
SECTION
GRouted RIPRAP SLOPE PROTECTION WITH WEEPHOLES
FOR HEIGHT OF PROTECTION > 2.00m

- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS INDICATED OTHERWISE.
 - IF THERE IS DISCREPANCY BETWEEN THE REQUIREMENTS IN THE SPECIFICATIONS AND THOSE SHOWN ON THIS DRAWING. THE SPECIFICATIONS SHALL BE FOLLOWED.
 - ALL MATERIALS, FABRICATION AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND VERIFIED BY THE ENGINEER.
 - WEEPHOLES ARE PLACED @ 0.5m. FROM TOE AND STAGGERED AT 1.00m. VERTICALLY AND 3.00m. HORIZONTALLY AND THE ARRANGEMENT SUBJECT TO ENGINEER'S APPROVAL.
 - GRADATION OF THE FILTER MATERIAL SHOULD SATISFY THE FOLLOWING CRITERIA:
 - a) IN RELATION TO BASE MATERIAL RETAINED BEHIND THE FILTER
 - D15f / D85b < 5 *f=FILTER
 - 5 < D50f / D50b < 25 *b=BASE
 - D20f / D20b > 5
 - b) IN RELATION TO WEEPHOLES
 - D85f / Dhole > 1-2
- WHERE D15f, D20f, D50f AND D85f ARE USED TO DESIGNATE THE SIZE OF THE SIEVE THAT ALLOWS 15%, 20%, 50% AND 85% RESPECTIVELY BY WEIGHT OF THE FILTER MATERIAL TO PASS THROUGH IT.
- ALSO, D20b, D50b AND D85b ARE USED TO DESIGNATE THE SIZE OF THE SIEVE THAT ALLOWS 20%, 50% AND 85% RESPECTIVELY BY WEIGHT OF THE BASE MATERIAL TO PASS THROUGH IT. Dhole IS USED TO DESIGNATE THE DIAMETER OF THE WEEPHOLE..
- IF ONE LAYER OF THE FILTER DOES NOT SATISFY THE ABOVE CRITERIA, SEVERAL LAYERS MAY BE USED, PROVIDED THAT EACH LAYER IS AT LEAST GREATER OF 5 x D50f OR 150 mm THICK.

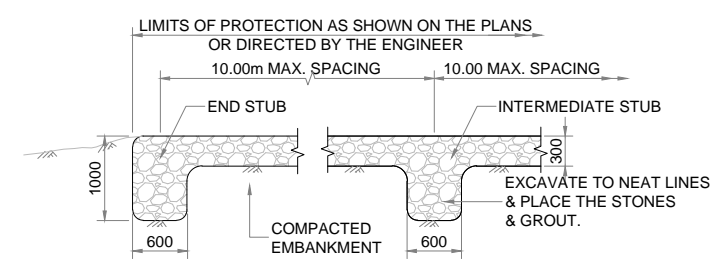
REFERENCE DRAWINGS AND DOCUMENTS			
No.	REVISIONS	APP'D	DATE
CLIENT			
TITLE			
STANDARD DRAWINGS MAIN ROADS			
DRAWING TITLE			
SURFACE DRAINAGE TYPICAL DETAILS OF EMBANKMENT PROTECTION			
DRAWN	-	SCALE	N.T.S
CHECKED	-	DATE	-
APPROVED	-	SIZE	A1
PROJECT No.	-	DWG. No.	N-245



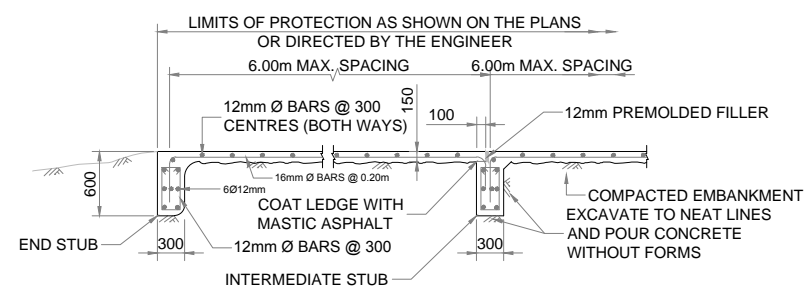
REINFORCED CONCRETE SLOPE PROTECTION
FOR HEIGHT OF PROTECTION < 1.00m



REINFORCED CONCRETE SLOPE PROTECTION
FOR HEIGHT OF PROTECTION > 1.00m



SECTION OF STUBS
SECTION A - A



SECTION OF STUBS
SECTION B - B
REINFORCED CONCRETE SLOPE PROTECTION
FOR HEIGHT OF PROTECTION ≥ 1.00m