

# SOILCO MATERIALS INVESTIGATIONS ( PTY ) LTD

## CIVIL ENGINEERING MATERIALS TESTING LABORATORY



Reg. No. : 1965/09585/07

25 WESTMEAD ROAD - WESTMEAD P.O.BOX 15318 WESTMEAD 3608 KWAZULU - NATAL

TELEPHONE : 031 7004325 TELEFAX : 031 7001909 email : soilslab@mweb.co.za

<b>Client</b>	BSM Laboratories
<b>Project</b>	Bayhead Road
<b>Job Card No.</b>	243400
<b>Date of Test</b>	2023-10-26
<b>Field Technician</b>	M.M
<b>Position</b>	LHS S/S
<b>Test Pit Number</b>	TP 3
<b>Chainage</b>	
<b>Co - Ordinates</b>	<b>S</b> 29°53.435"
	<b>E</b> 030°59.788"



## FIELD SOIL SURVEY TEST REPORT

Water Table	Soil Legend	Depth ( mm )	DESCRIPTION	
			Moisture ; Colour ; Consistency ; Structure ; Soil Type ; Origin; Sampling ; Laboratory Testing : - ( I = Indicator ; M = MOD AASHTO ; C = CBR )	
		70	Aged brittle ASPHALT.	
			Aged slightly tackey ASPHALT.	4L
		300		
			Slightly moist, dusky blue pale red, medium dense, crushed rock quarzitic SANDSTONE.	
		420	PHEN - HCL +	4L
		600	Slightly moist (MC = 3.7%), dark yellow brown, medium dense, crushed rock TILLITE.	
			PHEN - HCL +	4L
		800	Slightly moist (MC = 6.2%), dark brown black, loose, uniform, silty SAND + sandstone gravel with coal, reworked residual.	2L
		1000	Moist (MC = 5.8%), dark brown, loose, intact, beach SAND + sandstone gravel, residual.	2L

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<b>Remarks</b>	:	Type of Excavation	Hand <input checked="" type="checkbox"/>	TLB <input type="checkbox"/>	Excavator <input type="checkbox"/>
		Excavation Stopped	<input checked="" type="checkbox"/>	Refusal <input type="checkbox"/>	<input type="checkbox"/>
		Struggling to Excavate	<input type="checkbox"/>		
		Photo No :	8631-8632 / 8635-8636 / 8637-8638		

For Soilco : \_\_\_\_\_ (Technical Signatory).

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<b>Client</b>	BSM Laboratories	
<b>Project</b>	Bayhead Road	
<b>Job Card No.</b>	243400	
<b>Date of Test</b>	2023-10-26	
<b>Field Technician</b>	M.M	
<b>Position</b>	RHS N/S	
<b>Test Pit Number</b>	TP 4	
<b>Chainage</b>		
<b>Co - Ordinates</b>	<b>S</b> 27°53.361" <b>E</b> 030°59.715"	

## FIELD SOIL SURVEY TEST REPORT

Water Table	Soil Legend	Depth ( mm )	DESCRIPTION	
			Moisture ; Colour ; Consistency ; Structure ; Soil Type ; Origin; Sampling ; Laboratory Testing : - ( I = Indicator ; M = MOD AASHTO ; C = CBR )	
		80	Aged brittle ASPHALT.	4L
		190	Aged slightly tackey ASPHALT.	
		400	Slightly moist (MC = 4.5%), pale red dark grey, medium dense, crushed rock SANDSTONE. PHEN - HCL +	4L
		800	Slightly moist (MC = 9.9%), dark grey black, loose, uniform, dune SAND with crushed coal, reworked residual.	4L
		1000	Moist (MC = 6.3%), light brown, loose, intact, beach SAND + concrete boulder, residual.	2L

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**Remarks** : Type of Excavation  Hand  TLB  Excavator  
 Excavation Stopped   Refusal   
 Struggling to Excavate   
 Photo No : 8633-8634 / 8639-8642

For Soilco : \_\_\_\_\_ (Technical Signatory).

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<b>Client</b>	BSM Laboratories
<b>Project</b>	Bayhead Road
<b>Job Card No.</b>	243400
<b>Date of Test</b>	2023-10-27
<b>Field Technician</b>	M.M
<b>Position</b>	RHS N/S
<b>Test Pit Number</b>	TP 5
<b>Chainage</b>	
<b>Co - Ordinates</b>	<b>S</b> 27°54.238"
	<b>E</b> 031°00.383"



## FIELD SOIL SURVEY TEST REPORT

Water Table	Soil Legend	Depth ( mm )	DESCRIPTION	
			Moisture ; Colour ; Consistency ; Structure ; Soil Type ; Origin; Sampling ; Laboratory Testing : - ( I = Indicator ; M = MOD AASHTO ; C = CBR )	
		100	Aged brittle ASPHALT. <span style="float: right;">2L</span>	
		220	Aged slightly tackey ASPHALT.	
		440	Slightly moist (MC = 3.1%), pale red, medium dense, crushed rock SANDSTONE. PHEN - HCL + <span style="float: right;">4L</span>	
		780	Slightly moist to moist (MC = 10.2%), dark brown, loose, uniform, silty SAND with coal + gravel, reworked residual. <span style="float: right;">4L</span>	
		1000	Moist (MC = 10.9%), light brown, loose, intact, beach SAND, residual. <span style="float: right;">2L</span>	

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**Remarks** :

Type of Excavation	Hand <input checked="" type="checkbox"/>	TLB <input type="checkbox"/>	Excavator <input type="checkbox"/>
Excavation Stopped	<input checked="" type="checkbox"/>	Refusal <input type="checkbox"/>	<input type="checkbox"/>
Struggling to Excavate	<input type="checkbox"/>		

Photo No : 8643-8644 / 8651 / 8655

For Soilco : \_\_\_\_\_ (Technical Signatory).

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Reg. No. : 1965/09585/07

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<b>Client</b>	BSM Laboratories	
<b>Project</b>	Bayhead Road	
<b>Job Card No.</b>	243400	
<b>Date of Test</b>	2023-10-27	
<b>Field Technician</b>	M.M	
<b>Position</b>	RHS N/S	
<b>Test Pit Number</b>	TP 6	
<b>Chainage</b>		
<b>Co - Ordinates</b>	<b>S</b> 29°53.168"	
	<b>E</b> 030°59.476"	

## FIELD SOIL SURVEY TEST REPORT

Water Table	Soil Legend	Depth ( mm )	DESCRIPTION	
			Moisture ; Colour ; Consistency ; Structure ; Soil Type ; Origin; Sampling ; Laboratory Testing : - ( I = Indicator ; M = MOD AASHTO ; C = CBR )	
		60	Aged brittle ASPHALT.	
		290	Aged slightly tackey ASPHALT. <span style="float: right;">4L</span>	
		410	Slightly moist, dusky blue dark grey pale red, medium dense, crushed rock SANDSTONE. PHEN - HCL + <span style="float: right;">4L</span>	
		600	Slightly moist (MC = 4.3%), dusky blue dark yellow brown, medium dense, crushed rock TILLITE. PHEN - HCL - <span style="float: right;">4L</span>	
		1000	Slightly moist to moist (MC - 6.1%), dark brown, loose, uniform, silty SAND with coal + building rubble. <span style="float: right;">2L</span>	

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**Remarks** :

Type of Excavation	Hand <input checked="" type="checkbox"/>	TLB <input type="checkbox"/>	Excavator <input type="checkbox"/>
Excavation Stopped	<input checked="" type="checkbox"/>	Refusal <input type="checkbox"/>	<input type="checkbox"/>
Struggling to Excavate	<input type="checkbox"/>		
Photo No :	8645-8650		

For Soilco : \_\_\_\_\_ (Technical Signatory).

# SOILCO MATERIALS INVESTIGATIONS ( PTY ) LTD

## CIVIL ENGINEERING MATERIALS TESTING LABORATORY



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<b>Client</b>	BSM Laboratories
<b>Project</b>	Bayhead Road
<b>Job Card No.</b>	243400
<b>Date of Test</b>	2023-10-26
<b>Field Technician</b>	M.M
<b>Position</b>	LHS S/S
<b>Test Pit Number</b>	TP 7
<b>Chainage</b>	
<b>Co - Ordinates</b>	<b>S</b> 29°54.224"
	<b>E</b> 031°00.361"



### FIELD SOIL SURVEY TEST REPORT

Water Table	Soil Legend	Depth ( mm )	DESCRIPTION	
			Moisture ; Colour ; Consistency ; Structure ; Soil Type ; Origin; Sampling ; Laboratory Testing : - ( I = Indicator ; M = MOD AASHTO ; C = CBR )	
		150	Aged brittle ASPHALT. <span style="float: right;">4L</span>	
		290	Aged slightly tackey ASPHALT.	
		410	Slightly moist (MC = 2.9%), pale red, medium dense, crushed rock SANDSTONE PHEN - HCL + <span style="float: right;">2L</span>	
		520	Slightly moist (MC = 3.4%), dusky blue pale red, medium dense, crushed rock SANDSTONE. PHEN - HCL - <span style="float: right;">2L</span>	
		650	Slightly moist (MC = 4.8%), dark yellow brown, medium dense, uniform, weathered TILLITE + silty sand, reworked residual. <span style="float: right;">2L</span>	
		1000	Moist (MC = 5.2%), dark brown, loose, intact, dune SAND + tillite gravel, residual. <span style="float: right;">2L</span>	

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**Remarks** :

Type of Excavation	Hand <input checked="" type="checkbox"/>	TLB <input type="checkbox"/>	Excavator <input type="checkbox"/>
Excavation Stopped	<input checked="" type="checkbox"/>	Refusal <input type="checkbox"/>	<input type="checkbox"/>
Struggling to Excavate	<input type="checkbox"/>		
Photo No :	8620-8624		

For Soilco : \_\_\_\_\_ (Technical Signatory).

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<b>Client</b>	BSM Laboratories
<b>Project</b>	Bayhead Road
<b>Job Card No.</b>	243400
<b>Date of Test</b>	2023-10-30
<b>Field Technician</b>	M.M
<b>Position</b>	LHS
<b>Test Pit Number</b>	TP 8
<b>Chainage</b>	
<b>Co - Ordinates</b>	<b>S</b> 29°53.237"
	<b>E</b> 030°59.532"



## FIELD SOIL SURVEY TEST REPORT

Water Table	Soil Legend	Depth (mm)	DESCRIPTION	
			Moisture ; Colour ; Consistency ; Structure ; Soil Type ; Origin; Sampling ; Laboratory Testing : - ( I = Indicator ; M = MOD AASHTO ; C = CBR )	
		50	Aged brittle ASPHALT.	
		270	Aged brittle ASPHALT.	4L
		440	Slightly moist, dusky blue pale red, medium dense, crushed rock SANDSTONE. PHEN - HCL +	4L
		580	Slightly moist, dark yellow brown, medium dense, crushed rock TILLITE. PHEN - HCL -	3L
		720	Slightly moist, dark brown, loose, uniform, silty SAND + coal with sandstone gravel, reworked residual.	2L
		1000	Moist, dark brown, loose, intact, river SAND, residual.	2L

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**Remarks** :

Type of Excavation	Hand <input checked="" type="checkbox"/>	TLB <input type="checkbox"/>	Excavator <input type="checkbox"/>
Excavation Stopped	<input checked="" type="checkbox"/>	Refusal <input type="checkbox"/>	<input type="checkbox"/>
Struggling to Excavate	<input type="checkbox"/>		

Photo No : 8656-8657 / 8665-8668

For Soilco : \_\_\_\_\_ (Technical Signatory).

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<b>Client</b>	BSM Laboratories	
<b>Project</b>	Bayhead Road	
<b>Job Card No.</b>	243400	
<b>Date of Test</b>	2023-10-30	
<b>Field Technician</b>	M.M	
<b>Position</b>	RHS	
<b>Test Pit Number</b>	TP 9	
<b>Chainage</b>		
<b>Co - Ordinates</b>	<b>S</b> 27°35.757"	
	<b>E</b> 031°00.082"	

## FIELD SOIL SURVEY TEST REPORT

Water Table	Soil Legend	Depth ( mm )	DESCRIPTION	
			Moisture ; Colour ; Consistency ; Structure ; Soil Type ; Origin; Sampling ; Laboratory Testing : - ( I = Indicator ; M = MOD AASHTO ; C = CBR )	
		100	Aged brittle ASPHALT.	2L
		180	Aged slightly tackey ASPHALT.	
		300	Slightly moist, light yellow orange, medium dense, crushed rock SANDSTONE. PHEN - HCL -	3L
		400	Slightly moist, pale red dark grey, loose, crushed rock SANDSTONE. PHEN - HCL +	2L
		900	Slightly moist, dark brown, loose, uniform, silty SAND + coal, reworked residual.	2L
		1000	Slightly moist, light brown, loose, intact, beach SAND, residual.	2L

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**Remarks** : Type of Excavation  Hand  TLB  Excavator  
 Excavation Stopped  Refusal   
 Struggling to Excavate   
 Photo No : 8658-8664

For Soilco : \_\_\_\_\_ (Technical Signatory).

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<b>Client</b>	BSM Laboratories	
<b>Project</b>	Bayhead Road	
<b>Job Card No.</b>	243400	
<b>Date of Test</b>	2023-10-25	
<b>Field Technician</b>	M.M	
<b>Position</b>	LHS S/S	
<b>Test Pit Number</b>	TP 11	
<b>Chainage</b>		
<b>Co - Ordinates</b>	<b>S</b> 27°53.826" <b>E</b> 031°00.111"	

## FIELD SOIL SURVEY TEST REPORT

Water Table	Soil Legend	Depth ( mm )	DESCRIPTION	
			Moisture ; Colour ; Consistency ; Structure ; Soil Type ; Origin; Sampling ; Laboratory Testing : - ( I = Indicator ; M = MOD AASHTO ; C = CBR )	
		90	Aged brittle ASPHALT.	
		280	Aged slightly tackey ASPHALT.	4L
		420	Slightly moist (MC = 3.3%), pale red, medium dense, crushed rock quarzitic SANDSTONE. PHEN - HCL +	2L
		600	Slightly moist (MC = 6.4%), dusky blue grey dark yellow brown, medium dense, slightly clay crushed rock TILLITE. PHEN - HCL -	2L
		1000	Slightly moist, dark brown red, loose, intact, silty SAND + ash and tillite gravel, residual.	2L

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**Remarks** :

Type of Excavation	Hand <input checked="" type="checkbox"/>	TLB <input type="checkbox"/>	Excavator <input type="checkbox"/>
Excavation Stopped	<input checked="" type="checkbox"/>	Refusal <input type="checkbox"/>	<input type="checkbox"/>
Struggling to Excavate	<input type="checkbox"/>		
Photo No :	8626-8630		

For Soilco : \_\_\_\_\_ (Technical Signatory).