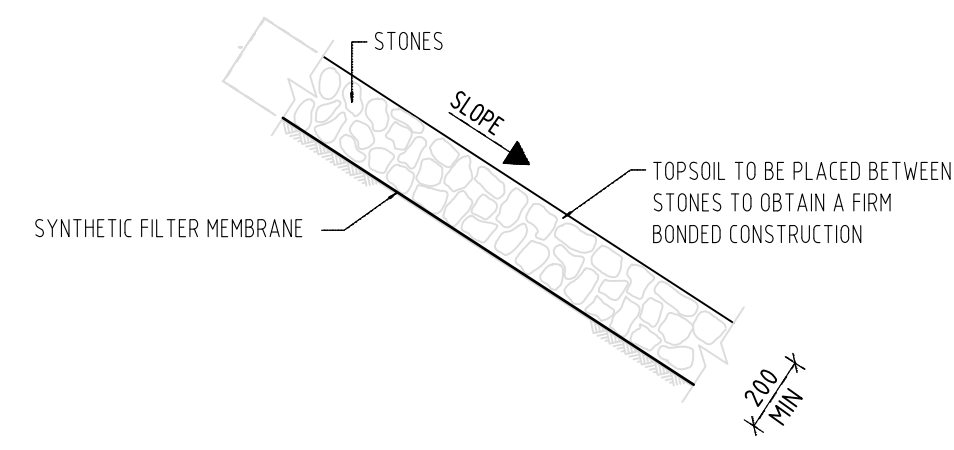
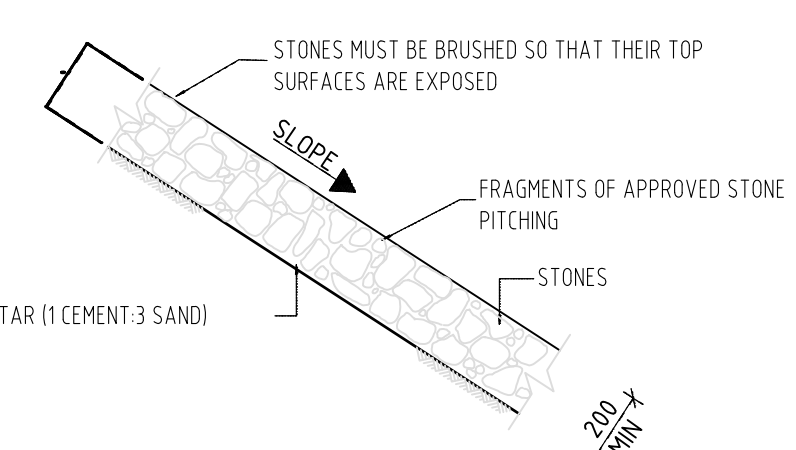


METHOD 1



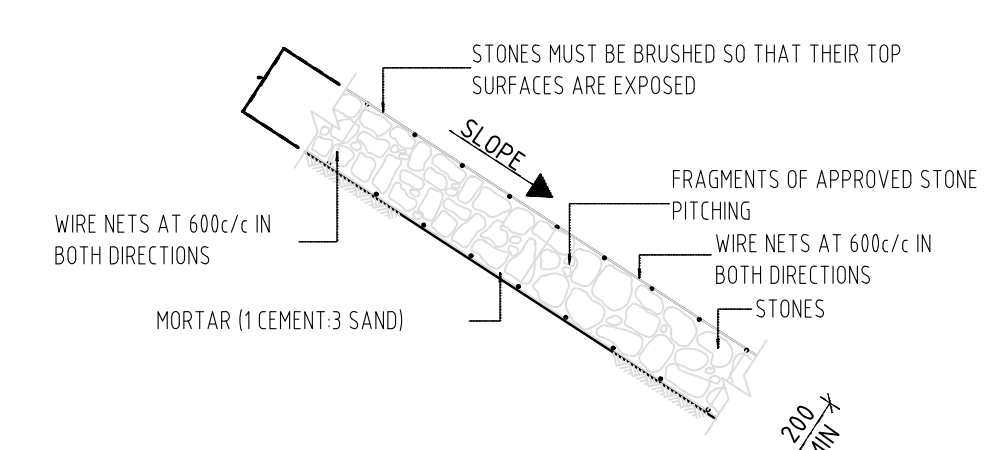
METHOD 2

**PLAIN STONE PITCHING**  
(SCALE - 1:20)



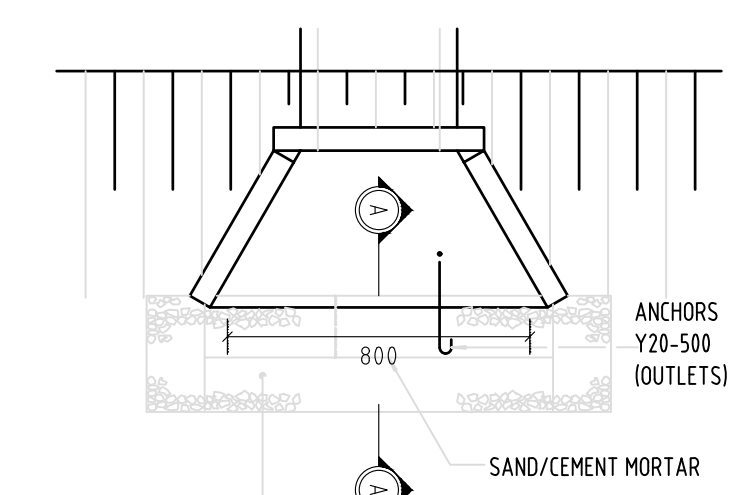
**GROUTED STONE PITCHING**  
(SCALE - 1:20)

NOTES:  
THE TECHNIQUE AND REQUIRMENTS LAID DOWN IN METHOD 1 SHALL APPLY WITH THE FOLLOWING EXCEPTION:  
1. THE SPACES BETWEEN THE STONES SHALL BE FILLED WITH MORTAR.

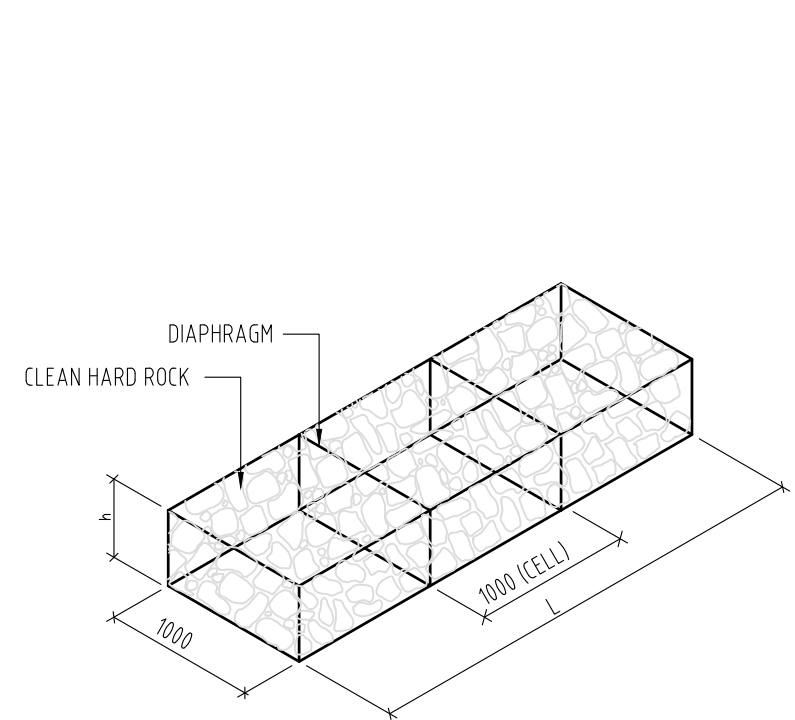


**WIRE AND GROUTED STONE PITCHING**  
(SCALE - 1:20)

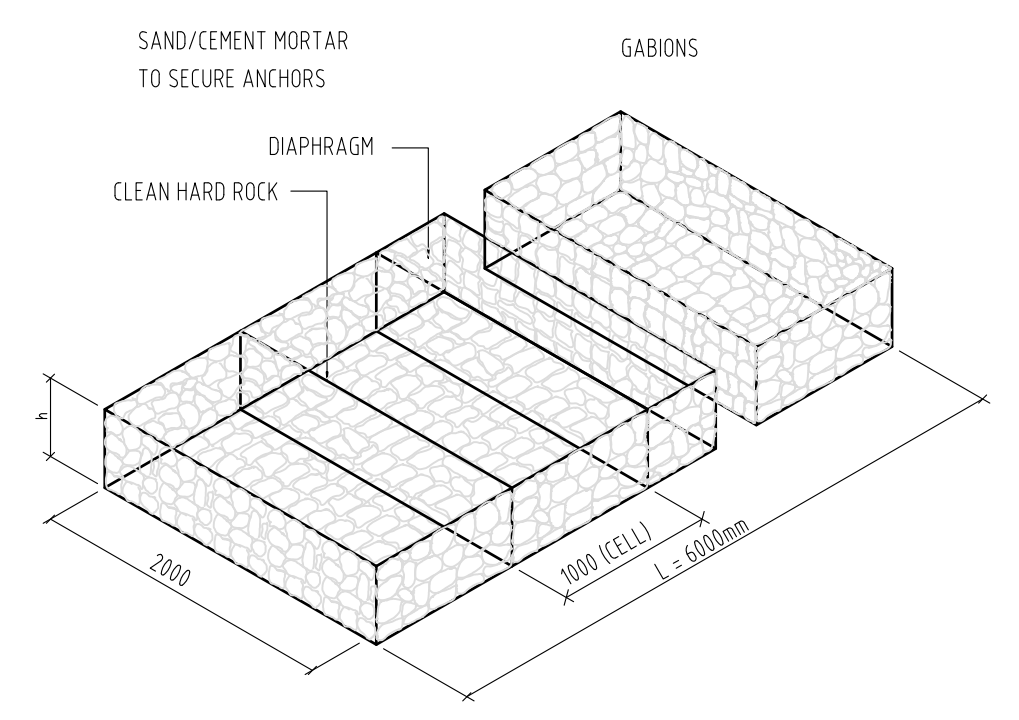
NOTES:  
THE TECHNIQUE AND REQUIRMENTS LAID DOWN IN METHOD 1 SHALL APPLY WITH THE FOLLOWING EXCEPTION:  
1. PITCHING IN ACCORDANCE WITH GROUTED STONE PITCHING  
2. CONSTRUCTION SHALL BE AS FOLLOWS:  
a) PLACING OF BOTTOM WIRE NET  
b) ATTACHING OF WIRE TIES TO BOTTOM MESH  
c) PITCHING  
d) PLACING THE TOP WIRE NET AND FASTENING WIRE TIES  
e) GROUTING.



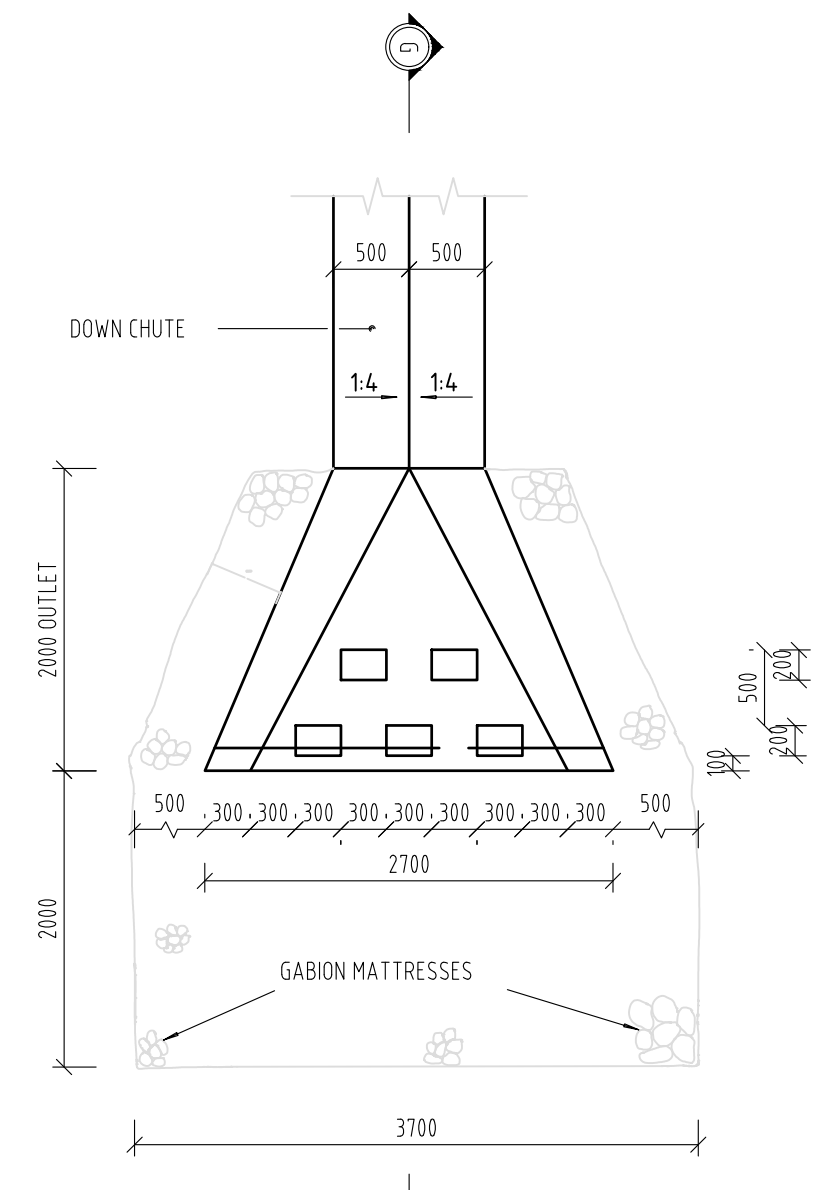
**PLAN OF INLET/OUTLET**  
(SCALE - 1:20)



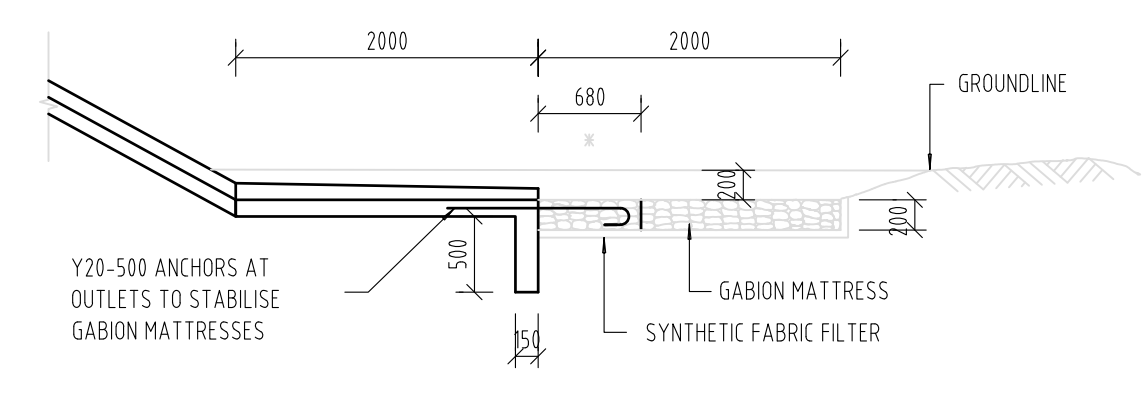
**BOXES**  
(SCALE - 1:50)



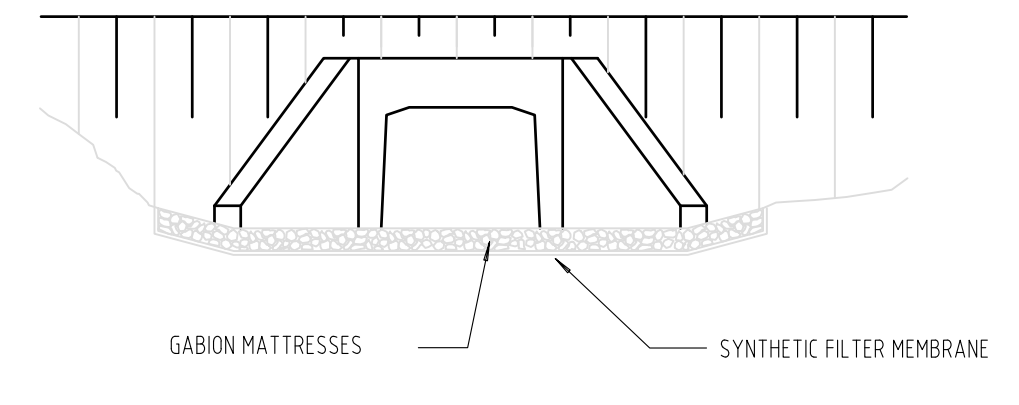
**MATTRESSES**  
(SCALE - 1:50)



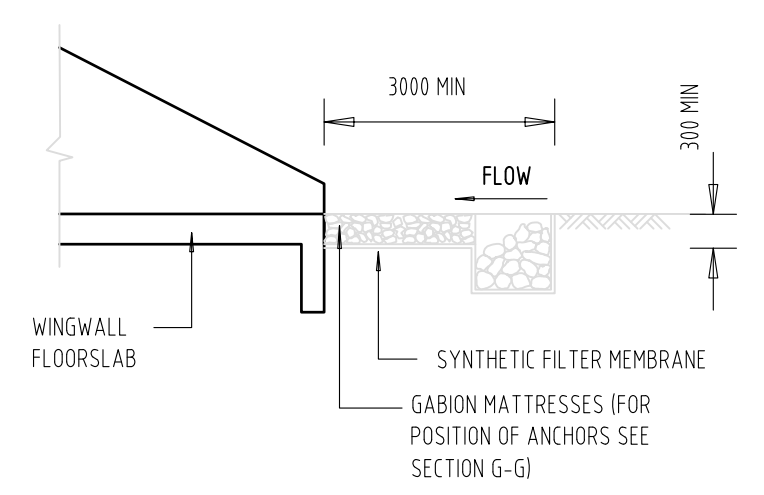
**PLAN OF DOWN CHUTE AND ENERGY BREAKER**  
(SCALE - 1:50)



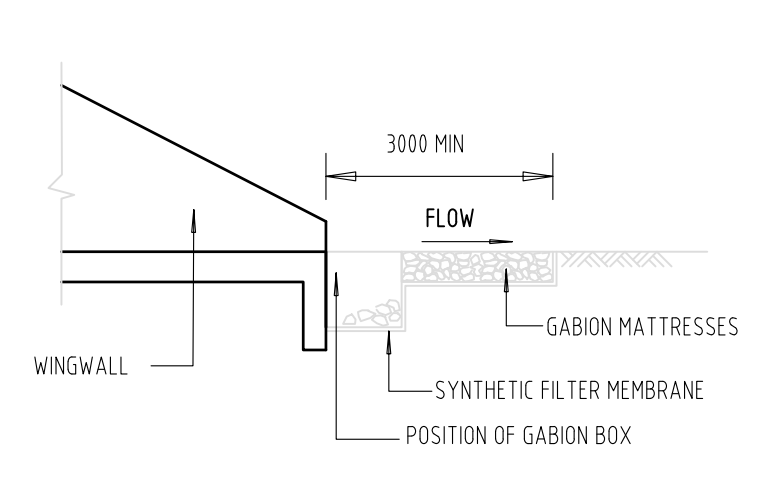
**SECTION G-G**  
(SCALE - 1:50)



**ELEVATION OF INLET/OUTLET**  
(SCALE - SCHEMATIC)

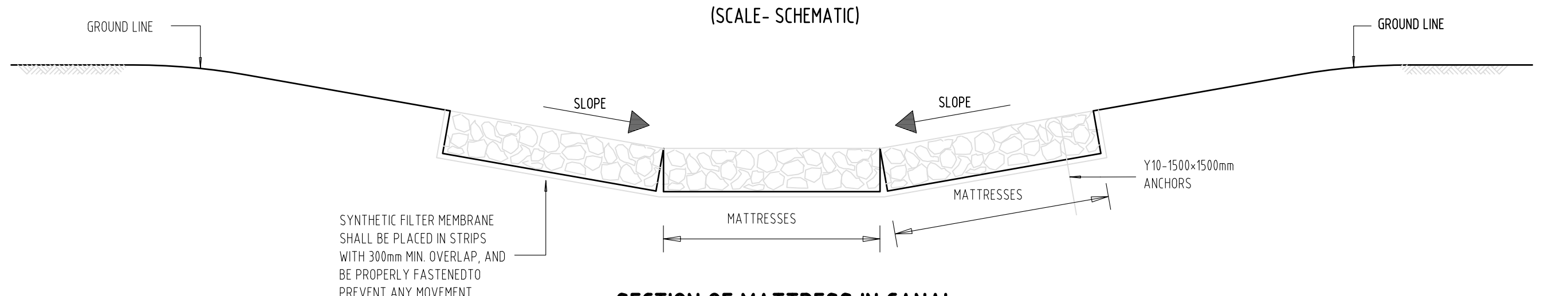


**SECTION A-A (OUTLET)**



**SECTION A-A (INLET)**

**DETAIL OF GABION MATTRESSES AND BOXES AT INLETS AND OUTLETS**  
(SCALE - SCHEMATIC)



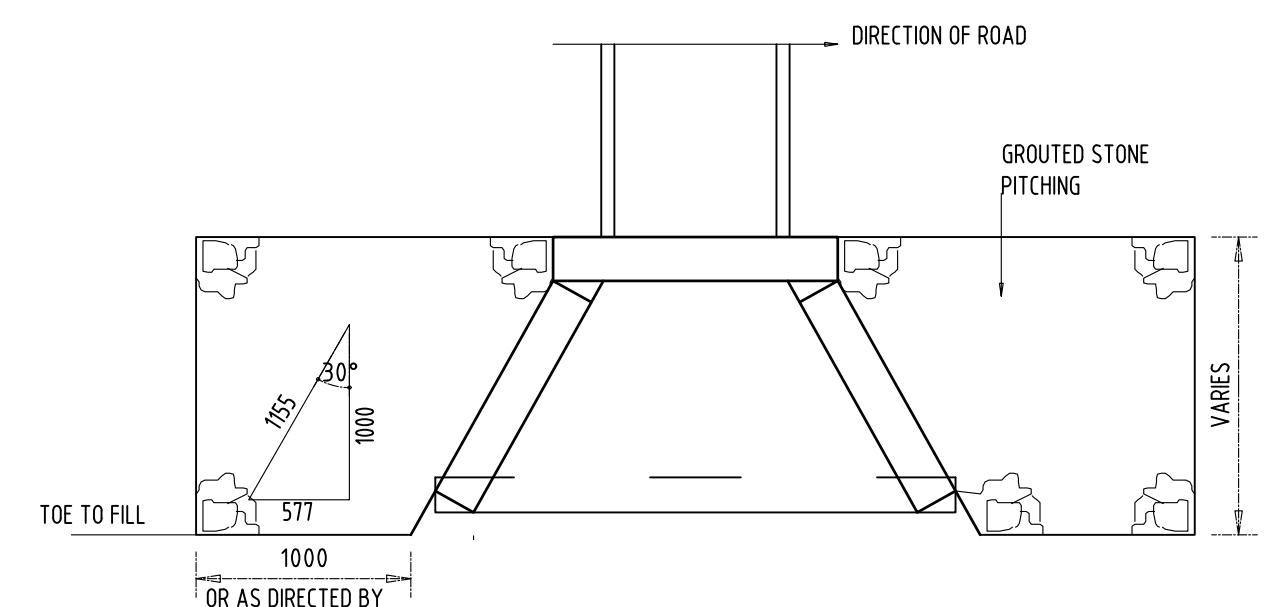
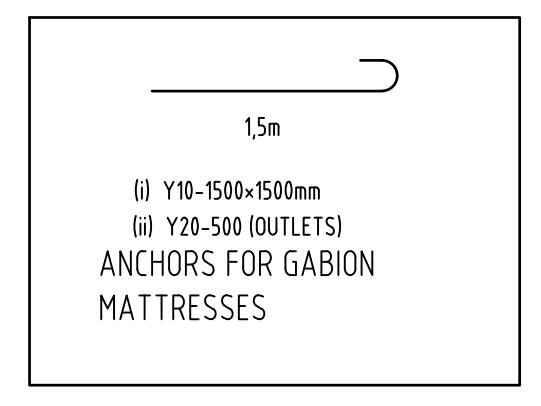
**SECTION OF MATTRESS IN CANAL**  
(SCALE - SCHEMATIC)

STANDARD SIZES OF BOXES	
LENGTH	1000mm, 2000mm, 3000mm, 4000mm
WIDTH	1000mm
DEPTH	500mm, 1000mm
DIAPHRAGM SPACING	1000mm

MESH SIZE AND WIRE DIAMETER FOR CAGES		
DEPTH OF GABION	MESH SIZE (mm)	WIRE DIA. (mm)
500mm AND OVER	80 x 100	2,7
200mm TO 300mm	80 x 100	2,5

STANDARD SIZES	
LENGTH	6000mm
WIDTH	2000mm
DEPTH	170mm, 230mm, 300mm

ROCK USED FOR THE FILLING OF CAGES		
DEPTH OF CAGES	ROCK SIZE (DIMENSIONS)	
	MIN. (mm)	MAKS. (mm)
230	100	125
300	100	200
300	100	250
1000	100	300



**TYPICAL DETAIL OF GROUTED STONE PITCHING ADJACENT TO WINGWALLS**  
(SCALE - SCHEMATIC)

1m 2m 3m 4m 5m 6m 7m 8m 9m 10m  
ORIGINAL SCALE 1:100

<p><b>FOR PRELIMINARY</b></p>	DESIGNED BY: SM NXUMALO (Pr. Technician)	Palabora Copper (Pty) Limited PO Box 65 1 Copper Road 1389	HAYELENI CONSULTING ENGINEERS 12 BICCARD STREET BICCARD HEIGHTS OFFICE 17 POLOKWANE 0699	PLM 00/2019	Revision: 20 / 1	SHEET 26 of 37
	CHECKED BY: LG NGCOBO (Pr. Technologist)	TEL: (015) 780 2911 FAX: (015) 780 2093	TEL: (015) 297 7434 FAX: (086) 244 6999	UPGRADING OF P43/3 ROAD Ga-SELWANA ACCESS ROAD	Revision: 20 / 1	AS SHOWN
	DRAWN BY: F BALOYI (Candidate Technician)			STANDARD DETAILS STONE PITCHING & GABION PROTECTION	CONSULTANTS DRAWING NUMBER HCE 000/2019/001	CLIENT DRAWING NUMBER PLM 000/2019/001
	CHECKED BY: SM NXUMALO (Pr. Technician)					