

# FACTUAL REPORT OF TRIAL PIT & BOREHOLE INVESTIGATION

DATE: 12-04-2017.

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

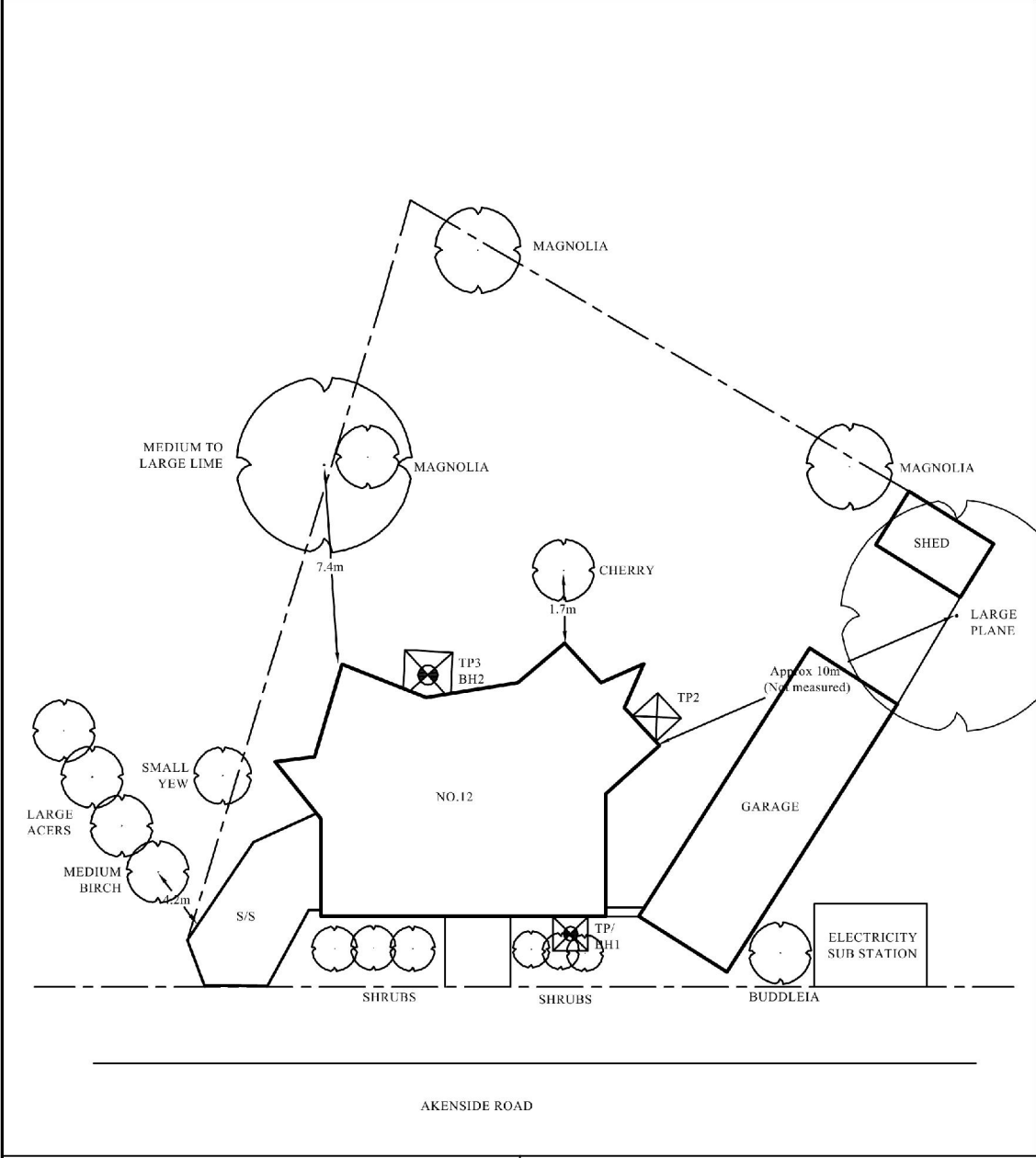
FOR: Richard F Gill & Associates LLP.

REF:

BY  
ARKLEY SOIL INVESTIGATION LLP  
FOUNDATION INVESTIGATION & TEST DRILLING

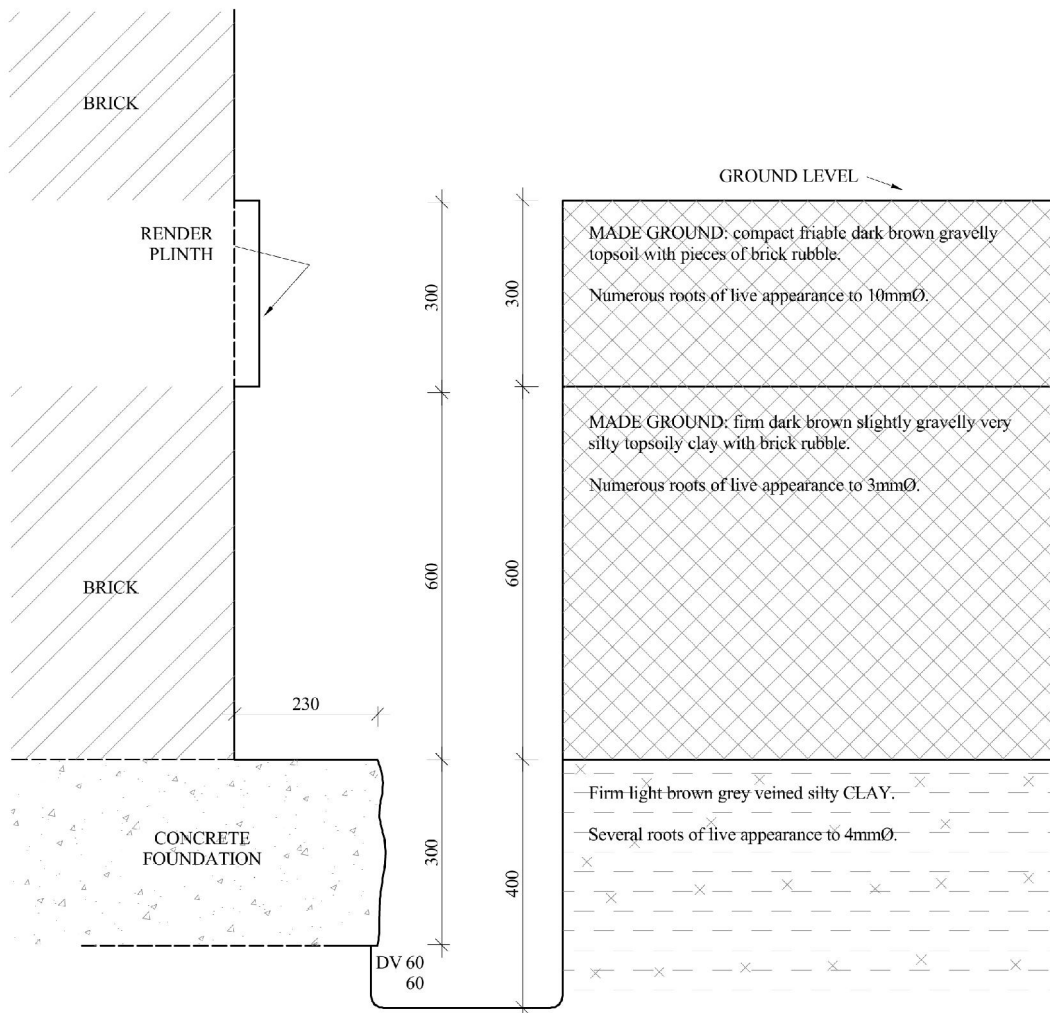


<b>Site Plan</b>	Sheet: 1 of 1	<b>Arkley Soil Investigation LLP</b> Foundation Investigation & Test Drilling
	Ref No:	
Not to scale	Date: 12.4.17	Site: 12 Akenside Road London NW3
Client: Richard F Gill & Associates		





Remarks:  Tree identification not authenticated.	Key:	IC = Inspection chamber
	TP = Trial Pit	IL = Invert level
	BH = Borehole	RWP = Rain water pipe
	H = Approximate Height	
	G = Gulley	
	SVP = Soil vent pipe	

Trial Pit No: 1	Sheet: 1 of 1	Arkley Soil Investigation LLP Foundation Investigation & Test Drilling [REDACTED]
	Ref No:	
Not to scale	Date: 12.4.17	Site: 12 Akenside Road London NW3
Client: Richard & Gill & Associates		

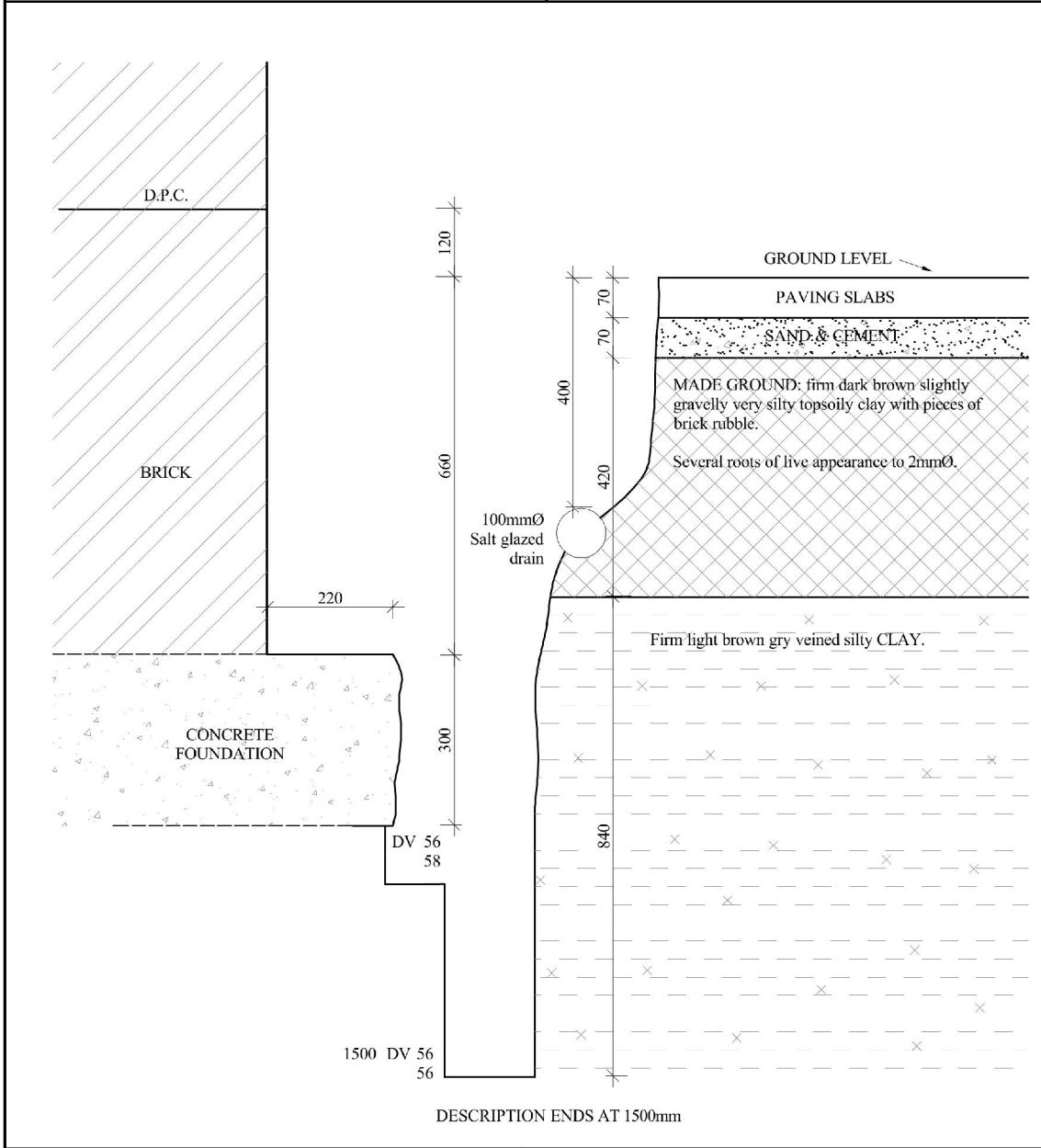


FOR STRATA BELOW 1300mm SEE BH LOG

Remarks:	Key: D = Small Disturbed sample      W = Water sample U = Undisturbed sample          B = Bulk sample SPT = Standard Penetration Test M = Mackintosh Probe Penetration Test V = Pilon Shear Vane Test
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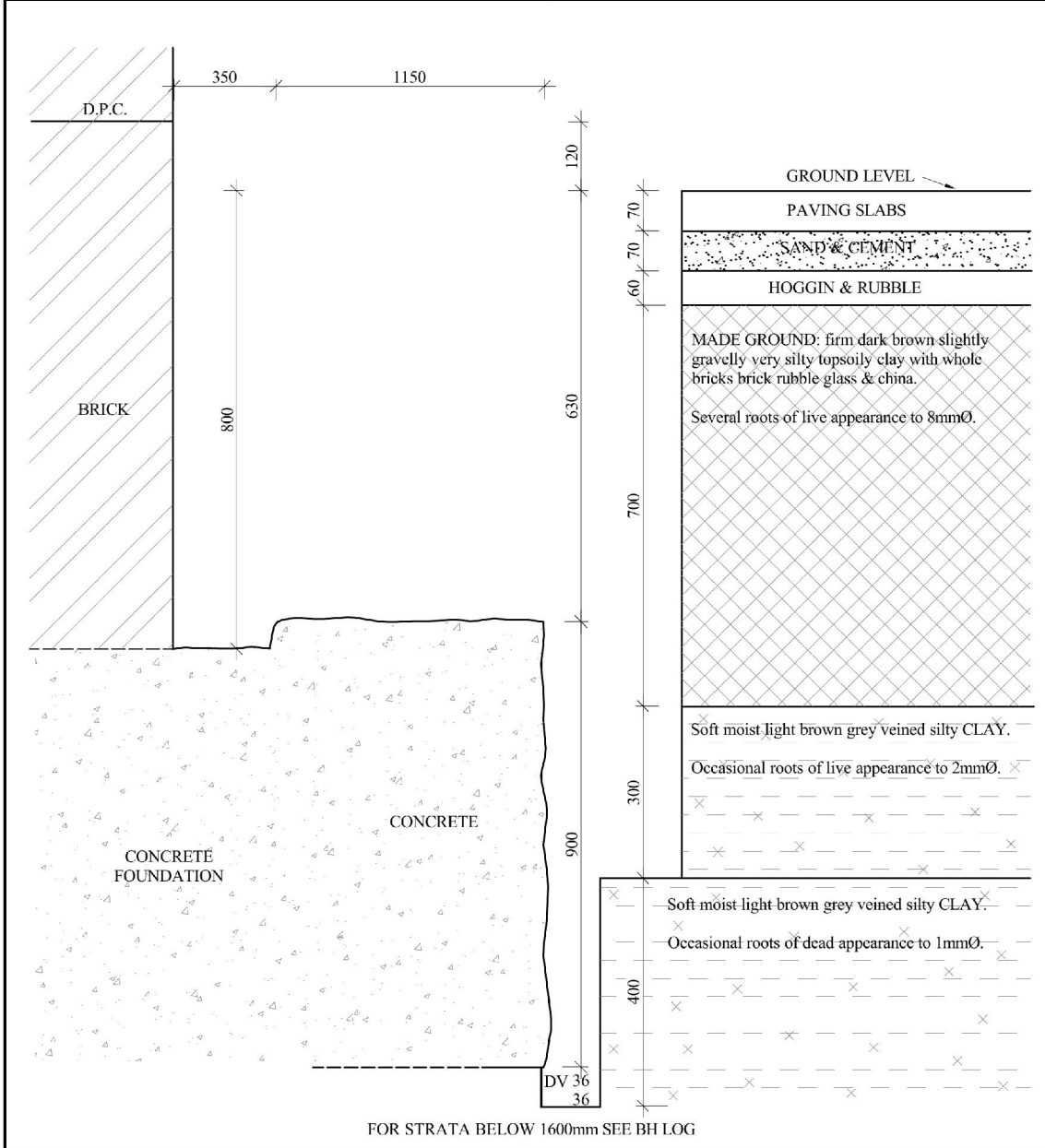
Borehole No: 1		Sheet: 1 of 1		Arkley Soil Investigation LLP					
		Ref No:		Foundation Investigation & Test Drilling					
Boring Method: Hand tools		Date: 12.4.17		Site: 12 Akenside Road London NW3					
Client: Richard F Gill & Associates									
Depth (m)	Description	Thick-ness	Legend	Samples		Insitu tests		Field comments	Depth to Water
				Type	Depth	Type	Result		
1.3	As trial pit one.	1.3						As trial pit one.	
1.8	Firm light brown grey veined silty CLAY.	0.5	X	D	1.5	V	56 60	1.5 - Several roots of live appearance to 2mmØ.  To 2.3m	
1.8	Firm to stiff light brown grey veined very silty CLAY.	1.5	X	D	2.0	V	70 80		
3.3				D	2.5	V	86 90		
3.3				D	3.0	V	80 90		
4.0	Firm/medium dense moist mid brown-orange laminated with very silty CLAY & sandy SILT (CLAYGATE BEDS).	0.7	X	D	3.5			Slight moisture @  3.3	
4.0	BOREHOLE ENDS AT 4.0m			D	4.0	M	36 44 48 38		
Remarks: Borehole moist & open on completion.				Key: D = Small Disturbed sample      V = Pilcon Vane Test B = Bulk sample                      W = Water sample U = Undisturbed sample S.P.T. = Standard Penetration Test M = Mackintosh Probe Penetration Test					

Trial Pit No: 2	Sheet: 1 of 1	Arkley Soil Investigation LLP Foundation Investigation & Test Drilling
	Ref No:	
Not to scale	Date: 12.4.17	Site: 12 Akenside Road London NW3
Client: Richard & Gill & Associates		



Remarks: No visible roots below the base of the foundation continued with large auger to 1500mm - no visible roots to 1500mm.	Key: D = Small Disturbed sample U = Undisturbed sample SPT = Standard Penetration Test M = Mackintosh Probe Penetration Test V = Pilon Shear Vane Test	W = Water sample B = Bulk sample
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Trial Pit No: 3	Sheet: 1 of 1	Arkley Soil Investigation LLP Foundation Investigation & Test Drilling
	Ref No:	
Not to scale	Date: 12.4.17	Site: 12 Akenside Road London NW3
Client: Richard & Gill & Associates		



Remarks: Trial pit excavated to 1200mm base of concrete found with large auger & steel pin NOT fully excavated.	Key: D = Small Disturbed sample U = Undisturbed sample SPT = Standard Penetration Test M = Mackintosh Probe Penetration Test V = Pilcon Shear Vane Test	W = Water sample B = Bulk sample
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<b>Borehole No: 2</b>		Sheet: 1 of 1		<b>Arkley Soil Investigation LLP</b> Foundation Investigation & Test Drilling					
		Ref No:							
Boring Method: Hand tools		Date: 12.4.17		Site: 12 Akenside Road London NW3					
Client: Richard F Gill & Associates									
Depth (m)	Description	Thick-ness	Legend	Samples		Insitu tests		Field comments	Depth to Water
				Type	Depth	Type	Result		
1.6	As trial pit three.	1.6						As trial pit three.	
1.6	Soft moist light brown grey veined silty CLAY with layers of dark grey clay.	0.4	X	D	2.0	V	60 60	1.6 - Occasional old dead decomposing roots to 1mmØ. ↓ To 2.0m	
2.0	Firm light brown grey veined silty CLAY.	0.6	X	D	2.5	V	60 64		
2.6	Firm mid brown-orange laminated very silty CLAY & sandy SILT (CLAYGATE BEDS).	1.4	X	D	3.0	V	76 80		
4.0	BOREHOLE ENDS AT 4.0m			D	4.0	V	86 90	Slight water seepage @ →	2.6
Remarks: Borehole moist & open on completion.				Key: D = Small Disturbed sample      V = Pilcon Vane Test B = Bulk sample                      W = Water sample U = Undisturbed sample S.P.T. = Standard Penetration Test M = Mackintosh Probe Penetration Test					

## 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



Trial pit 1



Borehole 1



Trial pit 2



Trial pit 2



Trial pit 3



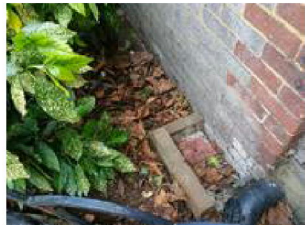
Trial pit 3



Trial pit 3



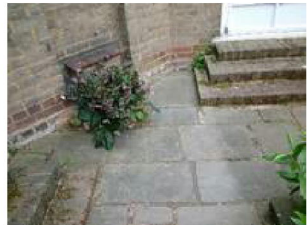
Borehole 2



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/m<sup>2</sup> ) 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.

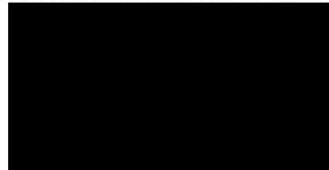
**Note:**

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.



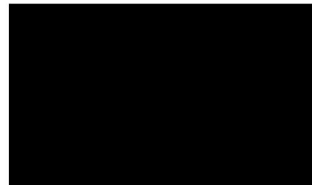
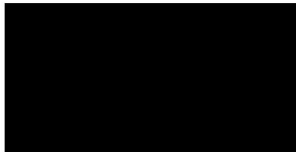


# Richardson's Botanical Identifications

Root identification  
Vegetation surveys  
Tree-Building investigations  
Plant taxonomy

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

## Arkley Soil Investigation LLP



26/04/2017

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.

#### TP3, u/s foundation

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.

Identified with no information on vegetation, on or off site.

Report commissioned by 

# Meridian Soils Limited

Electron House, Office & Technology Centre, West Hanningfield Road, Great Baddow, Essex. CM2 8JT

## 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	CH	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							