

MATROLAB (PTY) LTD

- CIVIL ENGINEERING SERVICES -
Reg.No.: 2003/029180/7 - VAT. Reg.No.: 4040210587

9b Wilken Street, Rocky Drift, White River, 1240
Posnet Suite #62, Private Bag x11326, Nelspruit, 1200

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TEST RESULTS

Lidwala Consulting Engineers
P.O Box 2930
Nelspruit
1200
Attention: Mr Pieter De Jager

Project : Township Development at Mkhando Local Municipality
: Amsterdam
Your Ref :
Our Ref : 114302ggg
Date Reported : 19/05/2016

SIEVE ANALYSIS, ATTERBERG LIMITS, CBR, UCS(TM1:A1-A5,A7,A8)

SAMPLE NO.	S6245	S6246	S6247	S6248
HOLE NO.	60	63	64	65
ROAD NO.				
DEPTH	200-500	500-1000	500-900	300-500
CHAINAGE				
LAYER TYPE	3	3	3	2
STABILISED WITH	Neat	Neat	Neat	Neat
SUPPLIER				
CURING METHOD				
DESCRIPTION	Light Yellow Gravely Clay	Light Y. Orange Gravely Clay	Light Y. Brown Sandy Gravel	Light Y. Brown Sandy Gravel

SIEVE ANALYSIS (% PASSING)

Sieve Size	S6245	S6246	S6247	S6248
75 mm				
63 mm	100		100	100
53 mm	85		93	93
37.5 mm	83	100	87	93
26.5 mm	79	97	82	91
19.0 mm	77	93	77	87
13.2 mm	75	86	70	76
4.75 mm	71	65	50	51
2.0 mm	63	57	41	40
0.425 mm	57	41	31	31
0.075 mm	47	36	24	23

SOIL MORTAR

Material	S6245	S6246	S6247	S6248
COARSE SAND <2.0mm >0.425mm	10	28	24	22
FINE SAND <0.425mm >0.075mm	16	9	17	20
MATERIAL <0.075mm	74	63	59	58

CONSTANTS

Property	S6245	S6246	S6247	S6248
GRADING MODULUS	1.33	1.66	2.04	2.06
PRA CLASSIFICATION	A-4(2)	A-4(0)	A-1-b(0)	A-1-b(0)
COLTO CLASSIFICATION			G8	
TRH Class.(INSITU 93% 90%)			G8 G10	
LIQUID LIMIT (%)	-		-	-
PLASTICITY INDEX (0.425mm)	SP	26	SP	NP
LINEAR SHRINKAGE (%)	1.5	9	1.0	0.0
MOISTURE CONTENT (%)		4.5	2.0	

MOD AASHTO

Property	S6245	S6246	S6247	S6248
MAXIMUM DRY DENSITY (kg/m ³)			1990	
OPTIMUM MOISTURE CONTENT(%)			10.7	
MOULDING MOISTURE (%)			10.7	

Property	S6245	S6246	S6247	S6248
CBR-UCS @ 100% MOD AASHTO			24	
CBR-UCS @ 98% MOD AASHTO			21	
CBR-UCS @ 97% MOD AASHTO			19	
CBR-UCS @ 95% MOD AASHTO			17	
CBR-UCS @ 93% MOD AASHTO			12	
CBR-UCS @ 90% MOD AASHTO			6.8	

CBR-UCS @ % MOD AASHTO derived from calculation.

% SWELL AT [MOD][NRB][PROC]	S6245	S6246	S6247	S6248
			0.07	0.11
			0.15	

Remarks :

FORM: A1

4.2.1R(SGS)(2016.02.12)

SANAS Technical Signatory / G.T Van Rooyen

MATROLAB GROUP OF COMPANIES IS NOW PART OF SGS, THE WORLD'S S
LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

SGS

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CBR-UCS GRAPH/S (OPTIONAL INFORMATION)

