SITE INVESTIGATION
FACTUAL REPORT

Report No:	495935
Client:	Cunningham Lindsey - Maidstone
Site:	Flat A. 53 Oakley Square
Client Ref:	6711155-Mrs Kathleen O Boyle
Date of Visit:	23/03/18

[redacted]

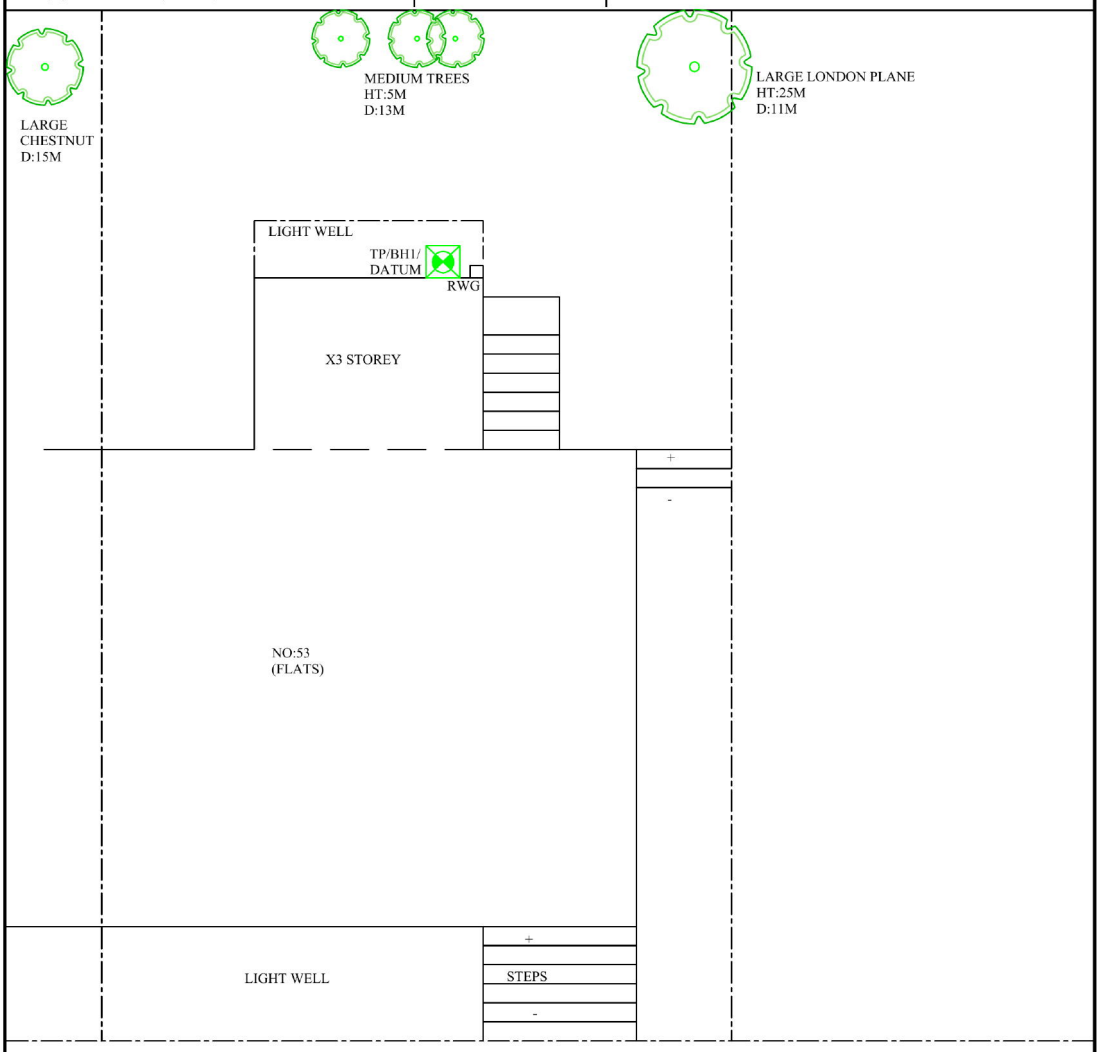
Investigation Layout Plan

Sheet: 1 of 1
Job No: 495935
Date: 23/03/2018

Site: 53 Oakley Square, NW1
Work carried out for: Cunningham Lindsey

IC (SI) | SA (Checked) | SK (Drawn)

Weather: DRY



ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks:

Scale: N.T.S.

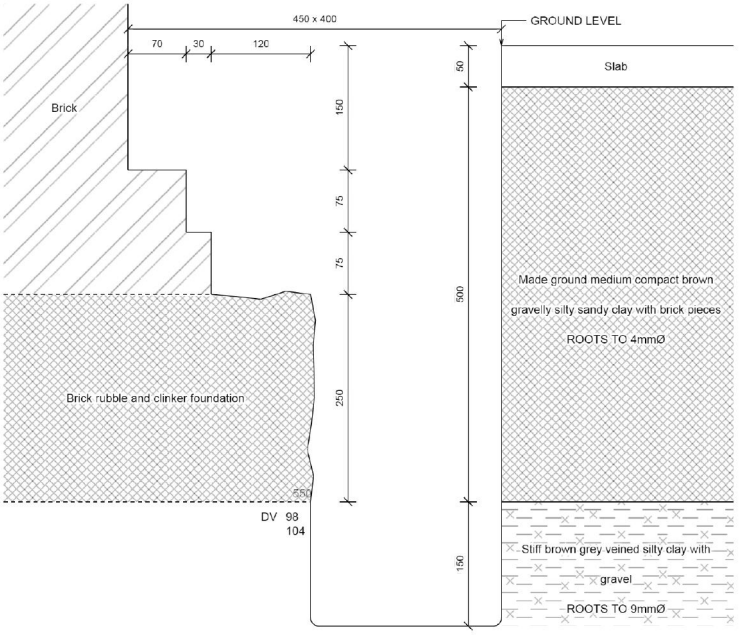
Key:

Combined Gulley	RWWG
Manhole	MH
Rain Water Pipe	RWP
Rain Water Gulley	RWG
Soil Vent Pipe	SVP
Waste Gulley	WG
Waste Pipe	WP

Surface Water Drain
Foul Water Drain
Tree / Bush (approx. ht in m)
Trial Pit
Borehole
O/D - Open Discharge

PROPERTY ASSURANCE
Giving our all

TEST REPORT:	**Trial Pit**		
REPORT NUMBER:	C350986 / 892.1.1.1		
TRIAL PIT REF:	Tp1 1of1	DATE:	23/03/2018
CLIENT:	Cunningham Lindsey	SITE:	Flat A. 53 Oakley Square,NW1 1NJ
JOB NO:	495935	WEATHER:	Clear
EXCAVATION METHOD:	Hand tools		



For Strata below 700mm see Bore Hole log

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:

For and on behalf of CET
Scott Alger - Lab

Approved Signatory
26-Mar-18

Report Format:

[redacted]

Borehole	1		Sheet:	1 of 1	Site:	Flat A. 53 Oakley Square
			Job No:	495935		
			Date:	23/03/2018		
Boring Method:	Hand Auger		Ground Level:		Client:	Cunningham Lindsey - Maidstone
Diameter (mm):	75	Weather:	dry			

Depth	Soil Description	Thickness	Legend	Samples and Tests		
(m)				Depth	Type	Result
0.00	See Trial Pit	0.70				
0.70	Stiff brown-grey veined silty CLAY with gravel	0.50		1.00	DV	104
						110
1.20	Stiff brown-grey veined silty CLAY with claystone nodules	0.80		1.50	DV	116
						122
2.00	Very Stiff brown-grey veined silty CLAY with claystone nodules	3.00		2.00	DV	140+
						140+
				2.50	DV	140+
						140+
				3.00	DV	140+
						140+
				3.50	DV	140+
						140+
				4.00	DV	140+
						140+
				4.50	DV	140+
						140+
				5.00	DV	140+
5.00	End of BH					140+

Remarks:
BH ends at 5.0m.BH dry and open on completion, no roots observed below 2.5m.. Datum installed at 5.0m.

Key:
D - Disturbed Sample
B - Bulk Sample
W - Water Sample
J - Jar Sample
V - Pilcon Shear Vane (kPa
M - Mackintosh Probe
TDTD - Too Dense To Drive

To Depth (m)	Max Dia (mm)
1.50	5
2.50	FIBROUS

Roots
Roots
Roots
Depth to Water (m)

Logged:	ic	SA	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.

Laboratory Summary Results

Our Ref : 495935 — Date Sampled: 23/03/18

Location : Flat A. 53 Oakley Square, London — Date Received : 26/03/18

Client: Cunningham Lindsey - Maidstone — Date Tested : 27/03/18

Address: 4 North Court, South Park Business Village, Armstrong Road, ME15 6JZ — Date of Report : 11/04/18

Sample Ref TP/BH No	Depth (m)	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)	Soil Sample Suction (kPa) [8]	Oedometer Strain *[9]*	Estimated Heave Potential (Dd) *(mm)[10]*	In situ * Shear Vane Strength (kPa) *[11]*	Organic * Content (%)*[12]*	pH * Value *[13]*	Sulphate Content * (g / l) SO_3 *[14]*	Sulphate Content * (g / l) SO_4 *[15]*	* Class *[16]*
1	U/S 0.55	D	23	32	68	28	40	-0.13	27	CH	168	68.5			101					
	1.0	D	31	<5											107					
	1.5	D	25	<5	65	24	41	0.02	41	CH	168	215			119					
	2.0	D	28	<5											> 140					
	2.5	D	32	<5	67	28	39	0.09	39	CH	168	155			> 140					
	3.0	D	31	<5											> 140					
	3.5	D	30	<5	72	28	44	0.05	44	CV	168	198			> 140					
	4.0	D	29	<5											> 140					
	4.5	D	31	<5							168	238			> 140					
	5.0	D	33	<5							168	95.0			> 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 31 - Plasticity Chart for the classification of fine soils.

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

[9] In-house Test Procedure S17a: One Dimensional Swell/Strain Test

[10] Estimated Heave Potential (Dd)

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

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

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

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

[15] $SO_4 = 1.2 \times SO_3$

[16] 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.

* 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
FNP	Essentially Non-Plastic by inspection
U/S	Underside of Foundation

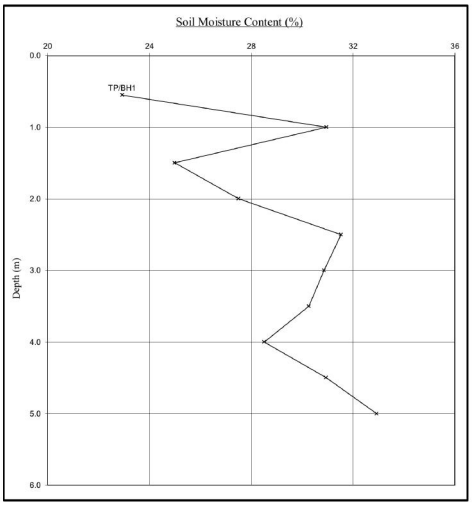
UKAS TESTING

8618

Version: 5BH V1.4 - 11/05/15

Moisture Content Profiles

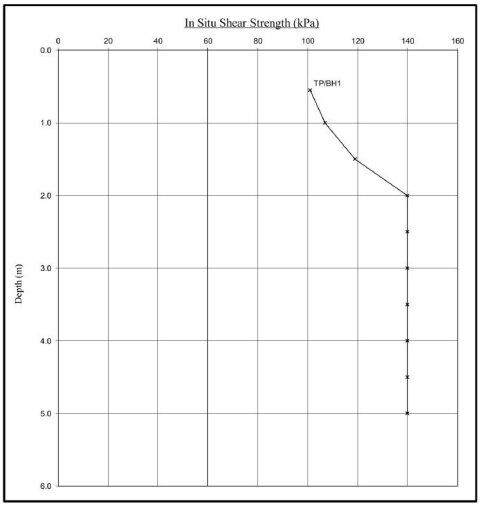
Our Ref : 495935
Location : Flat A. 53 Oakley Square, London
Work carried out for: Cunningham Lindsey - Maidstone



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 : 23/03/18
Date Received : 26/03/18
Date Tested : 27/03/18
Date of Report : 11/04/18



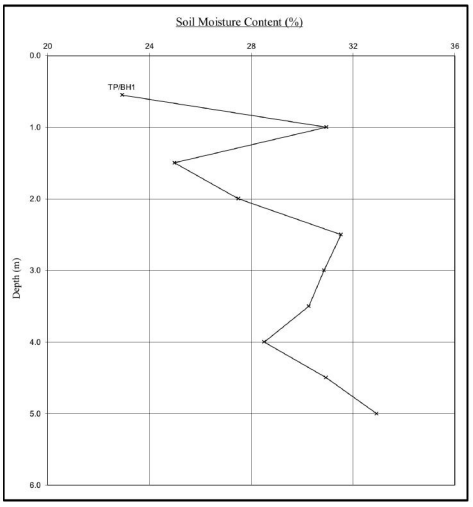
Note
1. Unless otherwise stated, values of Shear Strength were determined in situ by CET using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa.
2. Unless specifically noted the profiles have not been related to a site datum.

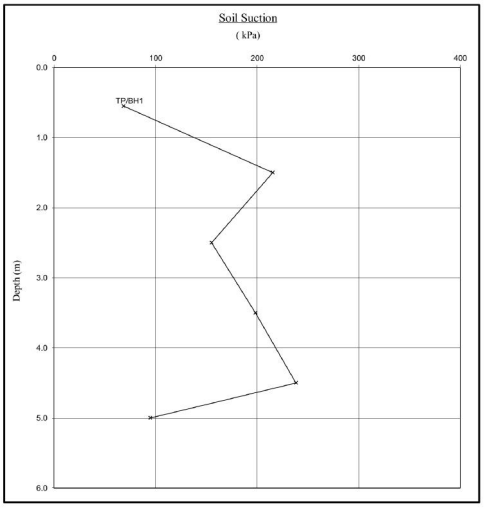
Moisture Content Profiles

Soil Suction Profiles

Our Ref : 495935
Location : Flat A. 53 Oakley Square, London
Work carried out for: Cunningham Lindsey - Maidstone

Date Sampled : 23/03/18
Date Received : 26/03/18
Date Tested : 27/03/18
Date of Report : 11/04/18





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.

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.

EPSL ***European Plant Science Laboratory***	Sheet: 1 of 1 Job No: **495935** Date: **28/03/2018** Order No: **1129490** EPSL Ref: **R21961**	Site: **53 Oakley Square,** Work carried out for: **Cunningham Lindsey**

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 -

Trial pit/ Borehole number	**Root diameter (mm)**	**Tree, shrub or climber from which root originates**	**Result of starch test**
TP1 (USF)	6 mm	Platanus spp. 2 roots	Positive
BH1 (1.5m)	4 mm	Platanus spp. 3 roots	Positive

Platanus spp. include London plane and Oriental plane.

[redacted]
MDM

[redacted]

Head of Laboratory Services : M D Mitchell B.Sc. (Hons), M.Phil.
Plant Anatomist : Dr G S Turner B.Sc. (Hons), M.Sc., Ph.D
Plant Anatomist : Dr R J Shaw B.Sc. (Hons), Ph.D
Consultant: Dr M P Denne B.Sc. (Hons), M.Sc., Ph.D

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