# FACTUAL REPORT OF TRIAL PIT & BOREHOLE INVESTIGATION

DATE: 12-04-2017.

SITE: 12, Akenside Road, London. NW3 5BT.

FOR: Richard F Gill & Associates LLP.

REF:

# BY ARKLEY SOIL INVESTIGATION LLP FOUNDATION INVESTIGATION & TEST DRILLING UNIT 10, REEDS FARM ESTATE, ROXWELL ROAD, WRITTLE, CHELMSFORD,

CM1 3ST E-mail: arkleysi@btconnect.com



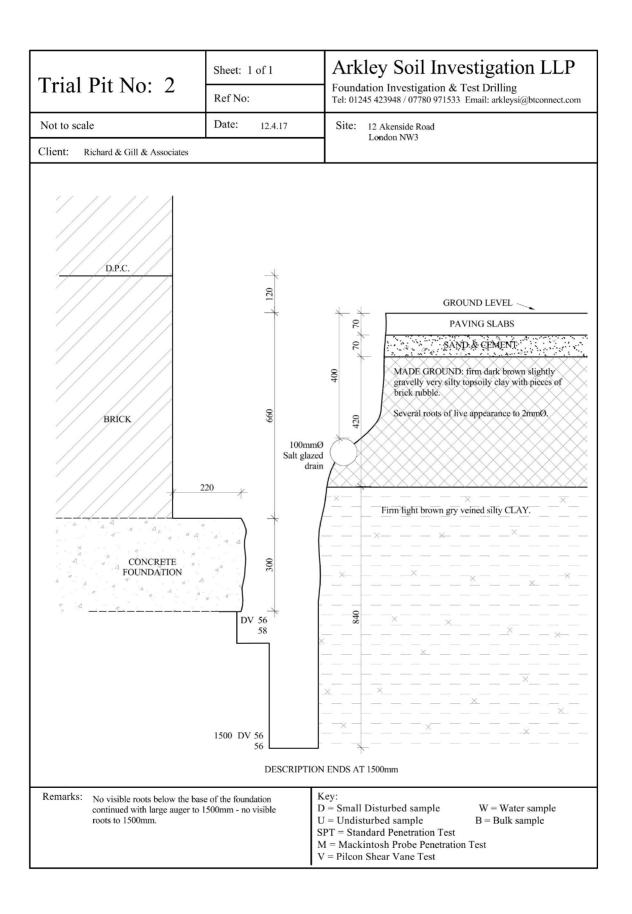




	Sheet: 1 of 1	Arkley Soil Investigation LLP
Site Plan	Ref No:	Foundation Investigation & Test Drilling Tel: 01245 423948 / 07780 971533 Email: arkleysi@btconnect.com
Not to scale	Date: 12.4.17	Site: 12 Akenside Road
Client: Richard F Gill & Associates		London NW3
MEDIUM TO LARGE LIME  SMALL YEW  LARGE ACERS  MEDIUM BIRCH  S/S  Remarks:	MAGNOLIA  7.4m  TP3 BH2  NO.12  AKENSIDE RO	Key: TP = Trial Pit IC = Inspection chamber
Tree identification not authenticated	l.	BH = Borehole IL = Invert level H = Approximate Height RWP = Rain water pipe G = Gulley SVP = Soil vent pipe

# Arkley Soil Investigation LLP Sheet: 1 of 1 Trial Pit No: 1 Foundation Investigation & Test Drilling Tel: 01245 423948 / 07780 971533 Email: arkleysi@btconnect.com Ref No: Not to scale Date: 12.4.17 12 Akenside Road London NW3 Client: Richard & Gill & Associates BRICK GROUND LEVEL MADE GROUND: compact friable dark brown gravelly topsoil with pieces of brick rubble. RENDER PLINTH 300 Numerous roots of live appearance to 10mmØ. MADE GROUND: firm dark brown slightly gravelly very silty topsoily clay with brick rubble. Numerous roots of live appearance to 3mmØ. BRICK 230 Firm light brown grey veined silty CLAY. Several roots of live appearance to 4mmØ. CONCRETE 60 FOR STRATA BELOW 1300mm SEE BH LOG Remarks: D = Small Disturbed sample W = Water sampleU = Undisturbed sample B = Bulk sampleSPT = Standard Penetration Test M = Mackintosh Probe Penetration Test V = Pilcon Shear Vane Test

Parahala Nas 1					nvestigation LL  1 & Test Drilling	P			
Borehole No: 1		Ref No:	Ref No:			5 4239	948 / 07780 97	1533 Email: arkleysi@btconnect.	.com
Boring Method: Hand tools Date: 12.4.17				Si	te:	12 Akenside Road London NW3			
Clien	t: Richard F Gill & Associates					Lon	don 14443		
Depth (m)	Description		Thick- ness	Legend	-	nples Depth	Insitu tests Type Result	Field comments	Depth to Water
	As trial pit one.		1.3					As trial pit one.	
1.3		Cr. All	0.5	×				1.5 - Several roots of live appearance to 2mmØ.	
1.8	Firm light brown grey veined silty	CLAY.	0.5	_X 	D	1.5	V 56 60		
				X X—  - X	D	2.0	V 70 80	To 2.3m	
Firm to stiff light brown grey veined very silty CLAY.			1.5	× - - × - ×	D	2.5	V 86 90		
3.3				X	D	3.0	V 80 90	Slight moisture @	3.3
	Firm/medium dense moist mid brow with very silty CLAY & sandy SIL BEDS).		0.7	×> >- >- >-	D	3.5			
4.0	BOREHOLE ENDS .	AT 4.0m		×>	D	4.0	M 36 44 48 38		
Remarks: Borehole moist & open on completion.			D = B = U = S.P	Key: D = Small Disturbed sample B = Bulk sample U = Undisturbed sample S.P.T. = Standard Penetration Test M = Mackintosh Probe Penetration Test					



### Arkley Soil Investigation LLP Sheet: 1 of 1 Trial Pit No: 3 Foundation Investigation & Test Drilling Ref No: Tel: 01245 423948 / 07780 971533 Email: arkleysi@btconnect.com Not to scale Date: 12.4.17 12 Akenside Road London NW3 Client: Richard & Gill & Associates D.P.C GROUND LEVEL PAVING SLABS SAND & CEMENT ... HOGGIN & RUBBLE MADE GROUND: firm dark brown slightly gravelly very silty topsoily clay with whole bricks brick rubble glass & china. Several roots of live appearance to 8mmØ. 700 Soft moist light brown grey veined silty CLAY. Occasional roots of live appearance to 2mmØ. CONCRETE 006 CONCRETÉ FOUNDATION Soft moist light brown grey veined silty CLAY. Occasional roots of dead appearance to 1mmØ. DV 36 FOR STRATA BELOW 1600mm SEE BH LOG Remarks: Trial pit excavated to 1200mm base of concrete D = Small Disturbed sample W = Water samplefound with large auger & steel pin NOT fully excavated. U = Undisturbed sample B = Bulk sampleSPT = Standard Penetration Test M = Mackintosh Probe Penetration Test V = Pilcon Shear Vane Test

Borehole No: 2		Sheet: 1 of 1		Arkley Soil Investigation LLP Foundation Investigation & Test Drilling								
		Ref No:			Foundation Investigation & Test Drilling Tel: 01245 423948 / 07780 971533 Email: arkleysi@btconnect.com							
Borir	ng Method: Hand tools	Date: 12.4.17	Date: 12.4.17				kenside Road don NW3					
Client: Richard F Gill & Associates												
Depth (m)	Description		Thick- ness	Legend	-	nples Depth	Insitu tests Type Result	Field comments	Depth to Water			
	As trial pit three.		1.6					As trial pit three.				
2.0	Soft moist light brown grey veined s of dark grey clay.	ilty CLAY with layers	0.4	× - _ ×	D	2.0	V 60	1.6 - Occasional old dead decomposing roots to 1mmØ.  To 2.0m				
2.6	Firm light brown grey veined silty C	0.6	 	D	2.5	60 V 60 64	Slight water seepage @	2.6				
	Firm mid brown-orange laminated very silty CLAY & sandy SILT (CLAYGATE BEDS).					3.0	V 76 80					
4.0	BOREHOLE ENDS AT 4.0m				D	4.0	V 86 90					
Borchole moist & open on completion.				ry: = Small Disturbed sample								

## SOIL INVESTIGATION PHOTO SHEET.

SITE: 12, Akenside Road, London. NW3 5BT. DATE: 12<sup>th</sup> April 2017.

CLIENT: Richard F Gill & Associates.

REF:



Trial pit 1 complete

Trial pit 2 complete

Trial pit 3 complete

#### REPORT NOTES

#### **Equipment Used:**

Hand tools, mechanical concrete breaker & spade, hand augers and 100mm diameter open bored continuous flight auger (access permitting)

#### **Insitu tests:**

By Pilcon hand shear vane tester (kN/m2) in clay soils, and or Mackintosh probe penetration test(blows per 75mm) in granular soil or made ground.

#### **Soil description:**

Soil descriptions are on-site descriptions only.

#### **Tree roots:**

Tree roots relate to tree roots observed in trial pits and boreholes only.

#### Note:

Details reported in trial pits and boreholes relate to positions investigated only, as instructed by the client, on the date shown only. We therefore do not accept any responsibility for changes in soil conditions not investigated any variations due to climate, seasons, vegetation and varying ground water levels.

Full terms and conditions are available upon request.

By
ARKLEY SOIL INVESTIGATION LLP
FOUNDATION INVESTIGATION AND TEST DRILLING.
Unit 10, Reeds Farm Estate,
Roxwell Road,
Writtle, Chelmsford,
Essex.
CM1 3ST.



**Arkley Soil Investigation LLP** Unit 10, Reeds Farm Estate **Roxwell Road WRITTLE** Chelmsford CM1 3ST

26/04/2017

Dr Ian B K Richardson BSc, PhD, CBiol, MiBiol, MiHort, FLS James Richardson BSc (Hons. Biology)

**Enterprise House** 49-51 Whiteknights Road Reading RG6 7BB

Tel: (0118) 986 9552 (Direct line) E-mail: richardsons@botanical.net Web: www.botanical.net

Your ref:

Our ref: 75/0601

Dear Sirs

#### 12 Akenside Road, London

The samples you sent in relation to the above on 12/04/2017 (received by us on 20/04/2017) have been examined. The structure was referable as follows:

#### TP1, u/s foundation

1 root: PLATANUS (Plane). 5 further samples, not examined in detail appeared similar under low magnification. Dead\*.

1 root: a SHRUB, similar in many ways to BUDDLEJA (bushes, sometimes large, with spikes consisting of tiny pink, white or blue scented flowers). 7 further samples, not examined in detail appeared similar under low magnification. Dead\*.

#### BH1, 1.5-2.3m

1 root: PLATANUS (Plane). 4 further samples, not examined in detail appeared similar under low magnification. Dead\*.

5 samples: unfortunately insufficient cells for identification.

1 root: PLATANUS (Plane). 2 further samples, not examined in detail appeared similar under low magnification. Dead\*.

I trust this is of help. Please call us if you have any queries; our Invoice is enclosed.

Yours faithfully



Dr Ian B K Richardson

Based mainly on the Iodine test for starch. Starch is present in some cells of a living woody root, but is more or less rapidly broken down by soil micro-organisms on death of the root, sometimes before decay is evident. This result need not reflect the state of the parent tree.

Report commissioned by

# **Meridian Soils Limited**

Electron House, Office & Technology Centre, West Hanningfield Road, Great Baddow, Essex. CM2 8JT
Tel: 01245 473113 E-mail: mail@meridiansoils.co.uk Web: www.meridiansoils.co.uk

# **Moisture Content and Index Property Determinations.**

Our Ref:- S.9040

Client Ref:-

Location:- 12 Akenside Road, London, NW3 5BT.

BH/TP No.	Sample No.	Depth m.	Natural Moisture %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Passing 0.425 um %	Equivalent Moisture %	Class	Modified Plasticity Index %
TP1		U.S (1.20)	31	71	27	44	100	31	CV	44
BH1		1.50	32							
		2.00	30	57	25	32	100	30	СН	32
		2.50	31							
		3.00	29	54	24	30	100	29	CH	30
		3.50	24							
		4.00	26							
TP2		U.S (0.96)	38							
		1.50	36							
TP3		U.S (1.53)	38	74	30	44	100	38	CV	44
BH2		2.00	35	64	27	37	100	35	CH	37
		2.50	32							
		3.00	27	42	22	20	100	27	CI	20
		3.50	30							
		4.00	28							