Factual Report

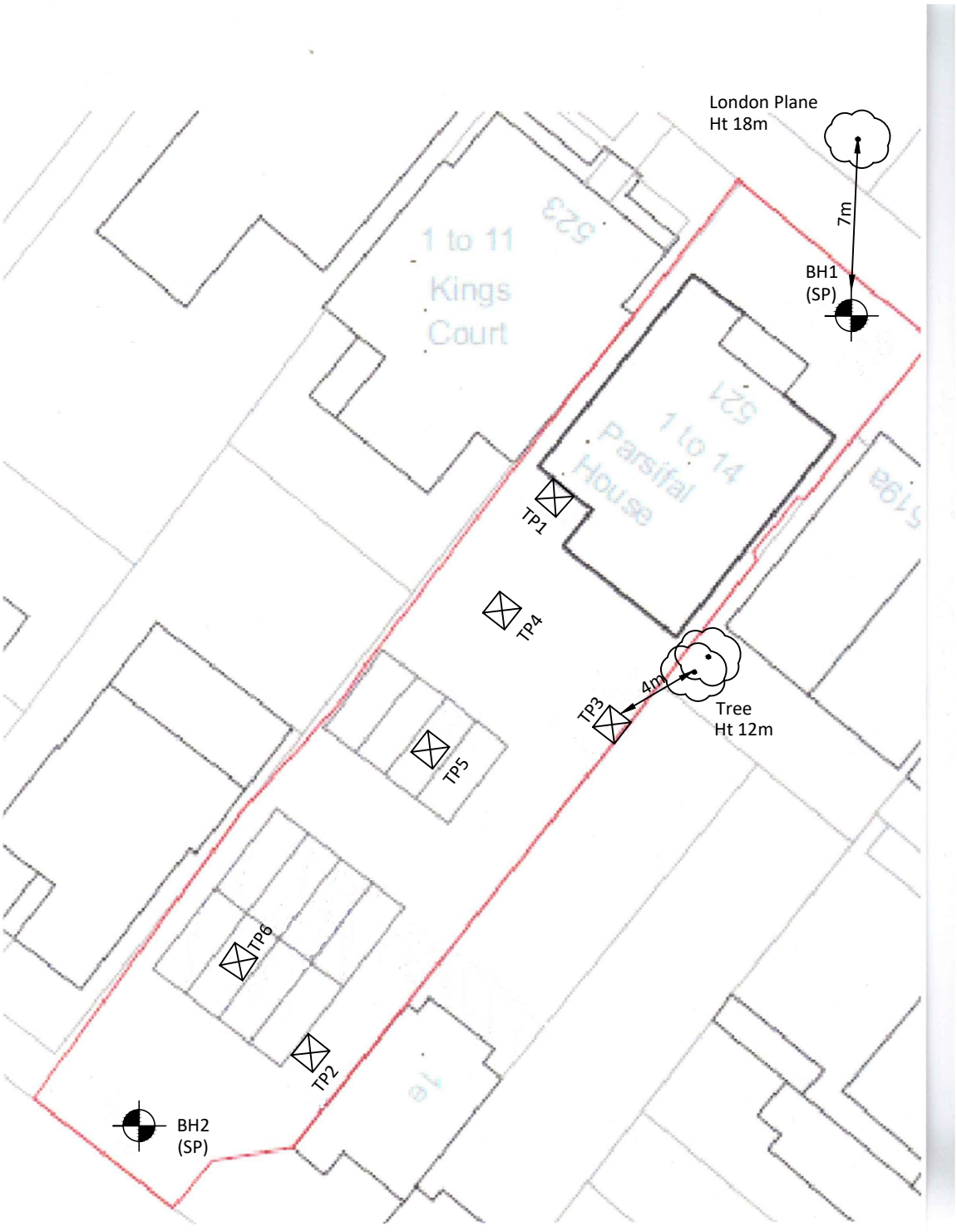
Site	Garages at Parsifal
	Behind 521 Finchley Road
	London
	NW3
Client	Gary Sugarman
Date	21/05/20
Our Ref	FACT/11384

Chelmer Global Ltd
Unit 7 Hall Road Industrial Estate, Hall Road, Southminster, Essex CM0 7DA
Essex: 01245 400930 | info@siteinvestigations.co.uk | www.siteinvestigations.co.uk

FACTUAL REPORT CONTENT

Site:		Client:			Identification:
Garages Parsifal, (Behind 521 Finchley Road), London, NW3 7BT		Gary Sugarman			SP
Contract Number:	**Date:**	**Logged By:**	**Checked by:**	**Drawn by:**	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Plan:**	**Weather:**	**Scale:**
ND	ND	ND	ND	Sunny	NTS

Sketch Site Plan



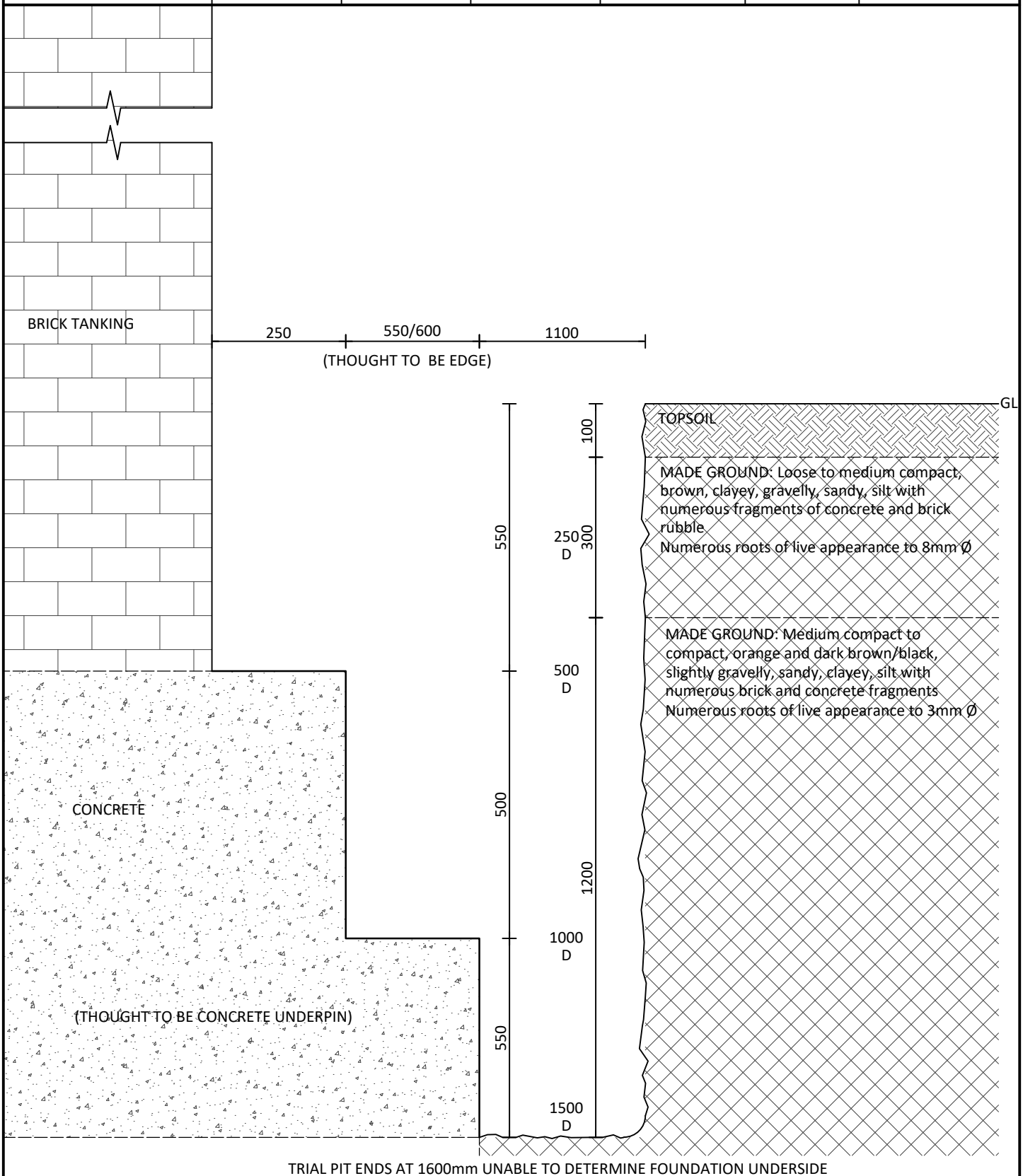
Remarks: On site tree identification for guidance only. Not authenticated.
All dimension in metres.

Key:

ND – No Data
NTS – Not to Scale
Trial Pit and Borehole
TP – Trial Pit
BH – Borehole
MH – Manhole
G – Gully
RWP – Rainwater Pipe
Tree/Shrub

Site:			Client:		Identification
Garages at Parsifal, (Behind 521 Finchley Road), London, NW3 7BT			Gary Sugarman		TP1
Contract Number:	**Date:**	**Logged By:**	**Checked by:**	**Drawn by:**	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**	**Weather:**	**Scale:**
ND	ND	ND	Hand Tools	Sunny	NTS

Trial Pit Log



TRIAL PIT ENDS AT 1600mm UNABLE TO DETERMINE FOUNDATION UNDERSIDE

Remarks:

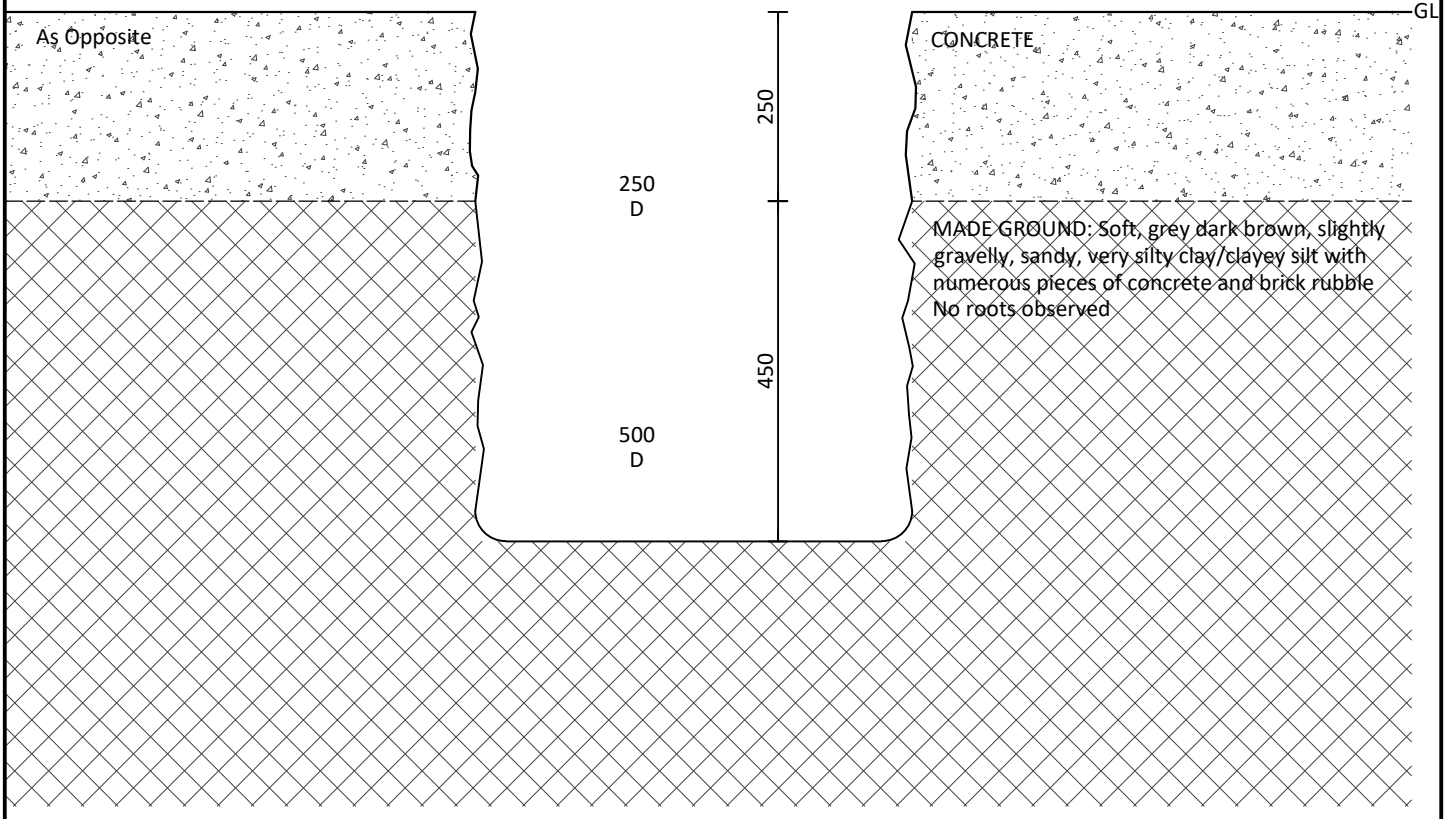
Groundwater was not encountered.
All dimensions in millimetres.

Key:

ND	No Data	V	Pilcon Vane (kPa)
NTS	Not to Scale	B	Bulk Disturbed Sample
GL	Ground Level	TDTD	Too Dense to Drive
D	Small Disturbed Sample		
M	Mackintosh Probe		

Site:			Client:		Identification
Garages at Parsifal, (Behind 521 Finchley Road), London, NW3 7BT			Gary Sugarman		TP2
Contract Number:	**Date:**	**Logged By:**	**Checked by:**	**Drawn by:**	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**	**Weather:**	**Scale:**
ND	ND	ND	Hand Tools	Sunny	NTS

Trial Pit Log

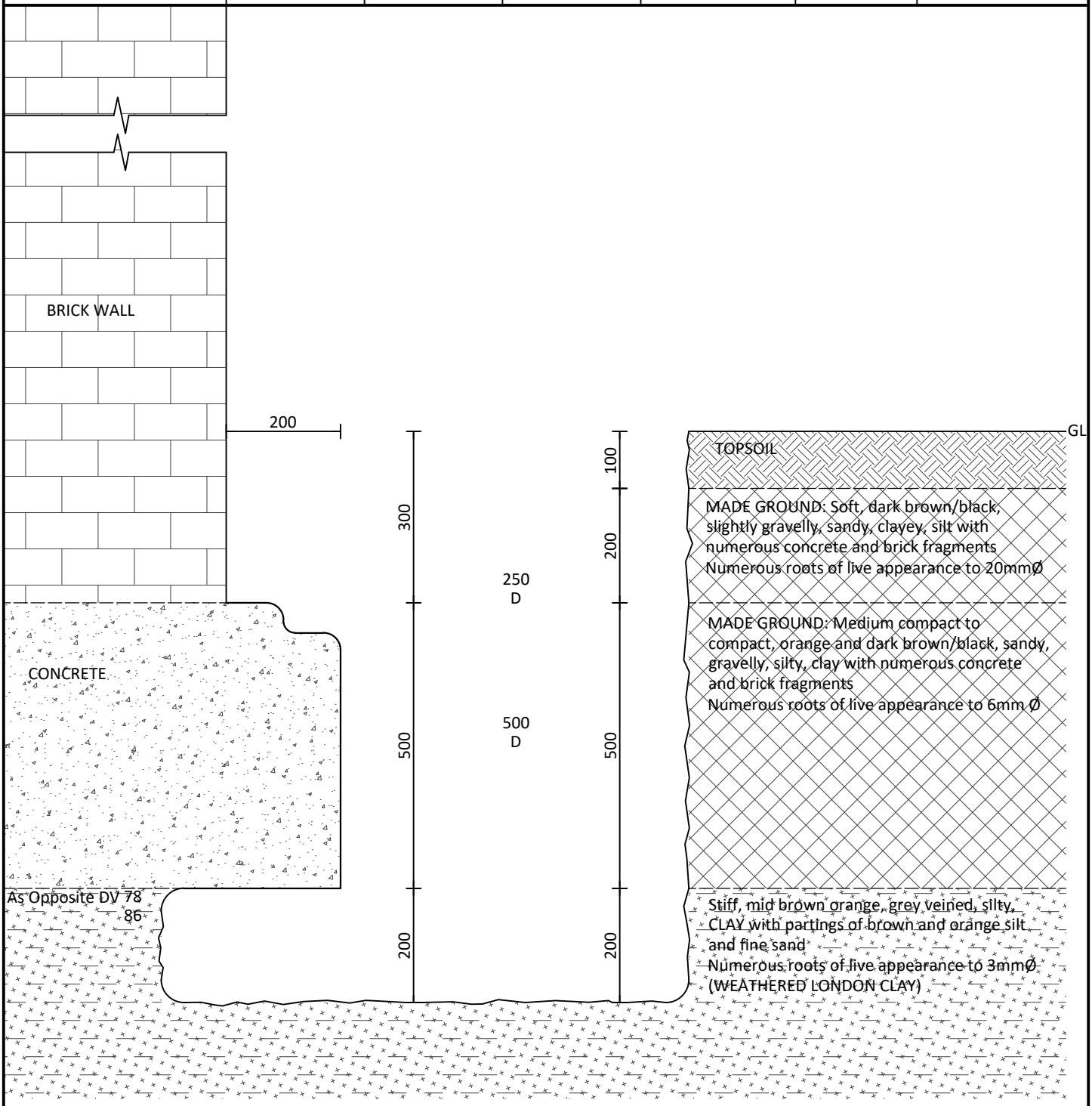


TRIAL PIT ENDS AT 700

Remarks:	Key:			
Groundwater was not encountered. All dimensions in millimetres.	ND	No Data	V	Pilcon Vane (kPa)
	NTS	Not to Scale	B	Bulk Disturbed Sample
	GL	Ground Level	TDTD	Too Dense to Drive
	D	Small Disturbed Sample		
	M	Mackintosh Probe		

Site:			Client:		Identification
Garages at Parsifal, (Behind 521 Finchley Road), London, NW3 7BT			Gary Sugarman		TP3
Contract Number:	**Date:**	**Logged By:**	**Checked by:**	**Drawn by:**	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**	**Weather:**	**Scale:**
ND	ND	ND	Hand Tools	Sunny	NTS

Trial Pit Log

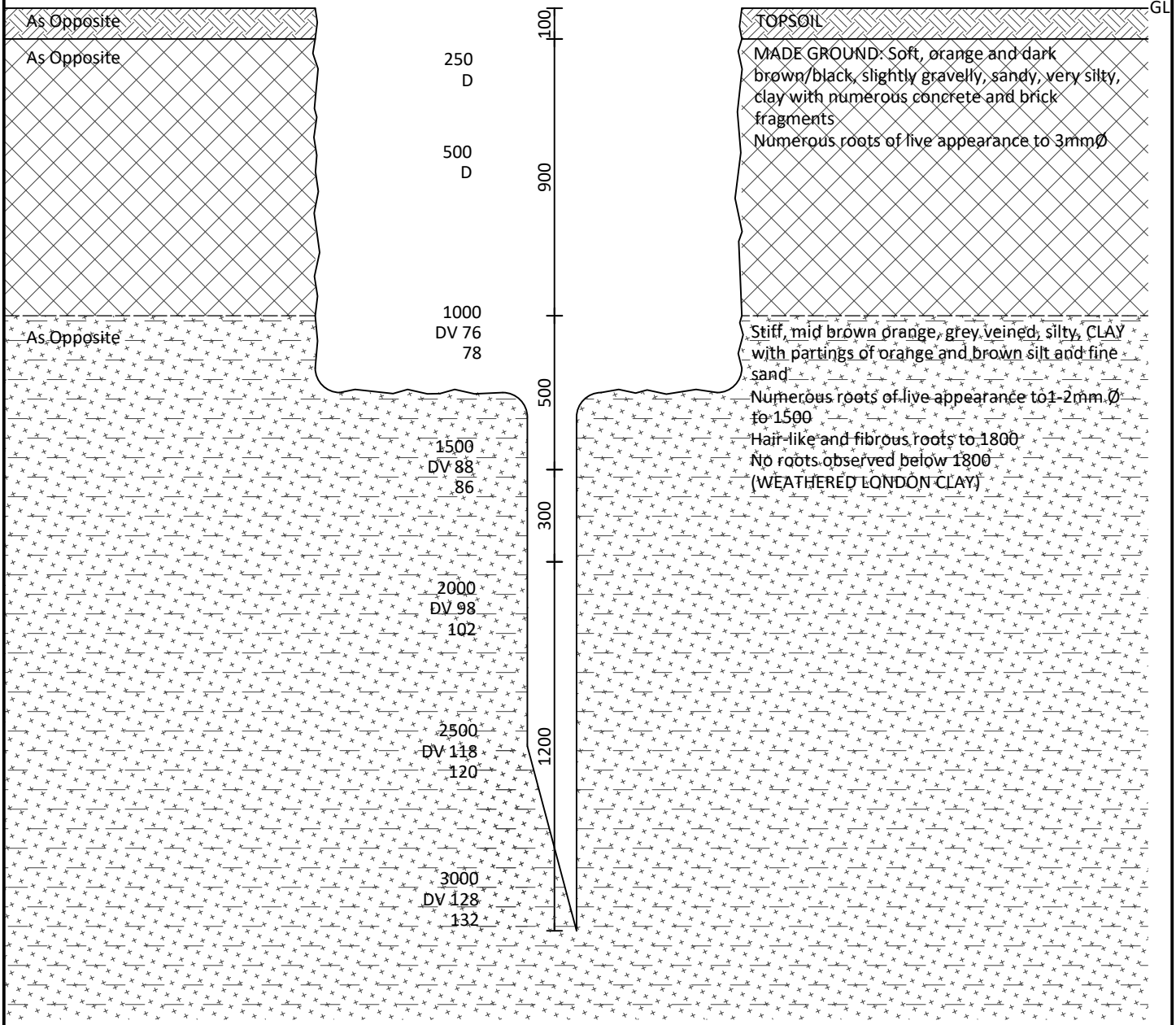


TRIAL PIT ENDS AT 1000

Remarks:	Key:			
Groundwater was not encountered. All dimensions in millimetres.	ND	No Data	V	Pilcon Vane (kPa)
	NTS	Not to Scale	B	Bulk Disturbed Sample
	GL	Ground Level	TDTD	Too Dense to Drive
	D	Small Disturbed Sample		
	M	Mackintosh Probe		

Site:			Client:		Identification
Garages at Parsifal, (Behind 521 Finchley Road), London, NW3 7BT			Gary Sugarman		TP4
Contract Number:	**Date:**	**Logged By:**	**Checked by:**	**Drawn by:**	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**	**Weather:**	**Scale:**
ND	ND	ND	Hand Tools	Sunny	NTS

Trial Pit Log

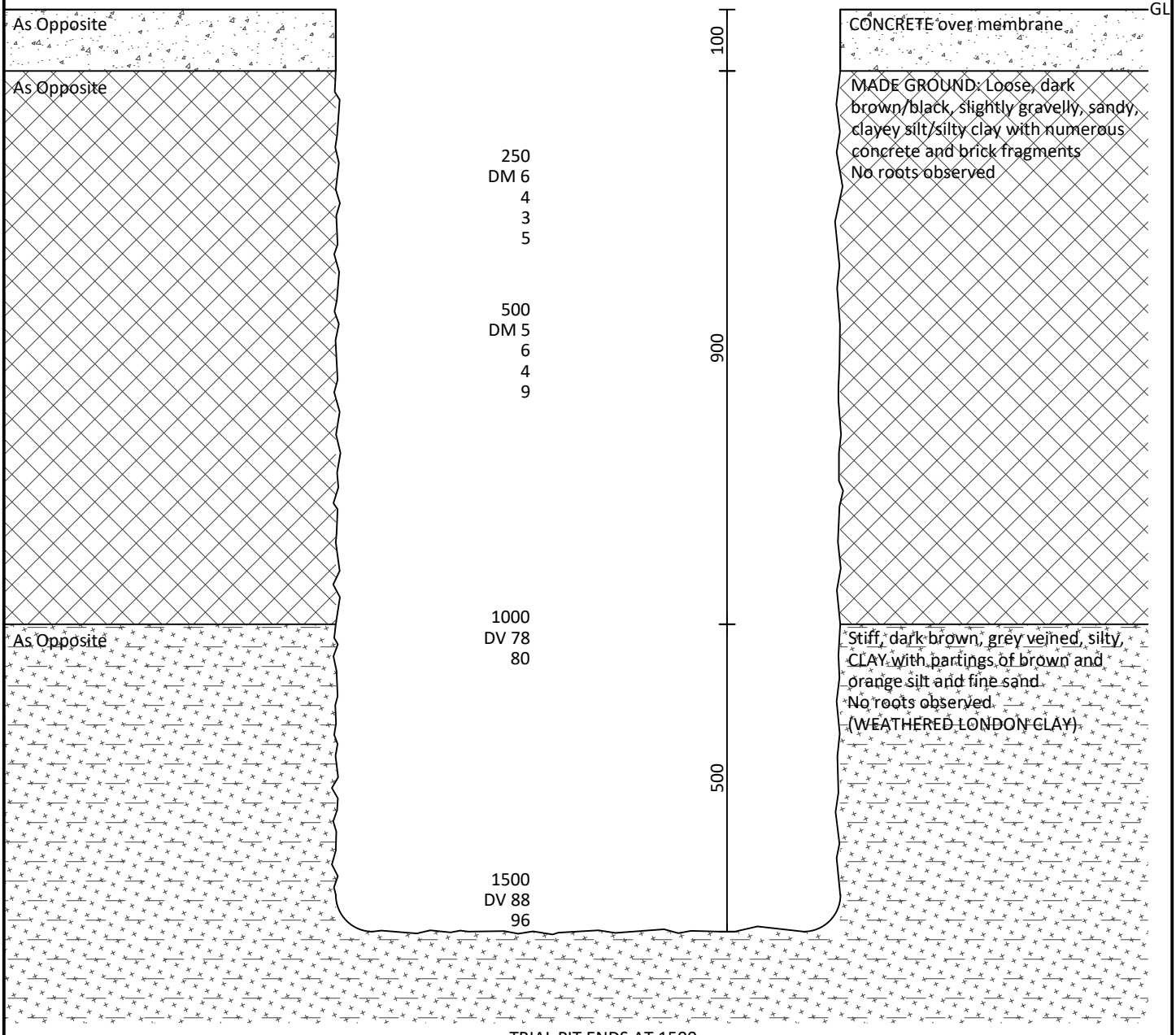


TRIAL PIT/BORHEOLE ENDS AT 3000

Remarks:	Key:			
Groundwater was not encountered.	ND	No Data	V	Pilcon Vane (kPa)
All dimensions in millimetres.	NTS	Not to Scale	B	Bulk Disturbed Sample
Trial pit extended by hand auger.	GL	Ground Level	TDTD	Too Dense to Drive
Borehole dry and open on completion.	D	Small Disturbed Sample		
	M	Mackintosh Probe		

Site:			Client:		Identification
Garages at Parsifal, (Behind 521 Finchley Road), London, NW3 7BT			Gary Sugarman		TP5
Contract Number:	**Date:**	**Logged By:**	**Checked by:**	**Drawn by:**	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**	**Weather:**	**Scale:**
ND	ND	ND	Hand Tools	Sunny	NTS

Trial Pit Log

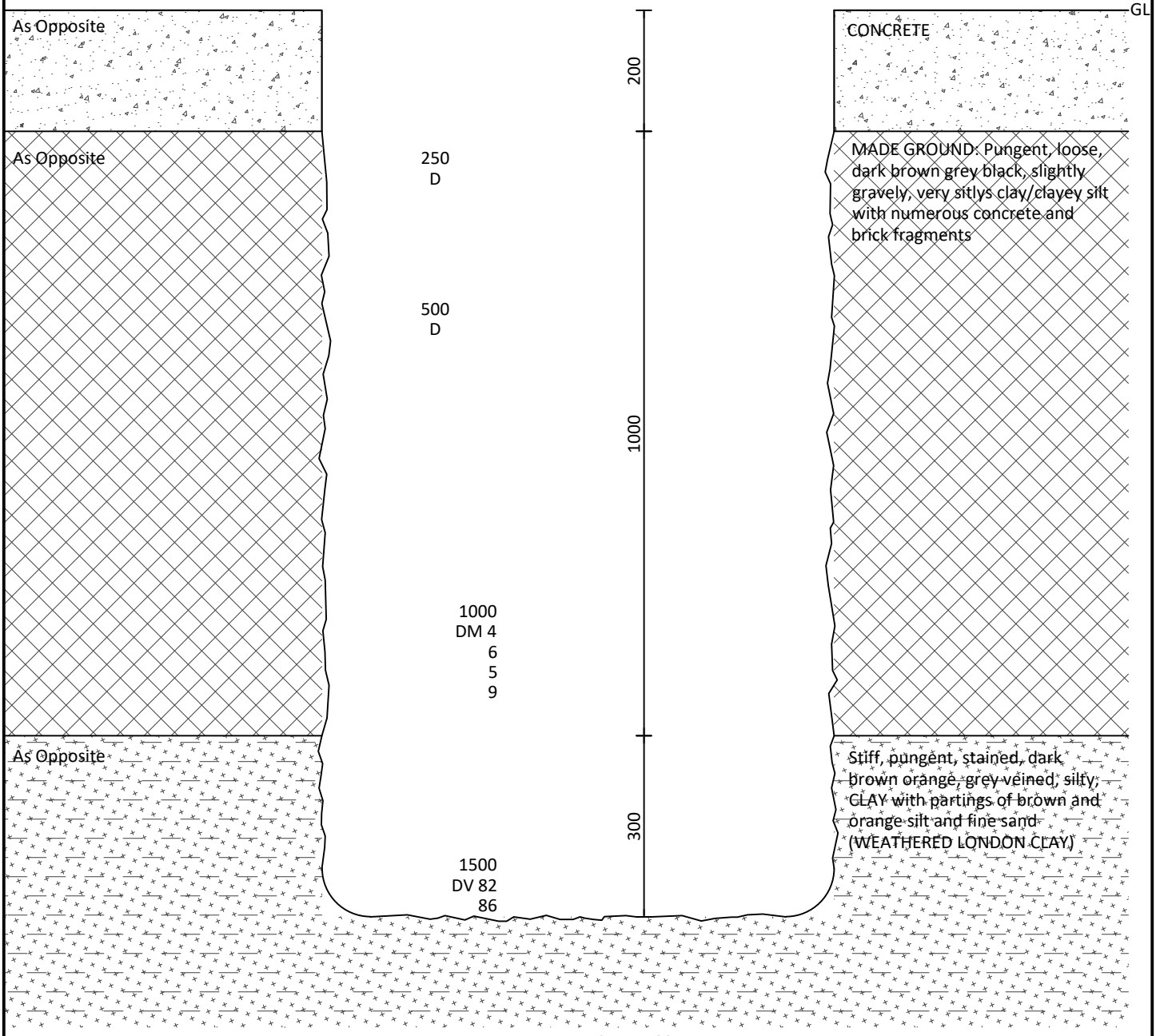


TRIAL PIT ENDS AT 1500

Remarks:	Key:			
Groundwater was not encountered. All dimensions in millimetres.	ND	No Data	V	Pilcon Vane (kPa)
	NTS	Not to Scale	B	Bulk Disturbed Sample
	GL	Ground Level	TDTD	Too Dense to Drive
	D	Small Disturbed Sample		
	M	Mackintosh Probe		

Site:			Client:		Identification
Garages at Parsifal, (Behind 521 Finchley Road), London, NW3 7BT			Gary Sugarman		TP6
Contract Number:	**Date:**	**Logged By:**	**Checked by:**	**Drawn by:**	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**	**Weather:**	**Scale:**
ND	ND	ND	Hand Tools	Sunny	NTS

Trial Pit Log



TRIAL PIT ENDS AT 1500

Remarks:

Groundwater was not encountered.
All dimensions in millimetres.
Pungent odor noted throughout MADE GROUND and top of natural material encountered.

Key:

ND	No Data	V	Pilcon Vane (kPa)
NTS	Not to Scale	B	Bulk Disturbed Sample
GL	Ground Level	TDTD	Too Dense to Drive
D	Small Disturbed Sample		
M	Mackintosh Probe		

Borehole Log

Site:	Client:	Identification
Garages at Parsifal, (Behind 521 Finchley Road), London, NW3 7BT	Gary Sugarman	BH1

Contract Number:	Date:	Logged By:	Checked by:	Drawn by:	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Plant Used:**	**Weather:**	**Scale:**
ND	ND	ND	Secondman	Sunny	NTS

Samples & In Situ Testing			Strata Details				Roots and Groundwater	
Depth (m)	Sample	Test Result	Depth (m)	Thickness (m)	Legend	Strata Description	Roots Information	Groundwater (m)
GL			GL					
0.25	D					PAVING over MADE GROND: Medium compact to compact, dark brown/black, gravelly, sandy, clayey, silt with numerous pieces of concrete and brick rubble	Roots of live and dead appearance to 1-2mmØ to 2.20.	
0.50	D			1.20				
1.00	D							
			1.20					
1.50	D	V 128 130				Stiff, mid orange-brown, grey veined, silty, CLAY with partings of orange and brown silt and fine sand (WEATHERED LONDON CLAY)		
2.00	D	V 134 138					Hair-like and fibrous roots to 3.40.	
2.50	D					.....becoming very stiff from 2.50		
3.00	D	V 140+ 140+						
3.50	D						No roots observed below 3.40.	
4.00	D	V 140+ 140+						
4.50	D			6.80				
5.00	D	V 140+ 140+						
6.00	D	V 140+ 140+						
7.00	D	V 140+ 140+						
8.00	D	V 140+ 140+	8.00			BOREHOLE ENDS AT 8.00		

Remarks:

Borehole 'dry' and 'open' on completion.
All dimensions in metres.
Standpipe installed at 8m on completion (1m plain plastic pipe and 7m slotted plastic pipe)

Key:

ND	No Data	V	Pilcon Vane (KPa)
CFA	Continuous Flight Auger	M	Mackintosh Probe
NTS	Not to Scale	SPT	Standard Penetration Test
GL	Ground Level	N	Blow Count
D	Small Disturbed Sample	TDTD	Too Dense to Drive

Borehole Log

Site:	Client:	Identification
Garages at Parsifal, (Behind 521 Finchley Road), London, NW3 7BT	Gary Sugarman	BH2

Contract Number:	Date:	Logged By:	Checked by:	Drawn by:	
11384	21/05/2020	PE	MCE	CCP	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Plant Used:**	**Weather:**	**Scale:**
ND	ND	ND	Secondman	Sunny	NTS

Samples & In Situ Testing			Strata Details				Roots and Groundwater	
Depth (m)	Sample	Test Result	Depth (m)	Thickness (m)	Legend	Strata Description	Roots Information	Groundwater (m)
GL			GL					
0.25	D			1.20		CONCRETE over MADE GROUND: Loose, dark brown/black, slightly gravelly, sandy, very silty clay/clayey silt with numerous concrete and brick fragments	No roots observed	
0.50	D							
1.00	D	M 5 9 7 9	1.20					
1.50	D	V 110 108				Stiff, mid orange-brown, grey veined, silty, CLAY with partings of orange and brown silt and fine sand (WEATHERED LONDON CLAY)		
2.00	D	V 116 118						
2.50	D							
3.00	D	V 122 126						
3.50	D							
4.00	D	V 140+ 140+				.....becoming very stiff from 3.80.		
4.50	D			6.80				
5.00	D	V 140+ 140+						
6.00	D	V 140+ 140+						
7.00	D	V 140+ 140+						
8.00	D	V 140+ 140+	8.00			BOREHOLE ENDS AT 8.00		

Remarks:

Borehole 'dry' and 'open' on completion.
All dimensions in metres.
Standpipe installed at 8m on completion (1m plain plastic pipe and 7m slotted plastic pipe)

Key:

ND	No Data	V	Pilcon Vane (KPa)
CFA	Continuous Flight Auger	M	Mackintosh Probe
NTS	Not to Scale	SPT	Standard Penetration Test
GL	Ground Level	N	Blow Count
D	Small Disturbed Sample	TDTD	Too Dense to Drive

Laboratory Report

Site	**Garages @ Parsifal, Finchley Road, London, NW3 7BT**
Client	**Gary Sugarman**
Date	**05-Jun-20**
Our Ref	**CSI/11384**
CGL Ref	**11384**

Chelmer Global Ltd
Unit 7 Hall Road Industrial Estate, Hall Road, Southminster, Essex CM0 7DA
Essex: 01245 400930 | info@siteinvestigations.co.uk | www.siteinvestigations.co.uk

Content Summary

This report contains all test results as indicated on the test instruction/summary.

CGL Reference :	11384	
Client Reference :	CSI/11384	
For the attention of :	Gary Sugarman	
This report comprises of the following :	1	Cover Page
	1	Inside Cover/Contents Page
	4	Pages of Results
	1	Moisture/Shear Strength Chart
	1	Plasticity Chart
	1	Limitations of Report Page

Notes :

General

Please refer to report summary notes for details pertaining to methods undertaken and their subsequent accreditations

Samples were supplied by Chelmer Global Ltd

All tests performed in-house unless otherwise stated

Deviant Samples

Samples were received in suitable containers	Yes
A date and time of sampling was provided	Yes
Arrived damaged and/or denatured	No

Laboratory Testing Results

BS 1377 : 1990

Job Number : 11384
Client : Gary Sugarman
Client Reference : CSI/11384
Site Name : Garages @ Parsifal, Finchley Road, London, NW3 7BT

Date Received : 26/05/2020
Date Testing Started : 26/05/2020
Date Testing Completed : 05/06/2020
Laboratory Used : Chelmer Geotechnical, CM3 8AB

Sample Ref			Sample Type	*Moisture Content (%) [1]	*Soil Faction > 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)	Insitu Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	*pH Value [11]	*Sulphate Content (g/l)		
BH/TP/WS	Depth (m)	UID															SO_3 [12]	SO_4 [13]	Class [14]
BH1	1.5		D	28	<5	69	29	40	-0.02	38	CH			129					
BH1	3.0		D	27	<5	70	28	42	-0.01	40	CV			140					
BH1	4.0		D	28	<5	72	27	45	0.02	43	CV			140					
BH1	6.0		D	31	<5	73	28	45	0.06	42	CV			140					
BH1	8.0		D	28	<5	71	30	41	-0.06	39	CV			140					

Notes :- *UKAS Accredited Tests

[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
[8] In-house method S9a adapted from BRE IP 4/93
[9] Values of shear strength were determined in situ by Chelmer Global using a Pilcon 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] $SO_4 = 1.2 \times SO_3$
[14] BRE Special Digest One (Concrete in Aggressive Ground) 2005

Note that if the SO_4 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

Key

D - Disturbed sample
B - Bulk sample
U - U100 (undisturbed sample)
W - Water sample
ENP - Essentially Non-Plastic
U/S - Underside Foundation

Comments :-

Technician :- MW

Checked & Authorised By:- Martin Edwards- **Chelmer Global Company Director**

Date Checked :- 08/06/2020

Laboratory Testing Results

BS 1377 : 1990

Job Number : 11384
Client : Gary Sugarman
Client Reference : CSI/11384
Site Name : Garages @ Parsifal, Finchley Road, London, NW3 7BT

Date Received : 26/05/2020
Date Testing Started : 26/05/2020
Date Testing Completed : 05/06/2020
Laboratory Used : Chelmer Geotechnical, CM3 8AB

Sample Ref			Sample Type	*Moisture Content (%) [1]	*Soil Faction > 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)	Insitu Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	*pH Value [11]	*Sulphate Content (g/l)		
BH/TP/WS	Depth (m)	UID															SO_3 [12]	SO_4 [13]	Class [14]
BH2	1.5		D	36	<5	77	29	48	0.14	45	CV			109					
BH2	2.0		D	34	<5	74	30	44	0.09	41	CV			117					
BH2	2.5		D	36	<5	74	32	42	0.09	40	CV								
BH2	3.5		D	34	<5	76	30	46	0.08	44	CV								
BH2	5.0		D	33	<5	74	31	43	0.06	41	CV			140					
BH2	7.0		D	33	<5	75	28	47	0.10	45	CV			140					

Notes :- *UKAS Accredited Tests

[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
[8] In-house method S9a adapted from BRE IP 4/93
[9] Values of shear strength were determined in situ by Chelmer Global using a Pilcon 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] $SO_4 = 1.2 \times SO_3$
[14] BRE Special Digest One (Concrete in Aggressive Ground) 2005

Note that if the SO_4 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

Key

D - Disturbed sample
B - Bulk sample
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ENP - Essentially Non-Plastic
U/S - Underside Foundation

Comments :-

Technician :- MW

Checked & Authorised By:- Martin Edwards- **Chelmer Global Company Director**

Date Checked :- 08/06/2020

Laboratory Testing Results

BS 1377 : 1990

Job Number : 11384
Client : Gary Sugarman
Client Reference : CSI/11384
Site Name : Garages @ Parsifal, Finchley Road, London, NW3 7BT

Date Received : 26/05/2020
Date Testing Started : 26/05/2020
Date Testing Completed : 05/06/2020
Laboratory Used : Chelmer Geotechnical, CM3 8AB

Sample Ref			Sample Type	*Moisture Content (%) [1]	*Soil Faction > 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)	Insitu Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	*pH Value [11]	*Sulphate Content (g/l)		
BH/TP/WS	Depth (m)	UID															SO_3 [12]	SO_4 [13]	Class [14]
TP3	0.8		D	31	<5	71	31	40	-0.01	38	CV			79					

Notes :- *UKAS Accredited Tests

[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
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Comments :-

Technician :- MW

Checked & Authorised By:- Martin Edwards- **Chelmer Global Company Director**

Date Checked :- 08/06/2020

Laboratory Testing Results

BS 1377 : 1990

Job Number : 11384
Client : Gary Sugarman
Client Reference : CSI/11384
Site Name : Garages @ Parsifal, Finchley Road, London, NW3 7BT

Date Received : 26/05/2020
Date Testing Started : 26/05/2020
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Laboratory Used : Chelmer Geotechnical, CM3 8AB

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BH/TP/WS	Depth (m)	UID															SO_3 [12]	SO_4 [13]	Class [14]
TP4	1.0		D	37	<5	74	31	43	0.13	41	CV			77					

Notes :- *UKAS Accredited Tests

[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
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[13] $SO_4 = 1.2 \times SO_3$
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ENP - Essentially Non-Plastic
U/S - Underside Foundation

Comments :-

Technician :- MW

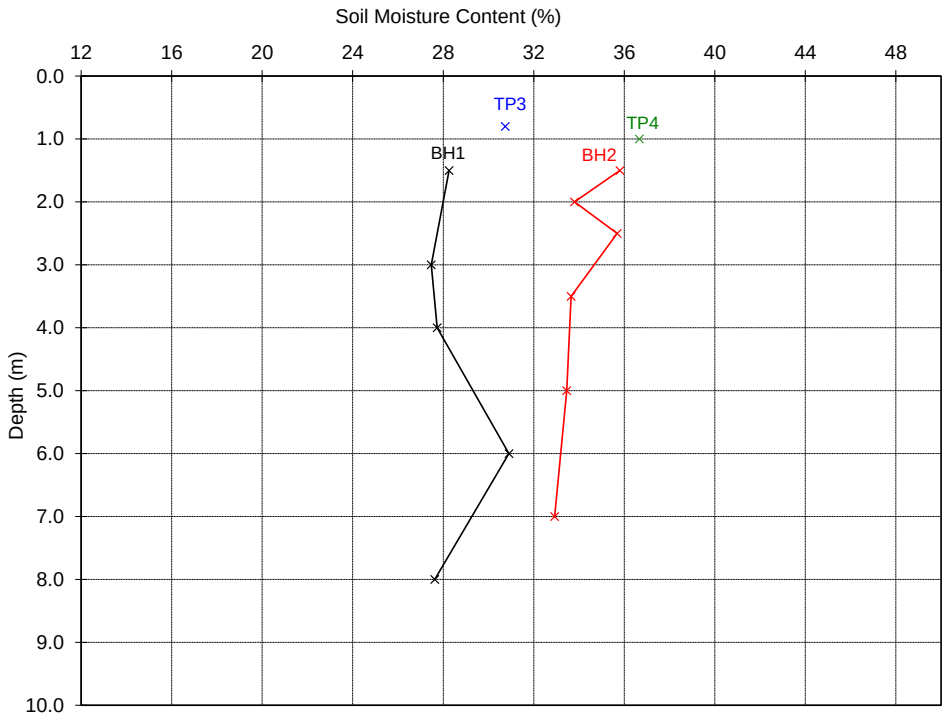
Checked & Authorised By:- Martin Edwards- **Chelmer Global Company Director**

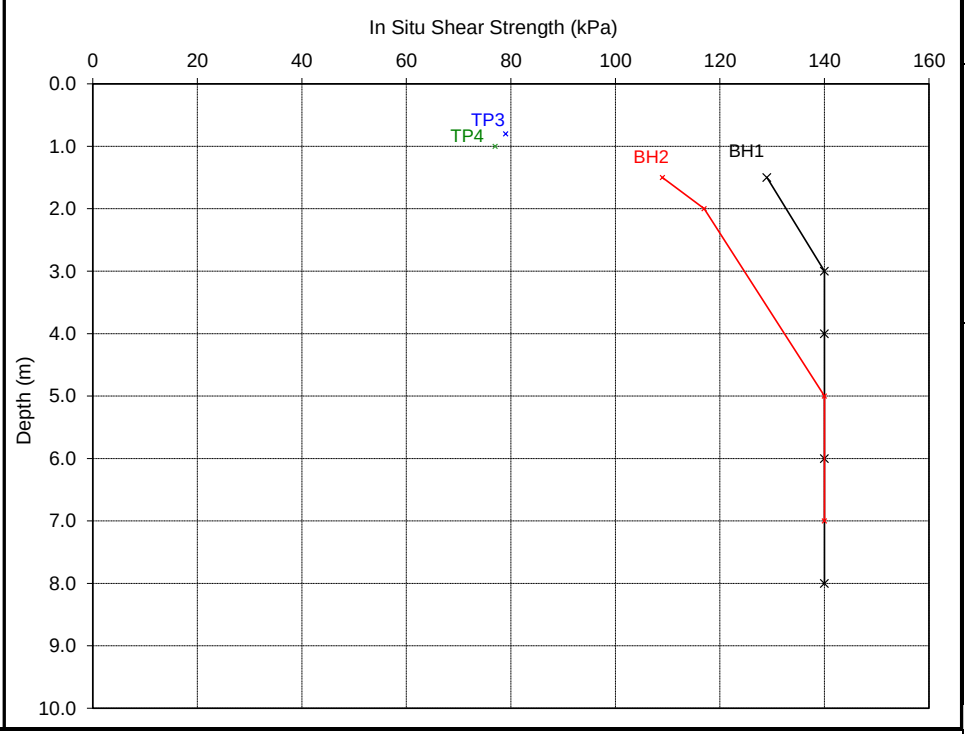
Date Checked :- 08/06/2020

Laboratory Testing Results

Moisture Content/Shear Strength Profile

Job Number :	11384	Date Received :	26/05/2020
Client :	Gary Sugarman	Date Testing Started :	26/05/2020
Client Reference :	CSI/11384	Date Testing Completed :	05/06/2020
Site Name :	Garages @ Parsifal, Finchley Road, London, NW3 7BT	Laboratory :	Chelmer Geotechnical Laboratories, CM3 8AB





Notes :-

1. If the Soil Fraction > 0.425mm exceeds 5% the Equivalent Moisture Content of the remainder (calculated in accordance with BS 1377: Part 2 : 1990, cl.3.2.4 note 1) is also plotted and the alternative profile additionally shown as an appropriately coloured broken line.
2. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly over consolidated clays) at shallow depths.

Unless otherwise stated, values of Shear Strength were determined in situ by Chelmer Global Ltd using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa. (Not UKAS accredited)

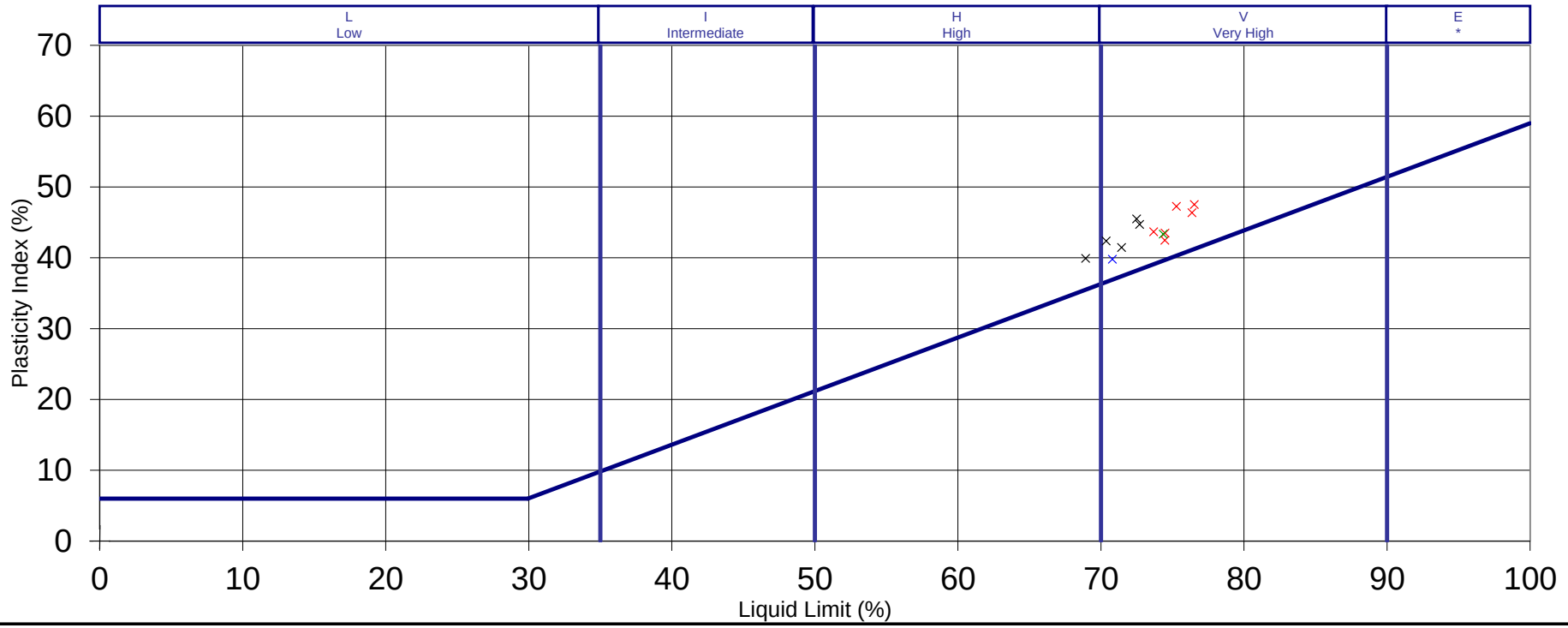
Comments :-

Checked & Authorised By:- Martin Edwards- **Chelmer Global Company Director** Date: 08/06/2020

Laboratory Testing Results

Plasticity Chart for the classification of fine soils and the finer part of coarse soils
In Compliance with BS5930 : 1999

Job Number :	11384	Date Received :	26/05/2020
Client :	Gary Sugarman	Date Testing Started :	26/05/2020
Client Reference :	CSI/11384	Date Testing Completed :	05/06/2020
Site Name :	Garages @ Parsifal, Finchley Road, London, NW3 7BT	Laboratory :	Chelmer Geotechnical Laboratories, CM3 8AB



Notes :-

SILT (M-SOIL), M, plots below A-Line
CLAY, C, plots above A-Line }M and C may be combined as FINE SOIL, F.

Key :- BH1
BH2
TP3
TP4

Comments :-

Checked & Authorised By:- Martin Edwards- **Chelmer Global Company Director** Date: 08/06/2020

Where our involvement consists exclusively of testing samples, the results and comments (if provided) relate only to the samples tested.

Any samples that are deemed to be subject to deviation will be recorded as such within the test summary.

Landborne Gas Assessment

Site Ref: 11384
Site Name: Garages @ Parsifal, 521 Finchley Road, London

Well	Date	Methane Peak	Methane Steady	Methane GSV	Carbon Dioxide Peak	Carbon Dioxide Steady	Carbon Dioxide GSV	Oxygen	Atmos.	Flow	Response Zone	Depth to Water	CO	H2S	VOC
		%v/v	%v/v	l/hr	%v/v	%v/v	l/hr	%v/v	mbar	l/hr	m bgl	m bgl	ppm	ppm	ppm
BH2				0.0000			0.0000				1.0-8.0				
				0.0000			0.0000								
	03/06/2020	0.5	0.5	0.0020	4.7	4.7	0.0188	17.4	1000	0.4		6.62	2	0	12.6
	10/06/2020	0.5	0.5	0.0020	2.7	2.0	0.0108	19.4	1007	0.4		6.00	1	0	2.6
				0.0000			0.0000								
				0.0000			0.0000								
BH1				0.0000			0.0000				1.0-8.0				
				0.0000			0.0000								
	03/06/2020	4.6	4.6	0.0184	4.6	4.6	0.0184	13.8	999	0.4		dry	1	0	6.6
	10/06/2020	0.5	0.5	0.0030	3.8	3.8	0.0228	14.5	1007	0.6		dry	1	0	4.4
				0.0000			0.0000								
				0.0000			0.0000								

Notes

NR = Not Recorded
Values in Red exceed CIRIA 665 criteria (CO_2 >5.0% and CH_4 >1.0%)

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Analytical Report Number : 20-11532

Replaces Analytical Report Number : 20-11532, issue no. 1

Additional analysis undertaken.

Project / Site name:	Garages Parsifal behind 521 Finchley Road NW3	**Samples received on:**	28/05/2020
Your job number:	11384	**Sample instructed/ Analysis started on:**	28/05/2020
Your order number:		**Analysis completed by:**	05/08/2020
Report Issue Number:	2	**Report issued on:**	07/08/2020
Samples Analysed:	9 soil samples		

Signed:

Joanna Wawrzeczko
Technical Reviewer (Reporting Team)

For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 20-11532

Project / Site name: Garages Parsifal behind 521 Finchley Road NW3

Lab Sample Number				1520080	1520081	1520082	1520083	1520084
Sample Reference				TP2	TP3	TP4	TP5	TP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.25	0.25	0.25	0.25	0.50
Date Sampled				21/05/2020	21/05/2020	21/05/2020	21/05/2020	21/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	18	16	2.5	20	22
Total mass of sample received	kg	0.001	NONE	1.5	1.0	1.6	1.5	0.50
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.8	8.5	7.9	8.9	-
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	-
Organic Matter	%	0.1	MCERTS	3.3	4.9	9.5	3.7	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.34	< 0.05	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.57	< 0.05	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	1.8	5.6	1.5	0.50	-
Anthracene	mg/kg	0.05	MCERTS	0.30	1.1	0.28	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	2.8	7.3	4.0	1.2	-
Pyrene	mg/kg	0.05	MCERTS	2.3	6.1	3.6	1.1	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.5	3.6	2.6	0.75	-
Chrysene	mg/kg	0.05	MCERTS	1.3	2.7	2.3	0.60	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.8	4.6	4.0	0.86	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.67	1.5	0.91	0.31	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.4	3.5	2.7	0.75	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.84	1.9	1.5	0.48	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.26	0.48	0.41	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.95	2.2	1.7	0.53	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	16.0	41.4	25.4	7.06	-
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	29	28	40	21	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	0.6	0.8	< 0.2	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	33	37	43	33	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	98	88	190	68	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	1100	410	2500	560	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.2	1.5	2.1	1.9	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	28	40	22	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	640	380	1200	170	-

Analytical Report Number: 20-11532

Project / Site name: Garages Parsifal behind 521 Finchley Road NW3

Lab Sample Number				1520080	1520081	1520082	1520083	1520084
Sample Reference				TP2	TP3	TP4	TP5	TP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.25	0.25	0.25	0.25	0.50
Date Sampled				21/05/2020	21/05/2020	21/05/2020	21/05/2020	21/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	32	< 8.0	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	32	< 10	< 10	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	6.4	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	25	15	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	26	34	30	14	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	34	66	45	22	-
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
Total PCBs by GC-MS								
Total PCBs	mg/kg	0.007	MCERTS	-	-	-	-	< 0.007

Analytical Report Number: 20-11532

Project / Site name: Garages Parsifal behind 521 Finchley Road NW3

Lab Sample Number				1520085	1520086	1520087	1520088	
Sample Reference				TP6	BH1	BH2	BH2	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.25	0.25	0.25	0.50	
Date Sampled				21/05/2020	21/05/2020	21/05/2020	21/05/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	-	-	< 0.1	
Moisture Content	%	N/A	NONE	10	-	-	21	
Total mass of sample received	kg	0.001	NONE	1.5	-	-	1.0	
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	11.0	-	-	9.3	
Free Cyanide	mg/kg	1	MCERTS	< 1	-	-	< 1	
Organic Matter	%	0.1	MCERTS	2.2	-	-	4.2	
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	< 0.05	
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	< 0.05	
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	< 0.05	
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	< 0.05	
Phenanthrene	mg/kg	0.05	MCERTS	0.27	-	-	0.74	
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	0.18	
Fluoranthene	mg/kg	0.05	MCERTS	0.60	-	-	2.1	
Pyrene	mg/kg	0.05	MCERTS	0.53	-	-	1.9	
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.37	-	-	1.5	
Chrysene	mg/kg	0.05	MCERTS	0.33	-	-	1.4	
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.51	-	-	1.9	
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.27	-	-	1.1	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.38	-	-	1.8	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.25	-	-	1.0	
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	0.25	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.28	-	-	1.2	
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	3.79	-	-	15.0	
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	-	-	53	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	1.0	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	46	-	-	34	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	42	-	-	75	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	720	-	-	880	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.9	-	-	1.6	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	-	-	25	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	280	-	-	730	

Analytical Report Number: 20-11532

Project / Site name: Garages Parsifal behind 521 Finchley Road NW3

Lab Sample Number				1520085	1520086	1520087	1520088	
Sample Reference				TP6	BH1	BH2	BH2	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.25	0.25	0.25	0.50	
Date Sampled				21/05/2020	21/05/2020	21/05/2020	21/05/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
o-xylene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	< 10	
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	-	< 10	
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	-	15	
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	22	
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	-	-	-	-	
PCB Congener 52	mg/kg	0.001	MCERTS	-	-	-	-	
PCB Congener 101	mg/kg	0.001	MCERTS	-	-	-	-	
PCB Congener 118	mg/kg	0.001	MCERTS	-	-	-	-	
PCB Congener 138	mg/kg	0.001	MCERTS	-	-	-	-	
PCB Congener 153	mg/kg	0.001	MCERTS	-	-	-	-	
PCB Congener 180	mg/kg	0.001	MCERTS	-	-	-	-	
Total PCBs by GC-MS								
Total PCBs	mg/kg	0.007	MCERTS	-	-	-	-	

Analytical Report Number: 20-11532
Project / Site name: Garages Parsifal behind 521 Finchley Road NW3
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
1520080	TP2	0.25	132	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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

Analytical Report Number : 20-11532

Project / Site name: Garages Parsifal behind 521 Finchley Road NW3

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1520080	TP2	None Supplied	0.25	Brown loam and clay with gravel.
1520081	TP3	None Supplied	0.25	Brown loam and clay with gravel.
1520082	TP4	None Supplied	0.25	Brown loam and clay with gravel.
1520083	TP5	None Supplied	0.25	Brown loam and clay with gravel.
1520084	TP5	None Supplied	0.50	Brown loam and clay with gravel.
1520085	TP6	None Supplied	0.25	Brown loam and clay with gravel.
1520086	BH1	None Supplied	0.25	-
1520087	BH2	None Supplied	0.25	-
1520088	BH2	None Supplied	0.50	Brown clay with gravel.

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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

REPORT NOTES

Equipment Used

Hand tools, Mechanical Concrete Breaker and Spade, Hand Augers, 100mm/150mm diameter Mechanical Flight Auger Rig, GEO205 Flight Auger Rig, Window Sampling Rig, and Large or Limited Access Shell & Auger Rig upon request and/or access permitting.

On Site Tests

By Pilcon Shear-Vane Tester (kN/m) in clay soils, and/or Mackintosh Probe in granular soils or made ground and/or upon request Continuous Dynamic Probe Testing and Standard Penetration Testing.

Note:

Details reported in trial-pits and boreholes relate to positions investigated only as instructed by the client or engineer on the date shown.

We are therefore unable to accept any responsibility for changes in soil conditions not investigated i.e. variations due to climate, season, vegetation and varying ground water levels.

Full terms and conditions are available upon request.