

SITE INVESTIGATION FACTUAL REPORT

Report No: 169946
Client: CRAWFORD CLAIMS MGMT SUS
Site: 51 Reddington Road, London

Client Ref: SU1304913-
Date of Visit: 14/01/2014



Home Emergency Response - Subsidence Investigation - Drainage Services – Crack & Level Monitoring – Property Video Surveys

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CET is the trading name of CET Structures Ltd
Registered in England No. 02527130

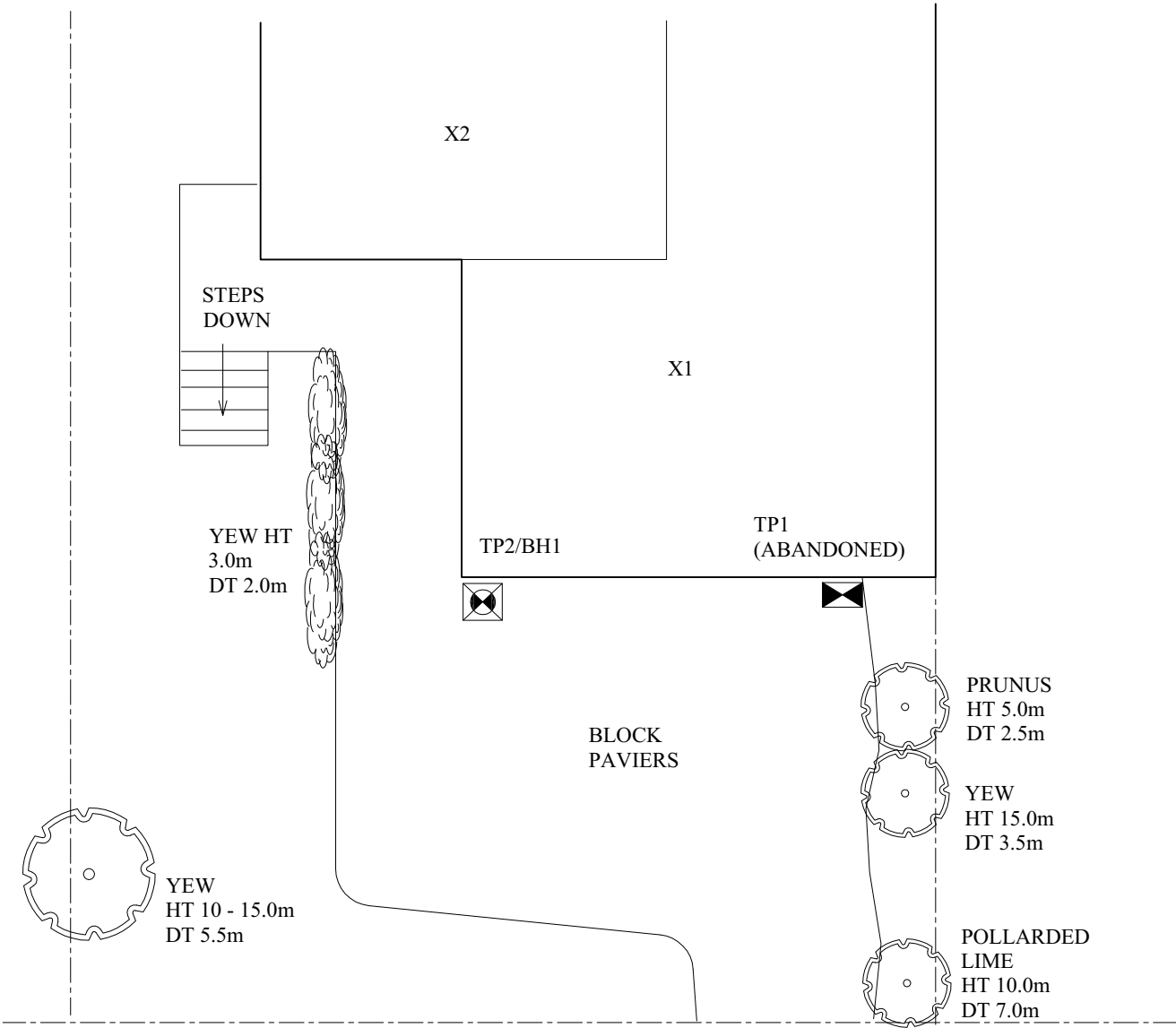
Site Investigation
Layout

Sheet: 1 of 1
Job No: 169946E
Date: 14/01/14

Site: 51, Reddington Road, NW3
Work carried out for: Crawford Claims MGMT SUS

DB (SI) SE (Checked) Jo F (Drawn)

Weather: Dry



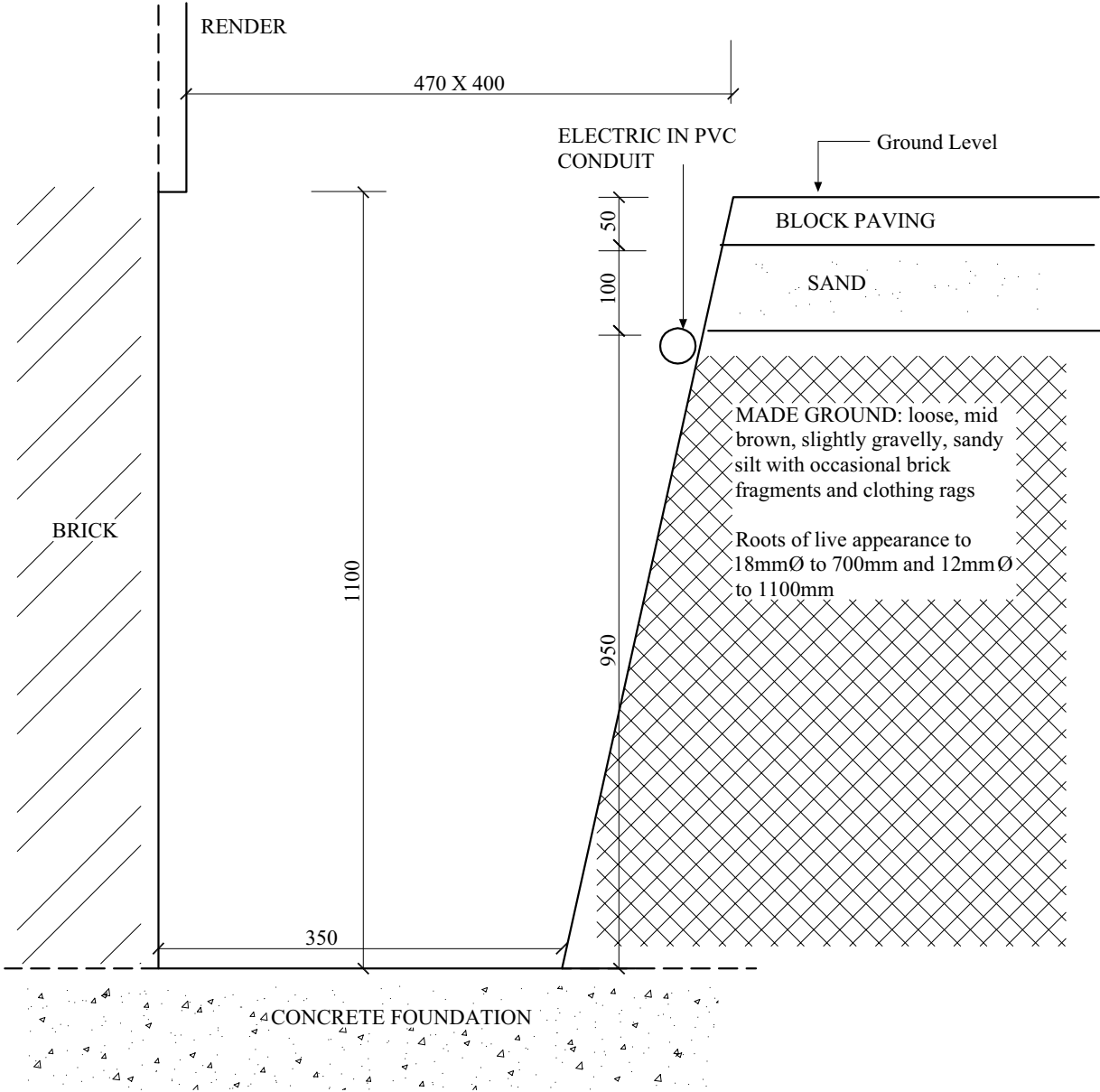
ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks:

Key:			
Combined Gulley	RWWG	Surface Water Drain	---
Manhole	MH	Foul Water Drain	---
Rain Water Pipe	RWP	Tree / Bush	(approx. ht in m)
Rain Water Gulley	RWG		
Soil Vent Pipe	SVP		
Waste Gulley	WG		
Waste Pipe	WP		

Scale: N.T.S.

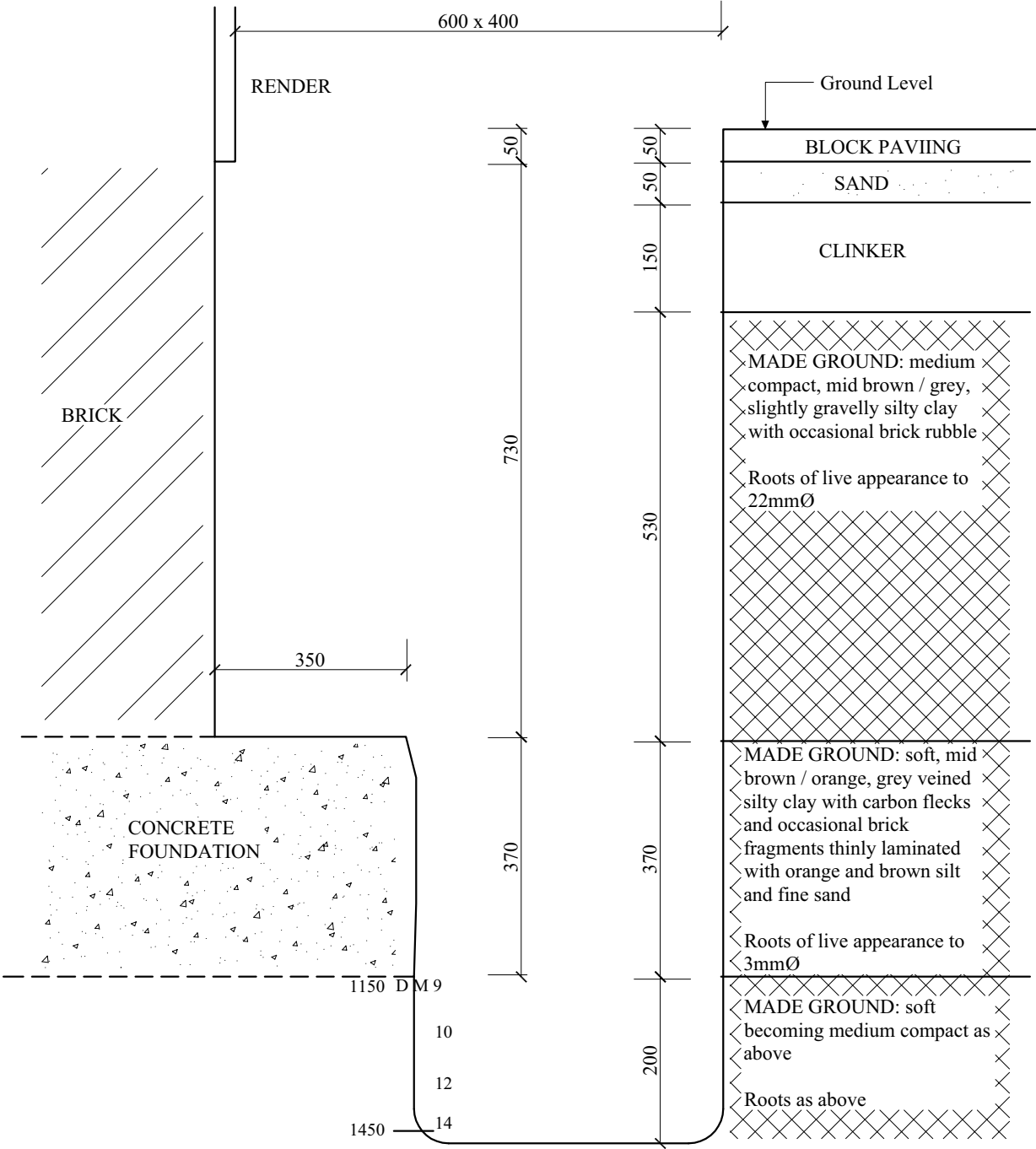
Trial Pit No: 1	Sheet: 1 of 1	Site: 51, Reddington Road, NW3 Work carried out for: Crawford Claims MGMT SUS
	Job No: 169946E	
	Date: 14/01/14	
Excavation Method: Hand Tools	Drawn by: Jo F	
Weather: Dry	Ground Level mOD:	



TRIAL PIT ABANDONED AT 1100mm
CANNOT COME FURTHER BACK - ELECTRICITY SERVICE AT
REAR OF TRIAL PIT

Remarks: All measurements in millimetres.			Key:	
			D	Small disturbed sample
			B	Bulk disturbed sample
			W	Water sample
			TDTD	Too dense to drive
			J	Jar sample
			V	Pilcon Vane (kPa)
			M	Mackintosh probe
Logged: DB	Checked: SE	Approved:	Scale:	N.T.S.

Trial Pit No: 2	Sheet: 1 of 1	Site: 51, Reddington Road, NW3
	Job No: 169946E	
	Date: 14/01/14	
Excavation Method: Hand Tools	Drawn by: Jo F	Work carried out for: Crawford Claims MGMT SUS
Weather: Dry	Ground Level mOD:	



Remarks: All measurements in millimetres. Curved steel pin hammered 250mm under foundation at 1150mm below ground level			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		
Logged: DB	Checked: SE	Approved:	Scale: N.T.S.		

Borehole No: 1			Sheet: 1 of 1			Site: 51, Reddington Road, NW3			
			Job No: 169946E						
Boring Method: CFA			Date: 14/01/2014						
Diameter: 100mm		Coordinates:		Ground Level mOD:		Work Carried out for: Crawford Claims MGMT SUS			
Depth (m)	Description of Strata	Thick-ness (m)	Legend	Sample	Test Type	Result	Depth (m)	Field Records/Comments	Depth to water (m)
1.35	As trial pit 2	1.35							
2.00	MADE GROUND: medium compact, mid brown / orange, grey veined silty clay with carbon flecks and occasional brick fragments thinly laminated with orange and brown silt and fine sand	0.65		D			1.50	Roots of live appearance to 2mm diameter to 2.0m	
2.50	MADE GROUND: medium compact, moist mid brown, grey veined silty clay with occasional brick fragments thinly laminated with orange and brown silt and fine sand	0.50		D	M	17 23 20 16	2.00	Roots of live appearance to 1mm diameter to 2.5m	
3.00	Stiff, mid brown / orange, grey veined silty CLAY thinly laminated with orange and brown silt and fine sand	0.50	___x ___ ___ x___	D			2.50	No roots observed below 2.5m	
	Very stiff as above		___x ___ ___		V	140+ 140+	3.00		
	Borehole ends at 3.0m								
Remarks: Borehole dry and open on completion Borehole drilled in TP2					Key: T.D.T.D. Too Dense to Drive D Small disturbed sample J Jar sample B Bulk disturbed sample V Pilcon Vane (kPa) W Water sample M Mackintosh Probe				
Logged: DB	Checked: SE	Drawn by Jo F			Scale: NTS		Weather: Dry		

Laboratory Testing Results

Our Ref : 169946

Location : 51, Reddington Road, NW3

Work carried out for: CRAWFORD CLAIMS MGMT SUS

Date Sampled: 14/01/2014

Date Received : 15/01/2014

Date Tested : 16/01/2014

Date of Report : 17/01/2014

TP/BH No	Sample Ref		Type	Moisture Content (%) [1]	Soil Fraction > 0.425mm (%) [2]	Liquid Limit (%) [3]	Plastic Limit (%) [4]	Plasticity Index (%) [5]	Liquidity Index [5]	Modified Plasticity Index (%) [6]	Soil Class [7]	Filter Paper Contact Time (h) [8]	Soil Sample Suction (kPa)	In situ Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	pH Value [11]	Sulphate Content (g/l)			Class [14]
	Depth (m)																SO3 [12]	SO4 [13]		
TP2/	1.15(U/S)		D	26	<5	51	18	33	0.23	33	CH									
BH1	1.5		D	26	<5															
	2.0		D	28	<5	54	20	34	0.23	34	CH									
	2.5		D	25	<5															
	3.0		D	25	<5	57	19	38	0.14	38	CH			> 140						

Test Methods / Notes

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

[2] Estimated if <5%, otherwise measured

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

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

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

[6] BRE Digest 240 : 1993

[7] BS 5930 : 1981 : Figure 3.1 - Plasticity Chart for the classification of fine soils

[8] In-house method S9a adapted from BRE IP 4/93

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

[9] Values of shear strength were determined in situ by CET using a Picon hand vane or Geonor vane (GV).

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

[11] BS 1377 : Part 2 : 1990, Test No 9

[12] BS 1377 : Part 3 : 1990, Test No 5.6

[13] SO₄ = 1.2 x SO₃

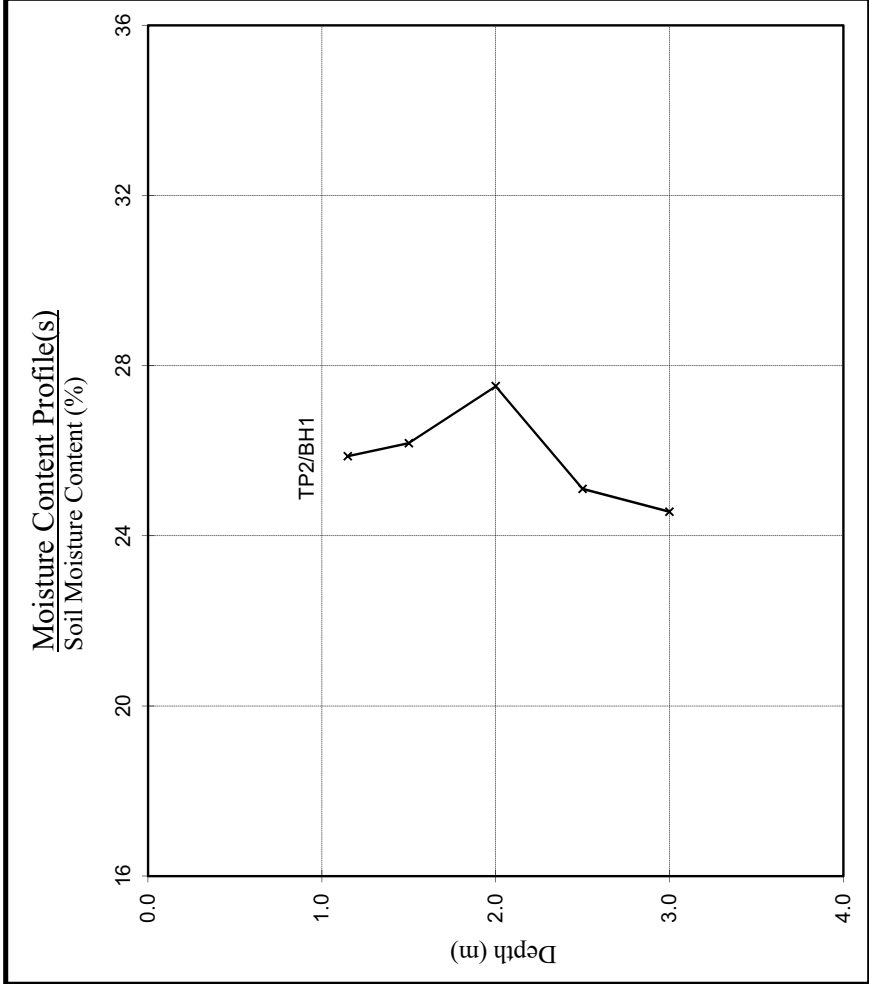
[14] BRE Special Digest One (Concrete in Aggressive Ground) August 2005

Note that if the SO₄ content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4m or DS-5m class respectively unless water soluble magnesium testing is undertaken to prove otherwise

Moisture Content and Shear Strength Profiles

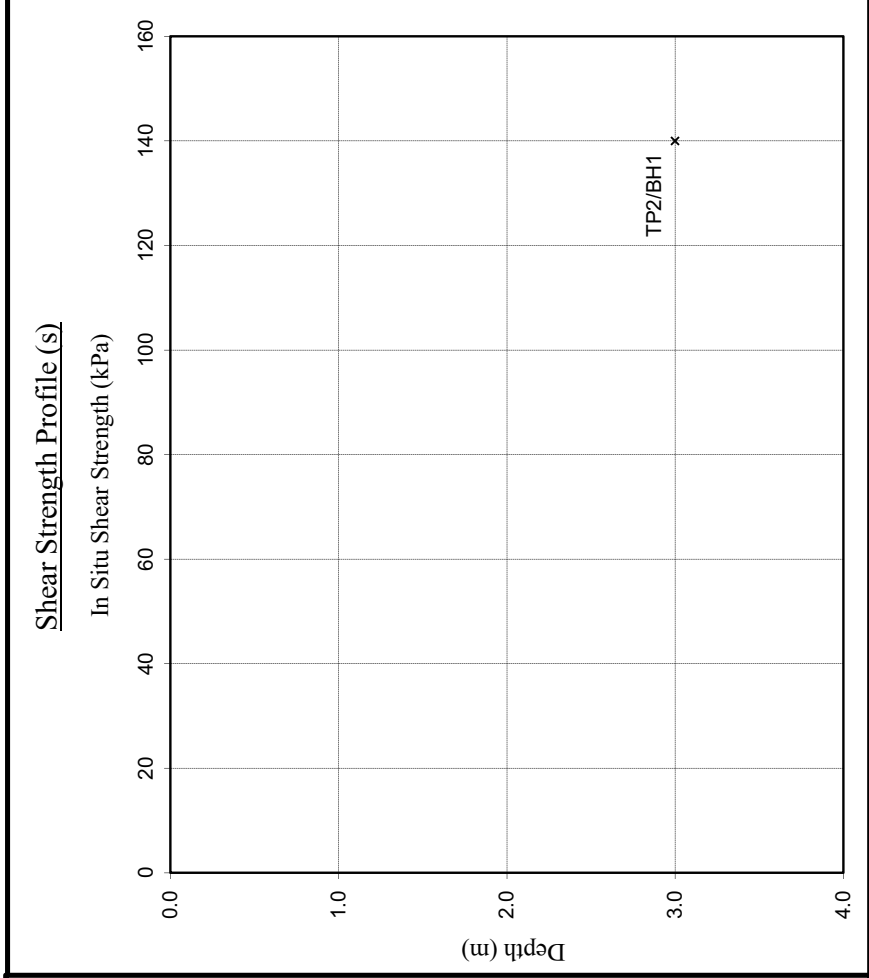
Our Ref :	169946	Date Sampled :	14/01/2014
Location :	51, Reddington Road, NW3	Date Received :	15/01/2014
Work carried out for:	CRAWFORD CLAIMS MGMT SUS	Date Tested :	16/01/2014
		Date of Report :	17/01/2014

Note : Unless specifically noted the profiles have not been related to a site datum.



Notes

1. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clays) at shallow depths.



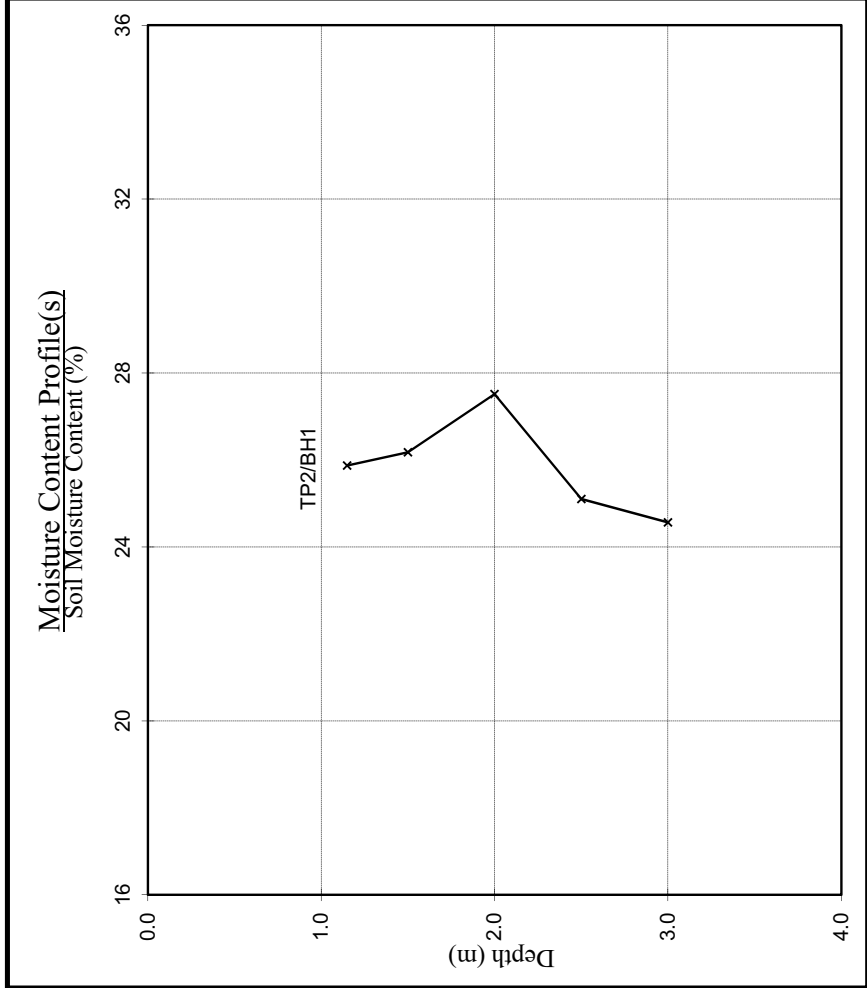
Note

Unless otherwise stated, values of Shear Strength were determined in situ by CET using a Pileon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa.

Moisture Content and Suction Profiles

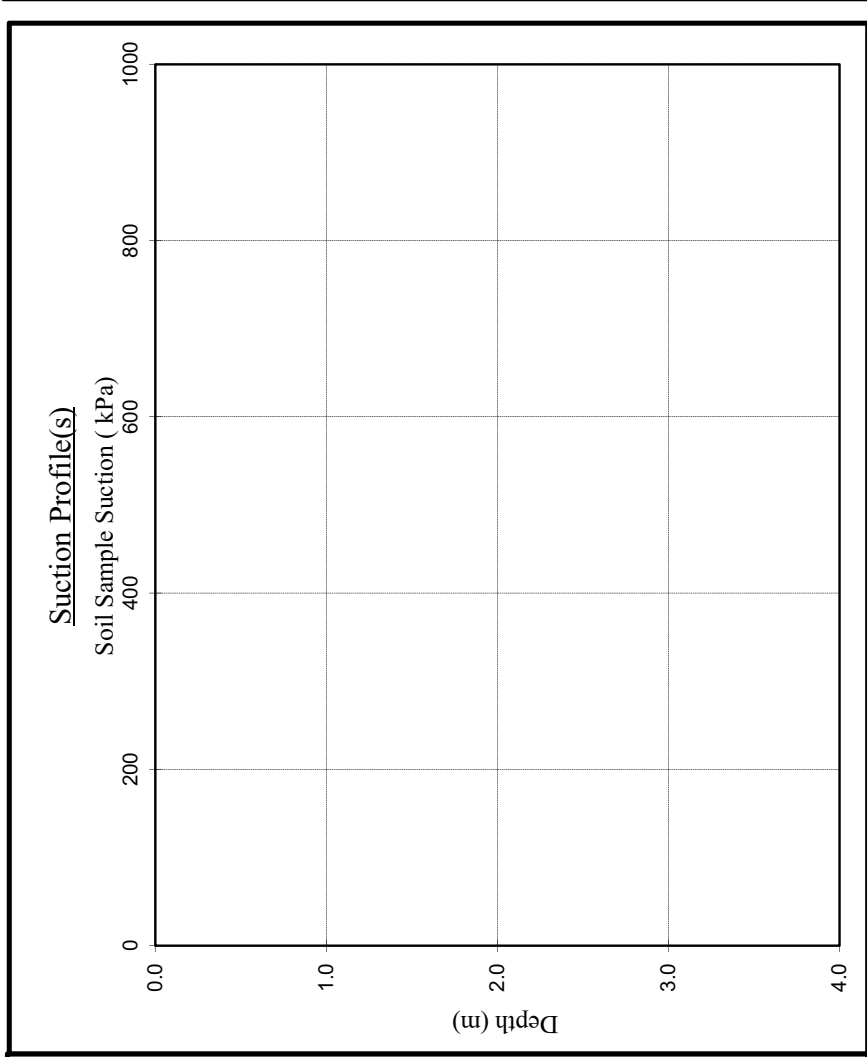
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Notes

1. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clays) at shallow depths.



Notes

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.

EPSL**European Plant Science Laboratory**

Sheet: 1 of 1

Job No: **169946**Date: **21/01/2014**Order No: **509471**EPSL Ref: **R4431**Site: **51 Reddington Road, London,**Work carried
out for: **Crawford Claims MGMT SUS*****Certificate of Analysis***

The following work was commissioned by CET on behalf of their client. Root samples were obtained in sealed packets from the above site with no reference given as to the types of tree or shrub from which they may have originated.

The results were as follows -

<u>Trial pit/ Borehole number</u>	<u>Root diameter (mm)</u>	<u>Tree, shrub or climber from which root originates</u>	<u>Result of starch test</u>
TP1 (1.1m)	12 mm	Tilia spp.	Positive
BH1 (1.5-2.0m)	2 mm	Tilia spp. 5 roots	Positive
TP2 (USF)	3 mm	Tilia spp. 5 roots	Positive

Tilia spp. are limes.


MDM

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Plant Anatomist : Dr G S Turner B.Sc. (Hons), M.Sc., Ph.D

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