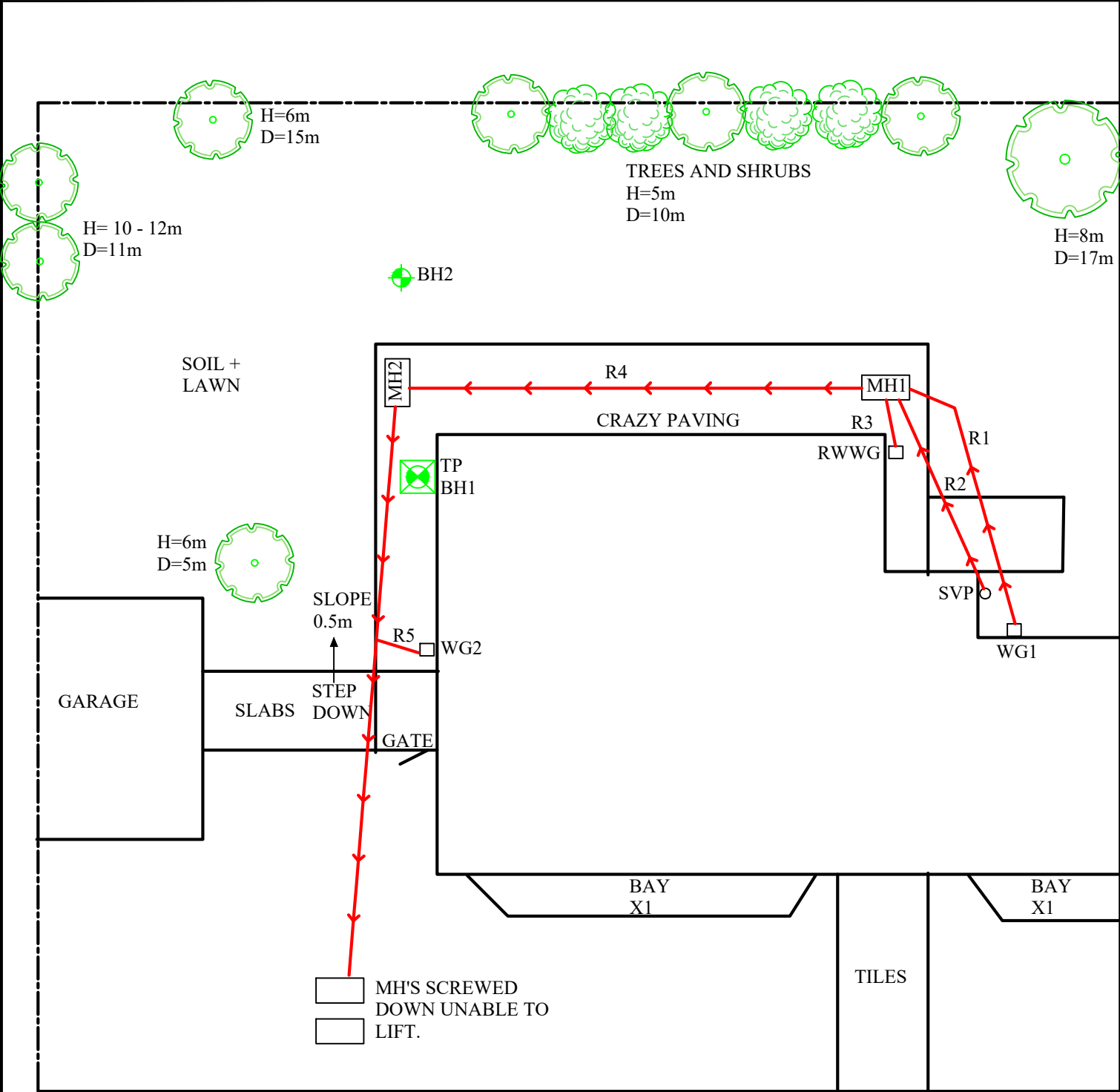




SITE INVESTIGATION REPORT

REPORT NUMBER	GHG402
CLIENT	GHG SOLUTIONS LIMITED
SITE ADDRESS	14 Bloomfield Road, London N6 4ET S2332465
DATE OF VISIT	07/12/2023
DATE REPORTED	10/01/2024



Scale: N.T.S.

TEST REPORT:
Trial Pit
REPORT NUMBER: C1084008 / 280294.1.1.1

TRIAL PIT REF: TP1

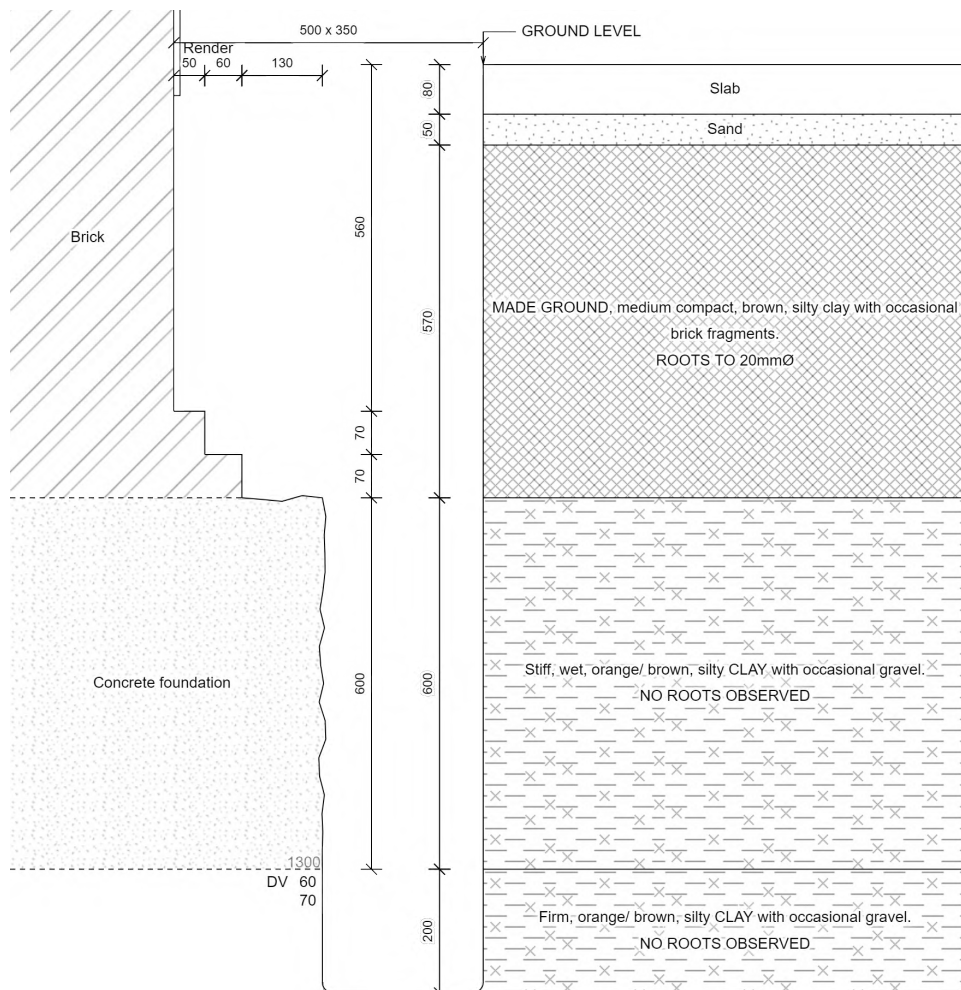
CLIENT: GHG SOLUTIONS LIMITED

JOB NO: GHG402

EXCAVATION METHOD: Hand tools

DATE: 07/12/2023

SITE: 14 BLOOMFIELD ROAD

WEATHER: Dry


For Strata below 1500mm see Bore Hole log

BH taken at rear of TP, unable to avoid water ingress

Key:

D Small disturbed sample J Jar sample
B Bulk disturbed sample V Pilcon vane (kPa)
W Water sample M Mackintosh probe
TDTD Too dense to drive

Remarks:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.
The laboratory does not apply a conformity statement to test reports as standard, unless specifically requested by the customer.

For and on behalf of CTS

Adam Mason - Quality Control



Approved Signatory

Report date 07-Dec-23

[illegible]

[illegible]

Construction Testing Solutions
4 Oak Spinney Park
Ratby Lane
Leicester Forest East
Leicestershire
LE3 3AW

Intec
Parc Menai, Bangor,
Gwynedd, North Wales
LL57 4FG
Tel: 01248 672652
Fax: 01248 672601

ROOT IDENTIFICATION

14 Bloomfield Road

Client Reference: GHG402
Report Date: 14 December 2023
Our Ref: R56335

Sub Sample	Species Identified		Root Diameter	Starch
BH1:				
to 1.7m	<i>Populus</i> or <i>Salix</i> spp.	1	1 mm	Absent
BH2:				
to 2.2m	<i>Prunus</i> spp.	2	6 mm	Abundant

Comments:

- 1 - In a state of decay.
2 - Plus 3 others also identified as *Prunus* spp.

Populus spp. are poplars and aspen; *Salix* spp. are willows.

Prunus spp. include blackthorn, cherry, cherry-laurel, Portuguese laurel, peach, plum, and related species.

Signed: R. Shaw

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.



Coding Sheet		Sheet:	1	Site:	14 BLOOMFIELD ROAD			
		Job No.:	GHG402					
		Date:	07/12/2023	Client:	GHG SOLUTIONS			

Run:	1								
From:		MH1	Invert Level:	550	Direction:	U/S			
To:		wg1	Invert Level:		Function:	F/W			
Pipe Material:		VC	Pipe Dia:	100					
Water/Pressure Test:			Drain Break-In:	No	Gully Condition:	As Built			
Distance (m)	Code	Clock Ref at to	Dia mm	Intrusion % mm	Shared Run:	No			
					If Shared How:				
0.00	ST				Remarks	Surface Material	Length (m)		
0.00	LR				Line deviates right	slabs and concrete	0		
1.80	CC	12	12		Crack circumferential				
1.80	RFJ				Roots fine at joint				
2.70	RFJ				Roots fine at joint				
4.00	LR				Line deviates right				
4.00	DEG			100	Debris grease				
4.10	FH				unable to push		4.1m		
Comments:									

Run:	2								
From:		MH1	Invert Level:	550	Direction:	U/S			
To:		svp	Invert Level:		Function:	F/W			
Pipe Material:		VC	Pipe Dia:	100					
Water/Pressure Test:			Drain Break-In:	No	Gully Condition:				
Distance (m)	Code	Clock Ref at to	Dia mm	Intrusion % mm	Shared Run:	No			
					If Shared How:				
0.00	ST				Remarks	Surface Material	Length (m)		
2.70	CC	12	12		Crack circumferential	slabs and concrete	0		
3.90	LU				Line deviates up				
4.10	FH				reached svp		4.1m		
Comments:									

Run:	3								
From:		MH1	Invert Level:	550	Direction:	U/S			
To:		rwg	Invert Level:		Function:	S/W			
Pipe Material:		VC	Pipe Dia:	100					
Water/Pressure Test:			Drain Break-In:	No	Gully Condition:	As Built			
Distance (m)	Code	Clock Ref at to	Dia mm	Intrusion % mm	Shared Run:	No			
					If Shared How:				
0.00	ST				Remarks	Surface Material	Length (m)		
0.20	LR				Line deviates right	slabs	0		
1.00	LU				Line deviates up				
1.00	FH				reached rwg		1m		
Comments:									

Run:	4										
From:		MH1	Invert Level:		550	Direction:	D/S				
To:		mh2 and front	Invert Level:			Function:	Comb				
Pipe Material:		VC	Pipe Dia:		100						
Water/Pressure Test:			Drain Break-In:		No	Gully Condition:					
Distance (m)	Code	Clock Ref at to		Dia mm	Intrusion % mm		Shared Run: If Shared How:	No			
0.00	ST						Remarks	Surface Material	Length (m)		
6.90	LL						Line deviates left	slabs	0		
6.90	MH						mh2				
7.20	GO						liner				
14.50	WL				10		Water level				
14.90	JN	9	0				to wg2				
22.70	FH						reached front mh		22.7m		
Comments:											
Run:	5										
From:		wg2	Invert Level:			Direction:	D/S				
To:		run4	Invert Level:			Function:	F/W				
Pipe Material:		PVC	Pipe Dia:		100						
Water/Pressure Test:			Drain Break-In:		No	Gully Condition:	As Built				
Distance (m)	Code	Clock Ref at to		Dia mm	Intrusion % mm		Shared Run: If Shared How:	No			
0.00	ST						Remarks	Surface Material	Length (m)		
1.50	FH						reached run4	slabs	0		
Comments:											

To: GHG

Our Ref: **GHG402**

Your Ref:

Date: **15-Dec-23**

Ftao:

Recommendations

Site:-

14 Bloomfield Road

Item

1.0	Location	Run 1 MH1 U/S
	Shared System	No
	Condition Grade	B
	Drain Serviceability	Unserviceable
	Probable Cause	0
	Work Spec	Excavate and replace 3m of pipe HPWJ/CCTV U/S and report back.
2.0	Location	Run 2 SVP D/S
	Shared System	No
	Condition Grade	B
	Drain Serviceability	Unserviceable
	Probable Cause	0
	Work Spec	Excavate and replace rest bend and 2m of pipe D/S

Notes Repairs to shared runs and off boundary pipe-work may be the responsibility of the water authority.

Condition Grade

A - Structurally sound with no leakage evident.

B - Cracks and fractures observed.

C - Structurally unsound

Quotation is binding only if accepted within 28 days from date of issue and is subject to our Standard Terms and Conditions

The price qualification notes, stated on this Schedule of rates, apply to this quotation.

CTS GROUP undertakes to return to site free of charge to carry out remedial work to the drainage repairs set out above for a period of 2 months from the date of this invoice. The company standard charge rates will apply to the visit should the work requested be unrelated to the said repairs.

SITE INVESTIGATION LABORATORY TEST REPORT

SI REPORT NUMBER: GHG402

CLIENT :
GHG Solutions Ltd

SITE:
14 Bloomfield Road
London
N6 4ET

DATE OF SITE VISIT:
07/12/2023

DATE RECEIVED BY LABORATORY:
08/12/2023

Approved by : 
C Kosma - Project Delivery Supervisor

DATE REPORTED: 8-Jan-2024

The testing on this report has been subcontracted, see Summary for testing
Laboratory details

Laboratory Summary Results

Our Ref :
Location :
Client:
Address:

GHG402
14 Bloomfield Road
GHG Solutions Ltd
Barclays House, 20-24 Upper Market Street, Eastleigh, SO50 9FD

Date Sampled:
Date Received :
Date Tested :
Date of Report :

07/12/2023
08/12/2023
02/01/2024
08/01/2024

Sample Ref		Type	#Moisture Content (%) [1]	Modified * Moisture Content (%) [2]	#Soil Fraction > 0.425mm (%) [3]	#Liquid Limit (%) [4]	#Plastic Limit (%) [5]	Plasticity Index (%) [6]	Liquidity * Index [6]	Modified * Plasticity Index (%) [7]	Soil * Class [8]	Filter Paper Contact Time (d)	#Soil Sample Suction (kPa) [9]	Estimated * Heave Potential (Dd) (mm)[10]	Organic * Content (%) [11]	In situ * Shear Vane Strength (kPa) [12]	Mackintosh Probes *			
TP/BH No	Depth (m)																(Quantity of blows to travel 75mm) [13]			
1	U/S 1.30	D	40	N/A	<5							7	12.0			66				
	1.5	D	36	N/A	<5							7	35.1			80				
	2.0	D	35	N/A	<5							7	59.1			106				
	2.5	D	35	N/A	<5							7	41.7			>130				
	3.0	D	41	N/A	<5							7	38.4			>130				

Test Methods / Notes
[1] BS 1377 : Part 2 : 1990, Test No 3.2
[2] Corrected MC % based on % retained over 5% on the 425um sieve
[3] Estimated if <5%, otherwise measured
[4] BS 1377 : Part 2 : 1990, Test No 4.4
[5] BS 1377 : Part 2 : 1990, Test No 5.3
[6] BS 1377 : Part 2 : 1990, Test No 5.4
[7] BRE Digest 240 : 1993

[8] BS 5930 : 2018 : Figure 8 - Plasticity Chart for the classification of fine soils
[9] Building Research Establishment Information Paper 4/93
[10] Estimated Heave Potential (Based on BRE Digest 412-client provided calculation table)
[11] BS 1377 : Part 3 : 1990, Test No 4
[12] Values of shear strength were determined in situ by CTS using a Pilcon hand vane or Geonor vane (GV).

[13] Values of mackintosh probes were determined in situ by CTS
PSD Chart - BS 1377: Part 2 : 1990, Test No 9.2

Key
D Disturbed sample (small)
B Disturbed sample (bulk)
U Undisturbed sample
W Groundwater sample
ENP Essentially Non-Plastic by inspection
U/S Underside of Foundation

* These tests are not UKAS accredited
Full reports can be provided upon request.

These tests have been subcontracted and carried out by

Our Ref : GHG402

Location : 14 Bloomfield Road

Client: GHG Solutions Ltd

Address: Barclays House, 20-24 Upper Market Street, Eastleigh, SO50 9FD

Laboratory Testing Results

Date Sampled : 07/12/2023

Date Received : 08/12/2023

Date Tested : 02/01/2024

Date of Report : 08/01/2024

Sample Ref		Type	Moisture Content	Modified * Moisture Content	Soil Fraction > 0.425mm	Liquid Limit	Plastic Limit	Plasticity Index	Liquidity * Index	Modified * Plasticity Index	Soil * Class	Filter Paper Contact Time (d)	Soil Sample Suction (kPa) [9]	Estimated * Heave Potential (Dd) (mm)[10]	Organic * Content (%) [11]	In situ * Shear Vane Strength (kPa) [12]	Mackintosh Probes *			
BH2 No	Depth (m)																(Quantity of blows to travel 75mm) [13]			
2	1.0	D	35	N/A	<5							7	163			54				
	1.5	D	32	N/A	<5							7	193			66				
	2.0	D	31	N/A	<5							7	109			104				
	2.5	D	31	N/A	<5							7	370			>130				
	3.0	D	31	N/A	<5							7	289			>130				

Test Methods / Notes

[1] BS 1377 : Part 2 : 1990, Test No 3.2

[2] Corrected MC % based on % retained over 5% on the 425um sieve

[3] Estimated if <5%, otherwise measured

[4] BS 1377 : Part 2 : 1990, Test No 4.4

[5] BS 1377 : Part 2 : 1990, Test No 5.3

[6] BS 1377 : Part 2 : 1990, Test No 5.4

[7] BRE Digest 240 : 1993

[8] BS 5930 : 2018 : Figure 8 - Plasticity Chart for the classification of fine soils

[9] Building Research Establishment Information Paper 4/93

[10] Estimated Heave Potential (Based on BRE Digest 412-client provided calculation table)

[11] BS 1377 : Part 3 : 1990, Test No 4

[12] Values of shear strength were determined in situ by CTS using a Pilcon hand vane or Geonor vane (GV).

[13] Values of mackintosh probes were determined in situ by CTS

PSD Chart - BS 1377: Part 2 : 1990, Test No 9.2

* These tests are not UKAS accredited

Full reports can be provided upon request.

Key

- D Disturbed sample (small)
- B Disturbed sample (bulk)
- U Undisturbed sample
- W Groundwater sample
- ENP Essentially Non-Plastic by inspection
- U/S Underside of Foundation



Test results reported relate only to the items tested.

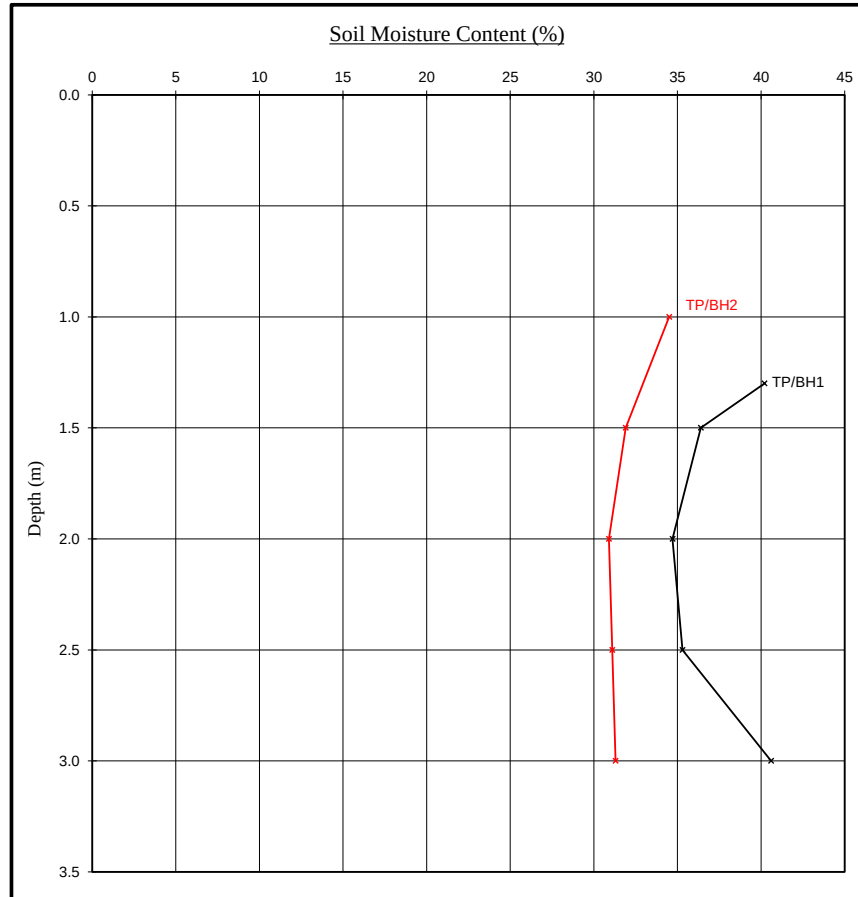
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Opinions and interpretations expressed herein are outside of the scope of UKAS accreditation.

Moisture Content Profiles

Our Ref : GHG402
Location : 14 Bloomfield Road
Work carried out for: GHG Solutions Ltd

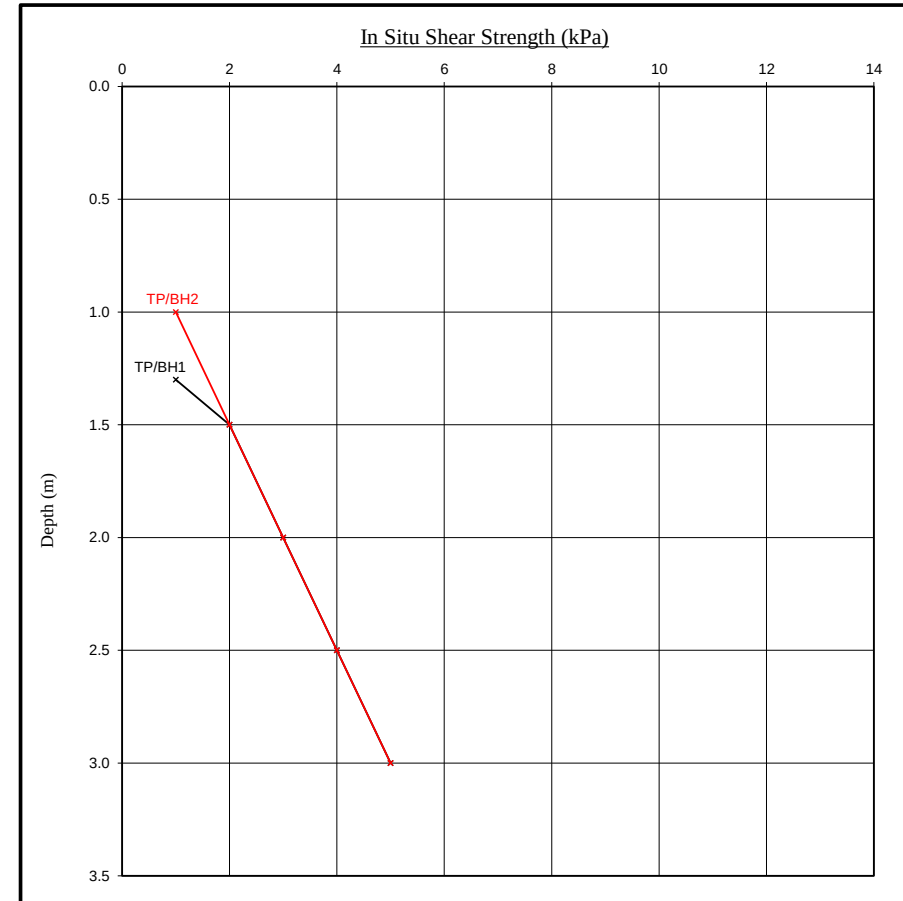


Notes

1. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clay) at shallow depths.
2. Unless specifically noted the profiles have not been related to a site datum.

Shear Strength Profiles

Date Sampled : 07/12/2023
Date Received : 08/12/2023
Date Tested : 02/01/2024
Date of Report : 08/01/2024

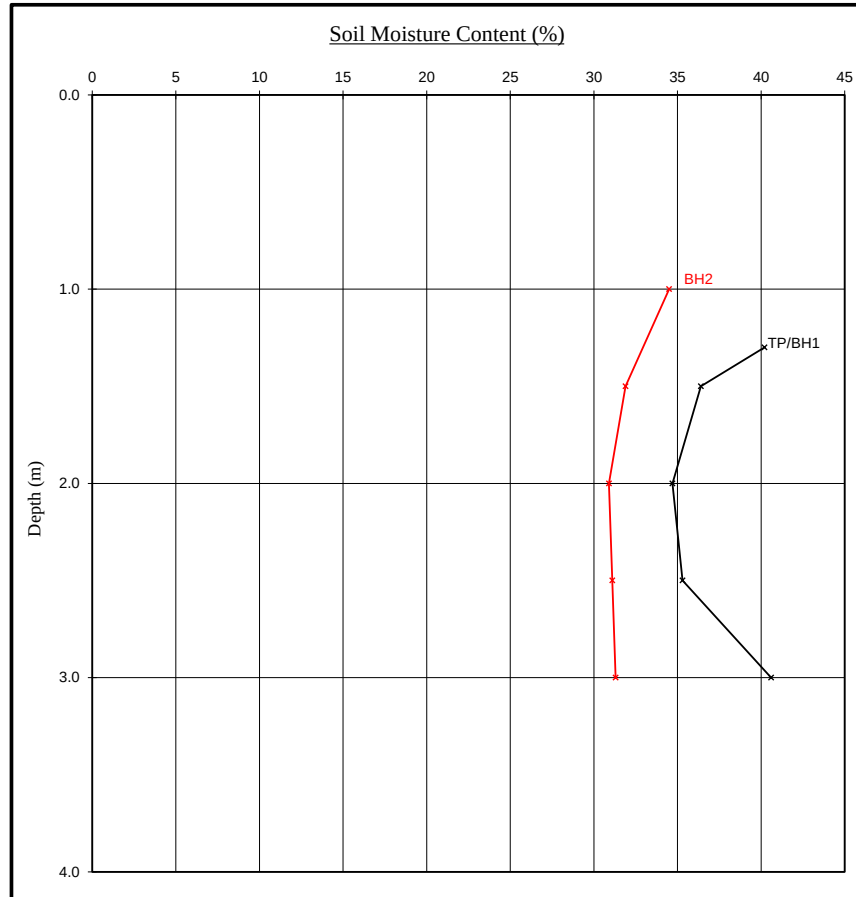


Note

1. Unless otherwise stated, values of Shear Strength were determined in situ by CTS using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 130 kPa.
2. Unless specifically noted the profiles have not been related to a site datum.

Moisture Content Profiles

Our Ref : GHG402
Location : 14 Bloomfield Road
Work carried out for: GHG Solutions Ltd

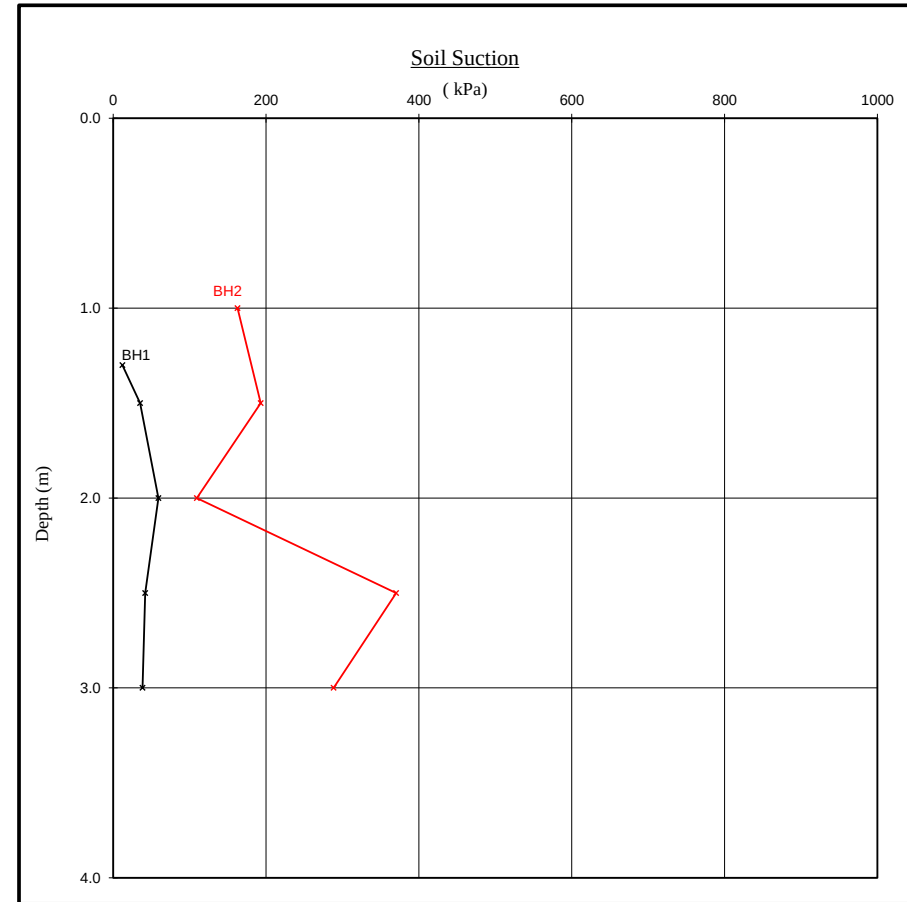


Notes

1. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clay) at shallow depths.
2. Unless specifically noted the profiles have not been related to a site datum.

Soil Suction Profiles

Date Sampled : 07/12/2023
Date Received : 08/12/2023
Date Tested : 02/01/2024
Date of Report : 08/01/2024



Note

When shown, the theoretical equilibrium suction profiles are based on conventional assumptions associated with London Clay (and similarly overconsolidated clays) at shallow depths. Note that the sample disturbance component is dependant on the method of sampling and any subsequent recompaction. The above plots show this to be 100kPa which is the value suggested by the BRE on the basis of their limited number of tests on recompacted samples. This may or may not be appropriate in this instance and judgement should be exercised.