



Intrusive Site Investigation Report

LOCATION	Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL
ISSUE DATE	9 June 2014
FOR	B Maule & Co Ltd
CLIENT REF.	20131151- Ref: Letchford
OUR REF.	G14098

Prepared by

Checked by

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1. Introduction

In accordance with your instruction of 22nd April 2014 Geoinvestigate Ltd. carried out a site investigation at the above property on 20 May 2014.

2. Scope of Investigation

Three trial pits were hand excavated to depths of 0.75m (TP1 and TP3) and 0.85m (TP2) at the positions shown on the site plan presented in Appendix 1. Excavation was continued at the base of TP2 by the sinking of a percussion window sampling borehole to a depth of 3.30m (BH2).

Information on the foundation and ground conditions revealed by the investigation is presented on the trial pit diagrams and borehole log which are included in Appendix 1 of this report. The results of hand vane shear strength tests which were carried out at selected depths are shown on the diagrams and log also.

The results of Plastic Limit, Liquid Limit and moisture determinations are presented in Table 1 in Appendix 1.

Moisture and strength profiles are shown against depth on the graphs also presented in Appendix 1.

A report on the identification of roots recovered to depths of 0.75m in TP1, 1.60m in TP/BH2, and 0.75m in TP3 is presented in Appendix 2 of this report.

We trust that you will find the results of this investigation satisfactory and we would be pleased to provide any further assistance you may require with this matter.

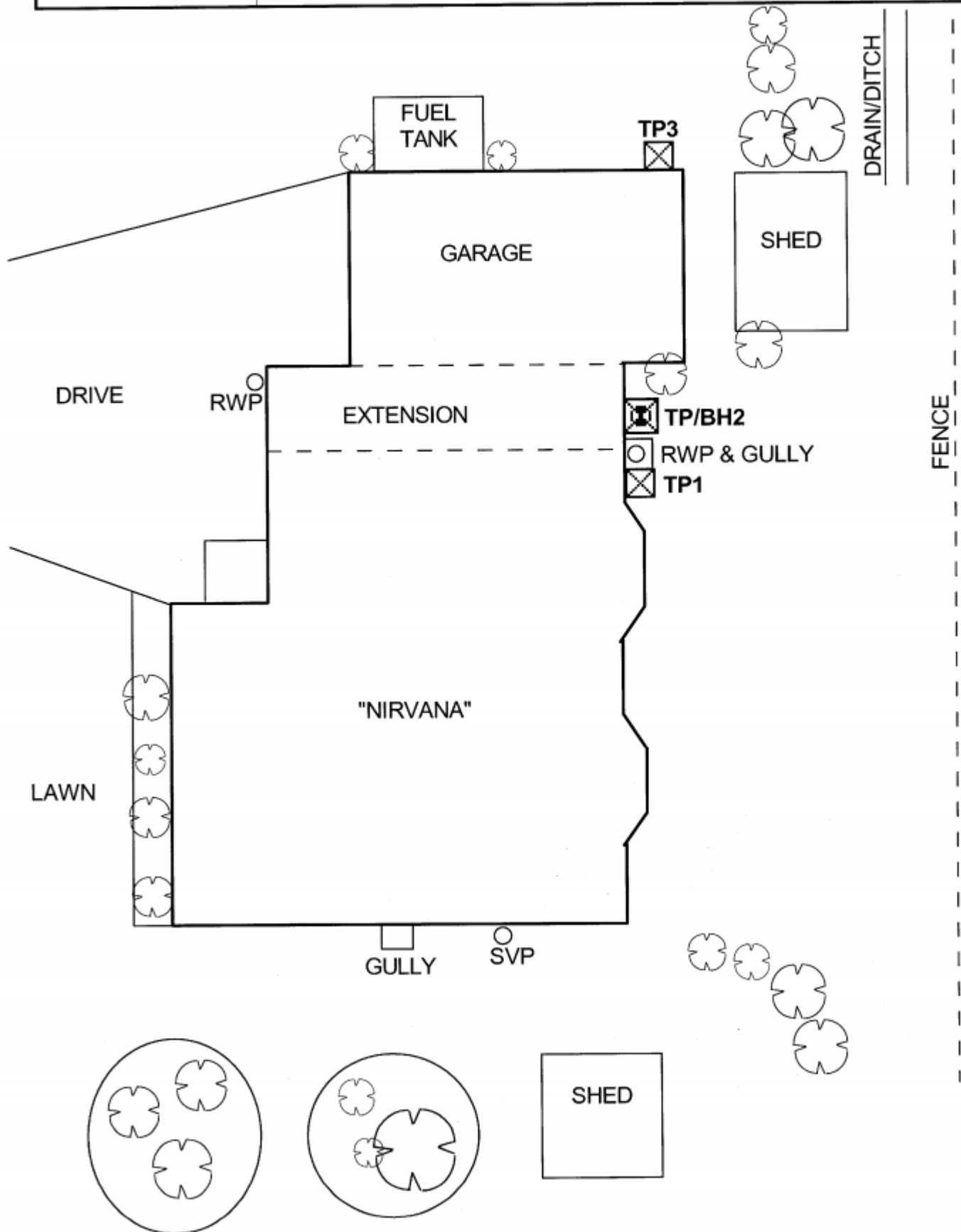
END OF REPORT



APPENDIX 1
SITE PLAN,
TRIAL PIT DIAGRAM / BOREHOLE LOG,
MOISTURE CONTENT / SHEAR STRENGTH PROFILES
AND
ATTERBERG LIMIT TEST RESULTS

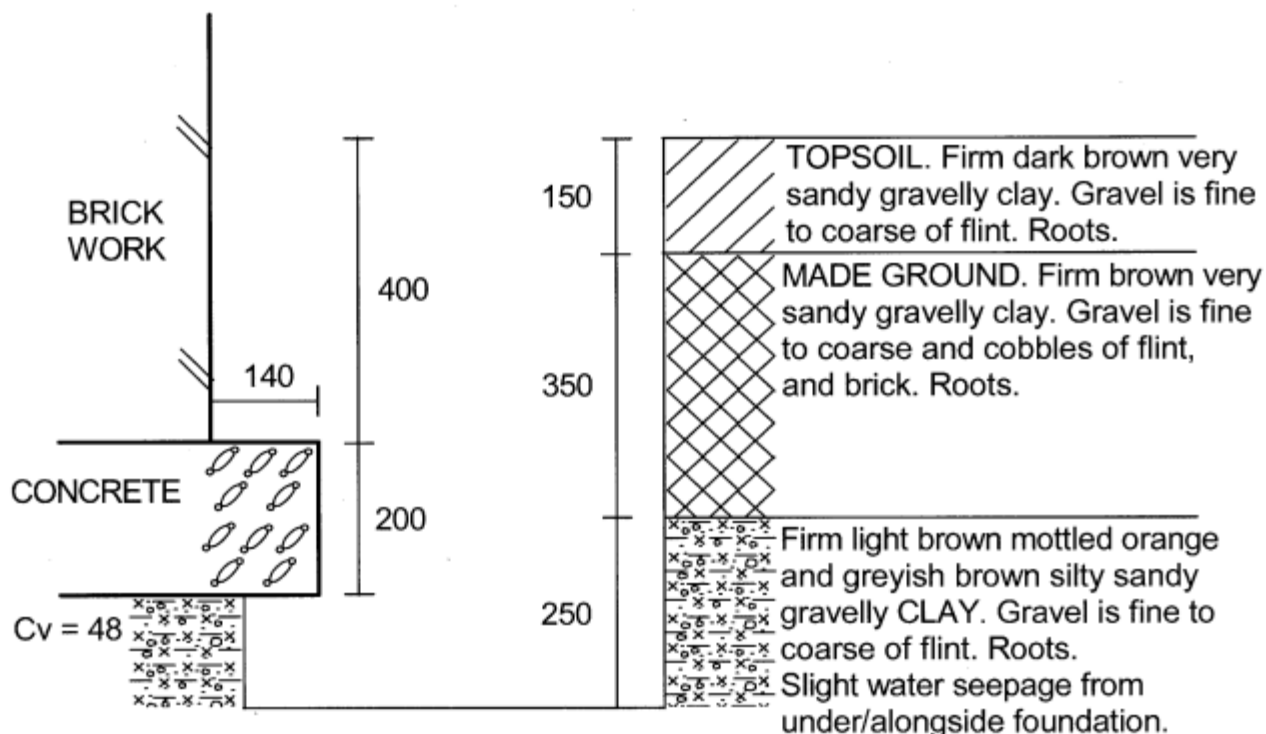
GEOINVESTIGATE Ltd.

OUR REF: G14098	YOUR REF: 20131151	SITE PLAN (NOT TO SCALE)
DATE: 20/05/14	LOCATION: Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL	



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OUR REF: G14098	YOUR REF: 20131151	TRIAL PIT: 1
DATE: 20/05/14	LOCATION: Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL	



Base of foundation at 0.60m.

Trial pit remained stable on completion. Standing water level at 0.72m.

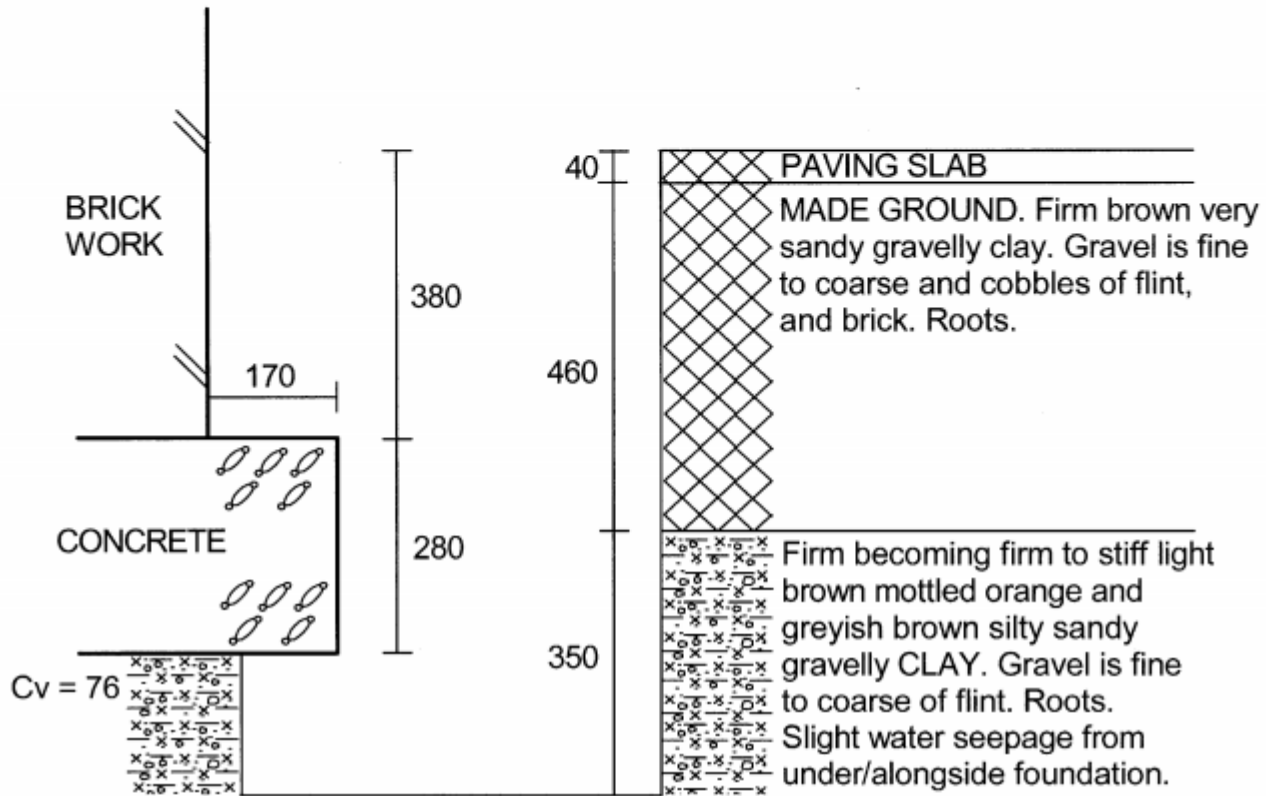
Trial pit terminated at 0.75m.

Disturbed soil sample taken from 0.60m.

Roots sampled from 0.00m to 0.60m and from 0.60m to 0.75m.

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OUR REF: G14098	YOUR REF: 20131151	TRIAL PIT: 2
DATE: 20/05/14	LOCATION: Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL	



Base of foundation at 0.66m.

Trial pit remained stable on completion. Standing water level at 0.85m.

For strata below 0.85m see BH2 log.

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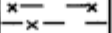
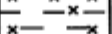
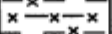
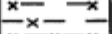
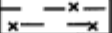
Your Ref. 20131151

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BH No.2 Sheet No. 1 of 1

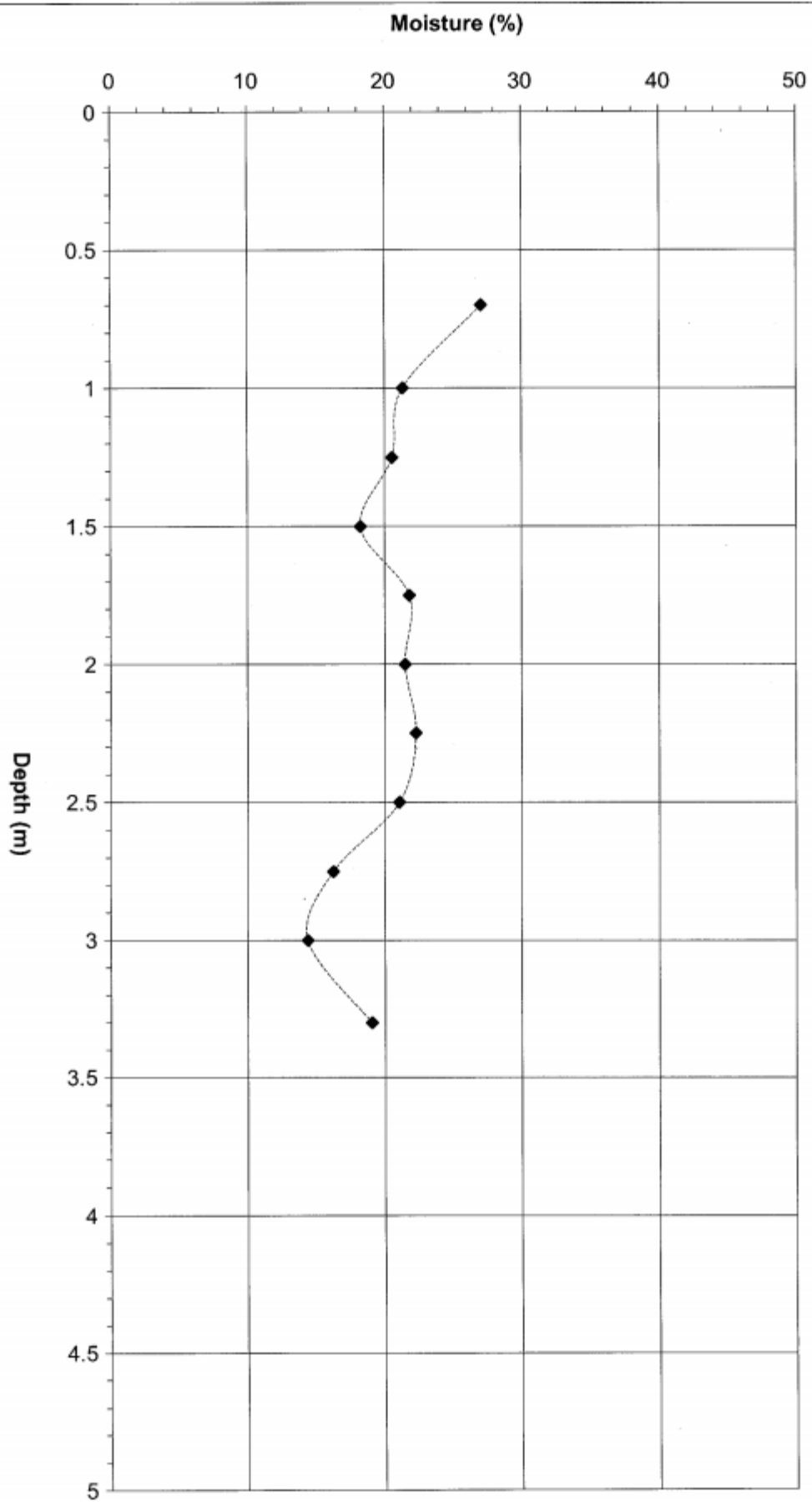
Location: Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL

DATE: 20/05/14

Depth (m)	Description of Strata	Thick-ness	Legend	Sample	Test Type Result	Root Information	Depth to Water	Depth (m)
	Trial pit				Cv kN/m ²			0.25
	Base of foundation at 0.66m	850				Roots 0.00m to 0.66m		0.50
				O				0.75
0.85	Compact brown and grey sandy very clayey							
0.95	GRAVEL and COBBLES of flint. Wet.	100		O	88			1.00
	Firm light brown and orange mottled grey slightly silty CLAY. Occasional fine to coarse gravel of flint.			O	83			1.25
	Becoming stiff below 1.50m	750		O	98	Roots 0.66m to 1.60m		1.50
1.70				O	127			1.75
	Stiff orangish brown and red mottled grey CLAY. Slightly laminated.			O	89			2.00
	Becoming red and grey mottled orangish brown below 2.00m. Firm to stiff inclusion at 2.00m.			O	117			2.25
		1600		O	118			2.50
				O	140			2.75
				O	140		SWL at 3.00m	3.00
3.30				O	140			3.30
	Borehole Terminated at 3.30m due to refusal							

Remarks: Hand excavated to 0.85m
Percussion window sampling to 3.30m
Borehole remained open on completion

Key: O Disturbed sample
Cv Shear vane
W Water sample

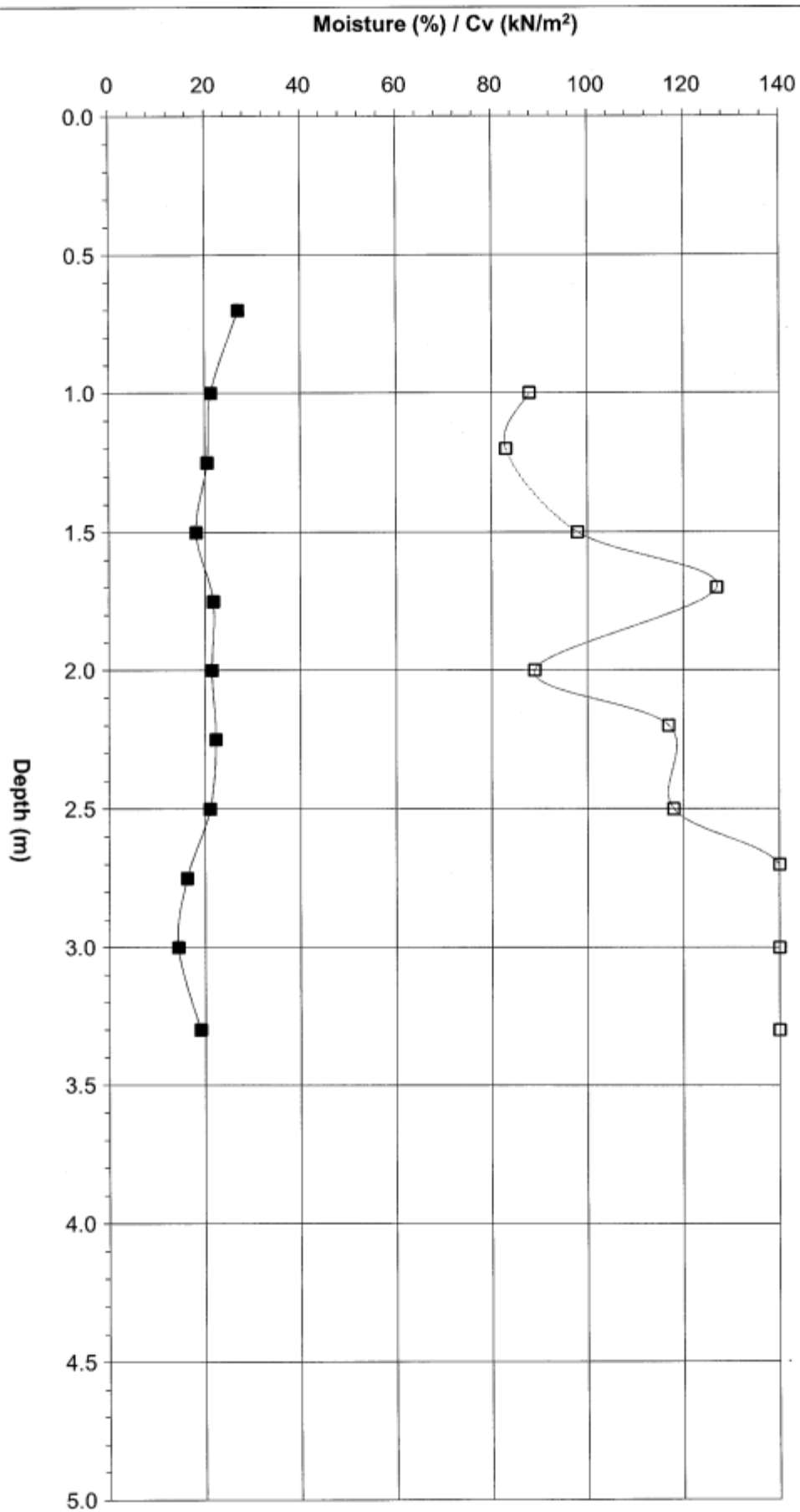


Moisture / depth profile BH 2

G14098

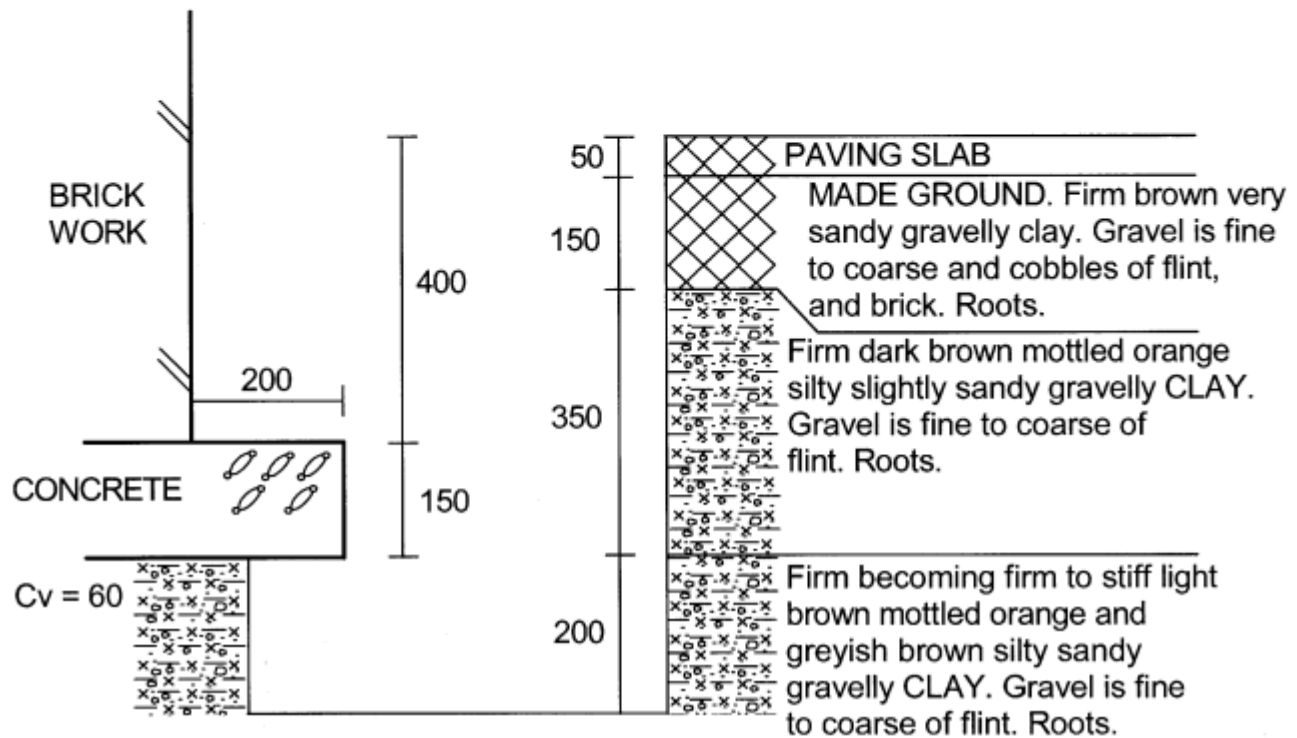
Moisture and shear strength depth profile BH 2

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OUR REF: G14098	YOUR REF: 20131151	TRIAL PIT: 3
DATE: 20/05/14	LOCATION: Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL	



Base of foundation at 0.55m.

Trial pit remained stable and dry on completion.

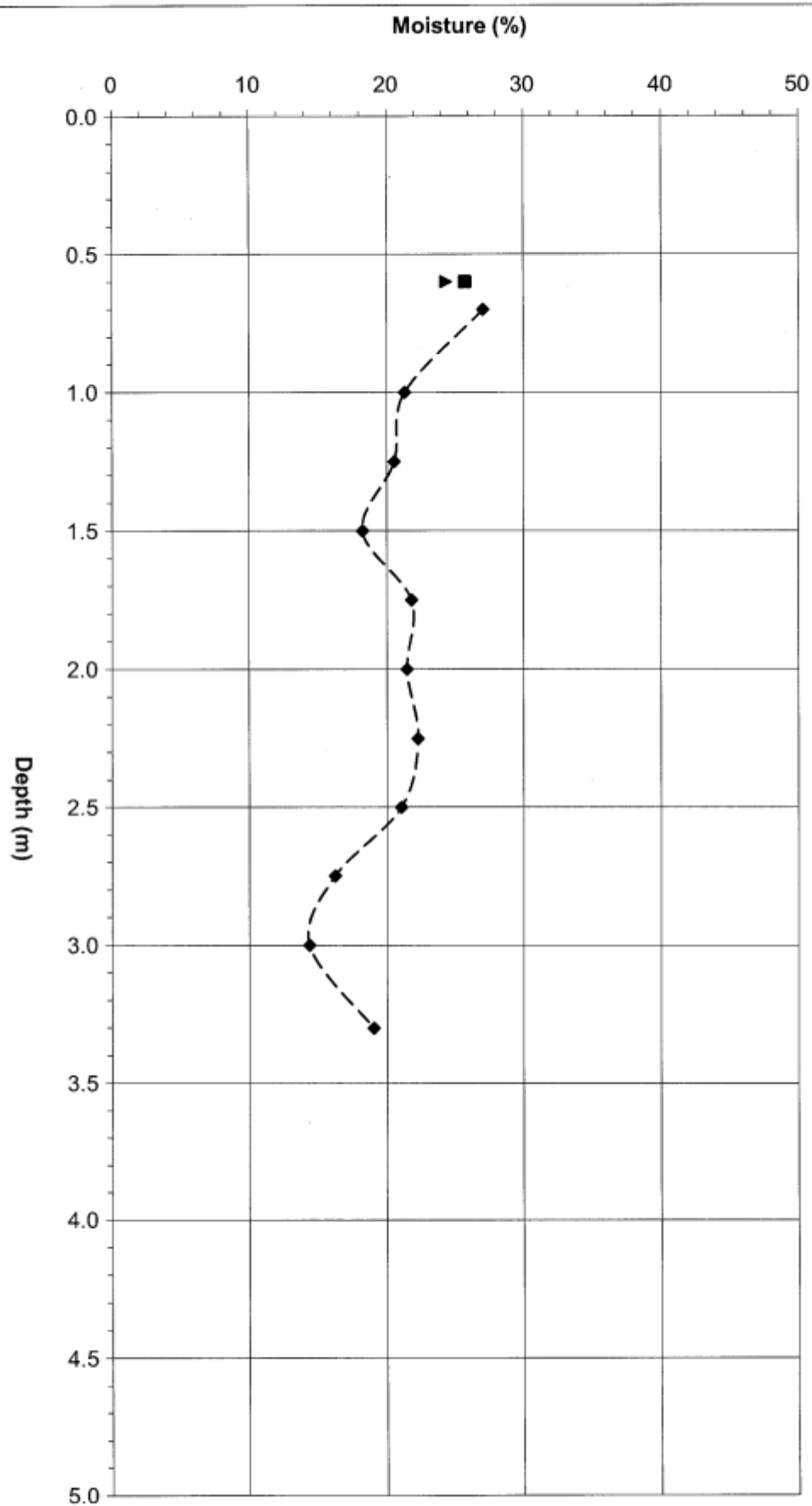
Trial pit terminated at 0.75m.

Disturbed soil sample taken from 0.60m.

Roots sampled from 0.00m to 0.55m and from 0.55m to 0.75m.

Moisture / depth profile

G14098



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Atterberg Limit Test Results

Our ref. G14098
Your ref. 20131151

Table 1
Location: Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL

TP / BH No.	Sample Depth (m)	Insitu Moisture Content (%)	% Passing BS 425 Micron Sieve	Corrected Moisture Content (%)	Plastic Limit (%)	Liquid Limit (%)	Plasticity Index (%)	Soil Classification
TP/BH2	0.70	27.1	91.8	29.5	19.4	40.0	20.6	CI
	1.00	21.3	81.9	26.0	21.5	55.0	33.5	CH
	1.25	20.5						
	1.50	18.2						
	1.75	21.8	>95		18.2	60.2	42.0	CH
	2.00	21.5						
	2.25	22.3						
	2.50	21.1						
	2.75	16.2						
	3.00	14.4	>95		11.8	47.2	35.4	CI
	3.30	19.0						
TP1	0.60	25.7	88.6	29.0	25.0	39.1	14.1	CI
TP3	0.60	24.4	87.2	28.0	18.8	46.5	27.7	CI

APPENDIX 2
EPSL ROOT IDENTIFICATION REPORT
AND
PHOTOGRAPHS OF EXCAVATIONS

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ROOT IDENTIFICATION

Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL

Client Reference: G14098

Report Date: 22 May 2014

Our Ref: R5169

Sub Sample	Species Identified		Root Diameter	Starch
TP/BH1:				
0-0.6m	<i>Jasminum</i> spp.	1	6 mm	Abundant
0.6-0.75m	<i>Quercus</i> spp.	2	7 mm	Moderate
TP/BH2:				
0-0.66m	<i>Quercus</i> spp.	3	4 mm	Moderate
0-0.66m	<i>Sambucus</i> spp.		3 mm	Abundant
0.66-1.6m	<i>Quercus</i> spp.	4	9 mm	Moderate
TP/BH3:				
0-0.55m	<i>Buxus</i> spp.	5	2 mm	Abundant
0-0.55m	<i>Quercus</i> spp.		1.5 mm	Low
0-0.55m	<i>Lonicera</i> spp.		1 mm	Abundant
0.55-0.75m	<i>Quercus</i> spp.	6	1.5 mm	Moderate

Comments:

- 1 - Plus 4 others also identified as *Jasminum* spp.
- 2 - Plus 4 others also identified as *Quercus* spp.
- 3 - Plus 2 others also identified as *Quercus* spp.
- 4 - Plus 3 others also identified as *Quercus* spp.
- 5 - Plus 1 other also identified as *Buxus* spp.
- 6 - Plus 4 others also identified as *Quercus* spp.

Jasminum spp. include Jasmine.

Quercus spp. are oaks (both deciduous and evergreen).

Sambucus spp. are elders.

Buxus spp. include box.

Lonicera spp. are honeysuckles, both climbing and shrub forms; related species include *Symphoricarpos* spp. (snowberry).

Signed: M D Mitchell

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.



INVESTOR IN PEOPLE

Registered in England No. 295427 Registered Office: Unit 4 Linnet Court, Cawledge Business Park, Alnwick, NE66 2GD



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Photographs

Our Ref: G14098

Your Ref: 20131151

Location: Nirvana, Woodgaston Lane, Hayling Island, PO11 0RL

Photograph 1 – View of TP1 position.



Photograph 2 – Close up of footing in TP1.



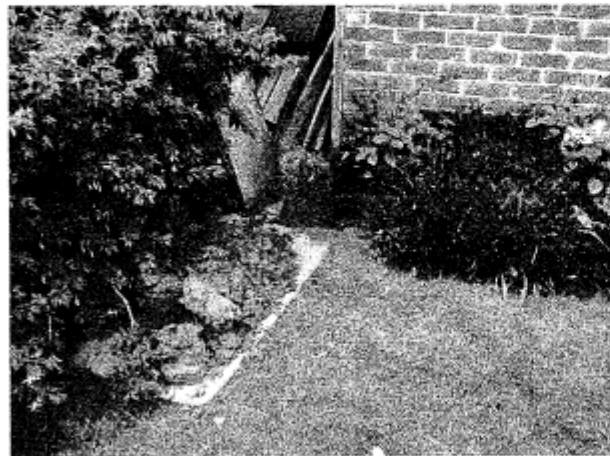
Photograph 3 – View of TP/BH2 position.



Photograph 4 – Close up of footing in TP/BH2.



Photograph 5 – View of TP3 position.



Photograph 6 – Close up of footing in TP3.

