LAND WEST OF TANGMERE, WEST SUSSEX

AN ARCHAEOLOGICAL WATCHING BRIEF REPORT U



PCA REPORT NO: R13632

SITE CODE: WSTA19

MARCH 2019



PRE-CONSTRUCT ARCHAEOLOGY

LAND WEST OF TANGMERE, WEST SUSSEX: ARCHAEOLOGICAL WATCHING BRIEF REPORT

Site Code: WSTA19

Central NGR: 489800 106500

Commissioning Agent: Terence O'Rourke Ltd, for Countryside Properties (UK) Ltd

Written/Researched by:Gareth Howland PCA WinchesterProject Manager:Paul McCulloch PCA WinchesterPre-Construct Archaeology Limited (Winchester)5 Red Deer Court5 Red Deer CourtElm RoadWinchesterHampshireSO22 5LXTel:01962 849 549

E-mail: pmcculloch@pre-construct.com

Web: www.pre-construct.com

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March 2019

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PCA REPORT NO. R13632

DOCUMENT VERIFICATION

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Report: R13632

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Graphics Prepared by:											
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CONTENTS

1	ABSTRACT	.4
2	INTRODUCTION	. 5
3	AIM	.6
4	RESULTS	.6
5	ARCHIVE PREPARATION AND DEPOSITION	. 8
6	ACKNOWLEDGMENTS	. 9
7	REFERENCES	. 9
APF	PENDIX 1: GEOTECHNICAL TEST PITS	10
APF	PENDIX 2: PLATES	14
APF	PENDIX 3: BOREHOLE AND TEST PIT LOGS	16

FIGURE: Proposed Exploratory Hole Location Plan (Peter Brett Associates)

1 ABSTRACT

Pre-Construct Archaeology Ltd was appointed by Terence O'Rourke Ltd, on behalf of Countryside Properties (UK) Ltd to carry out an archaeological watching brief at Land West of Tangmere, West Sussex. The Site is the subject of a proposed development currently in the pre-application stages.

The watching brief was carried out following advice provided to Terence O'Rourke Ltd by James Kenny, Chichester District Archaeological Officer, and comprised monitoring and recording of a geotechnical investigation. The watching brief forms part of a staged approach to understanding the archaeological implications of the proposed development. The geotechnical investigation was carried out by CC Ground Investigations Ltd for Peter Brett Associates LLP. The watching brief was carried between the 11th and 14th of March 2019.

The geotechnical investigations revealed a general deposit sequence for the Site, with a relatively shallow topsoil coverage and an underlying geology consistent with what is known of the Pleistocene / early Holocene sequence in the vicinity. Though no significant archaeological remains or features were observed during the monitored works, which, by their nature, afford limited scope for revealing archaeological remains, there is potential for these to survive across the Site; no significant evidence for truncation of the site and, thereby, loss of its archaeological potential, was observed.

2 INTRODUCTION

2.1 Project Background

- 2.1.1 Pre-Construct Archaeology Ltd (PCA) was appointed by Terence O'Rourke Ltd, on behalf of Countryside Properties (UK) Ltd to carry out an archaeological watching brief at Land West of Tangmere, West Sussex, hereafter 'the Site', NGR 489800 106500 (see attached Figure: client drawing for the location of all investigations). The Site is the subject of a proposed development currently in the pre-application stages.
- 2.1.2 The watching brief was carried out following advice provided to Terence O'Rourke Ltd by James Kenny, Chichester District Archaeological Officer, and comprised monitoring and recording of a geotechnical investigation. The watching brief forms part of a staged approach to understanding the archaeological implications of the proposed development.
- 2.1.3 The geotechnical investigation was carried out by CC Ground Investigations Ltd for Peter Brett Associates LLP.
- 2.1.4 The watching brief was carried between the 11th and 14th of March 2019. This document provides a report on the results of the watching brief and has been prepared in accordance with the Chartered Institute for Archaeologists standard and guidance for archaeological watching briefs (ClfA 2014) and Management of Research Projects in the Historic Environment (Historic England, 2015)

2.2 Location, Topography and Geology

- 2.2.1 The Site is located to west of the village of Tangmere, West Sussex. The Site covers an area of approximately 75ha. The Site is bordered on its eastern side by the village of Tangmere, the A27 along its northern edge, Tangmere road along the southern edge and by Copse farm and fields along its western side.
- 2.2.2 Two bedrock geological formations are present on the Site; Lambeth Group Clay, Silt and Sand in the north of the Site and a small outcrop of London Clay Formation - Clay, Silt and Sand in the south.
- 2.2.3 The bedrock deposits are overlain by a mixture of superficial deposits; Head Gravel, Sand, Silt and Clay, Alluvial Fan Deposits - Gravel, Sand, Silt and Clay, Raised Storm Beach Deposits, 2 – Gravel. River Terrace Deposits (undifferentiated) - Sand, Silt and Clay (http://mapapps.bgs.ac.uk/geologyofbritain/home.html).

2.3 Archaeological and Historical Background

2.3.1 The Site is situated in an area of high archaeological potential, with sites, findspots and monuments from a wide range of periods represented in and around the Site and recorded in the Chichester District Historic Environment Record.

2.3.2 Finds indicating prehistoric flint working have been recovered from the Site along with evidence for significant Bronze Age, Iron Age and Romano-British activity. These findspots and a recent geophysical survey (Terence O'Rourke, 2019) appear to indicate that the Site contains widespread and important archaeological remains.

3 AIM

3.1 Archaeological watching brief

- 3.1.1 The aim of the archaeological watching brief was to monitor the geotechnical investigation in order to:
 - Investigate and record archaeological remains if revealed by the geotechnical investigation.
 - Record, where possible, deposits at depth that may indicate the geoarchaeological potential of the Site
- 3.1.2 The aim of this report is to present the results of the watching brief and inform subsequent stages of archaeological works as may be carried out in connection with the proposed development of the Site.

4 RESULTS

4.1 Introduction

- 4.1.1 The following presents a summary of the watching brief results based upon the Site archive, which comprises a Site diary, written and sketched records and digital photographs. A tabulated summary of deposits recorded in the geotechnical test pits is provided in Appendix 1 and photographs illustrating the geotechnical works appear in Appendix 2. CC Ground Investigations Ltd bore hole and test pit logs are provided in Appendix 3. The Site archive is held at PCA's Winchester office under the Site code WSTA19 and will in due course be deposited with The Novium, Chichester.
- 4.1.2 The watching brief included monitoring the excavation of the 16 proposed test pits across the Site and two additional test pits (TP117 & TP118) in the south-eastern part of the Site These were mechanically excavated using a JCB excavator.

4.2 Summary of Deposition Sequence

- 4.2.1 A general sequence of deposits was observed across the Site, with some variation within and between the test pits. Plates 1-3 (Appendix 2). show examples of the deposits revealed in test pits 102, 103 and 111.
- 4.2.2 Topsoil coverage across the Site ranged from 0.24m to 0.55m thickness It contained occasional gravel inclusions, presumably resulting from ploughing. A subsoil was present in only five of the test pits, 105, 106, 110, 113 and 115 and comprised brown silty clay.

- 4.2.3 The underlying natural deposits observed in the test pits can be divided into two groups:
 - Alternating layers of brown and grey silty clays and flint gravels between 0.3m and 4m below ground level. Interpreted as Late Pleistocene/Holocene, soliflucted brickearth.
 - Layers of chalky silt-clay and gravel recorded in TPs: 104-106, 109-115 and 117-118). Seen with its surface at depths ranging from 0.3m-2.3m BGL and its base up to depths of at least 2m-3.8m BGL. Interpreted as possible Late Pleistocene, cryoturbated and soliflucted chalk mixed with brickearth.
- 4.2.4 The geotechnical investigation included the formation of four boreholes. Borehole 101 appears to have encountered bedrock chalk at 18.3m while "structureless" chalk was encountered in boreholes 201 and 202 at 13.3m and 7.2m respectively. Borehole 203 was completed at 8m and did not encounter chalk at that depth. All the boreholes recorded a sequence of predominated by clays, with gravel and sand components also present. These deposits are consistent with the test pit observations.
- 4.2.5 No marine deposits were observed in the test pits

4.3 Archaeological Features

4.3.1 No significant archaeological deposits, features or finds were observed. It was noted that there was a fair amount of burnt flint on the surface around test pit 113 in the southern part of the Site. Fragmented ceramic building material was observed across most of the Site.

4.4 Conclusion

4.4.1 The geotechnical investigations revealed a general deposit sequence for the Site, with a relatively shallow topsoil coverage and an underlying geology consistent with what is known of the Pleistocene / early Holocene sequence in the vicinity. Though no significant archaeological remains or features were observed during the monitored works, which, by their nature, afford limited scope for revealing archaeological remains, there is potential for these to survive across the Site; no significant evidence for truncation of the site and, thereby, loss of its archaeological potential, was observed.

5 ARCHIVE PREPARATION AND DEPOSITION

5.1 The Site Archive

5.1.1 The Site archive, to include all project records and cultural material produced by the project, will be prepared in accordance with 'Guidelines for the Preparation of Excavation Archives for Long-term Storage' (UKIC 1990) and the Institute for Archaeologists 'Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives' (ClfA 2014). On completion of the project PCA will arrange for the archive to be deposited with The Novium, Chichester.

5.2 Copyright

- 5.2.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Pre-Construct Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The Novium, Chichester however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms to the Copyright and Related Rights regulations 2003. Further distribution and uses of the report either in its entirety or part thereof in paper or electronic form is prohibited without the prior consent of Pre-Construct Archaeology Ltd.
- 5.2.2 The licence extends to the use of all documents arising from this project in all matters relating directly to the project, as well as for bona fide research purposes (which includes the HER).
- 5.2.3 Pre-Construct Archaeology Ltd has made every effort to ensure the accuracy of the content of this report. However, Pre-Construct Archaeology Ltd cannot accept any liability in respect of, or resulting from, errors, inaccuracies or omissions this report contains.

6 ACKNOWLEDGMENTS

Pre-Construct Archaeology is grateful to Terence O'Rourke Ltd for commissioning the watching brief on behalf of Countryside Properties (UK) Ltd. The watching brief was undertaken by Gareth Howland. This report was prepared by Gareth Howland. The project was managed for PCA by Paul McCulloch.

7 REFERENCES

Terence O'Rourke, 2019, Land West of Tangmere: Brief for Archaeological Trench Evaluation

APPENDIX 1: GEOTECHNICAL TEST PITS

Trial	Туре	Description	Max Depth
Pit No.			(m) BGL
101	Topsoil	Dark brown silty sandy clay.	0.3
	Layer	Grey silty clay. Freq. sub- angular flint	0.42
		gravel	
	Layer	Light orangish brown silty clay.	0.9
	Layer	Light orangish brown silty clay.	1.9
	Layer	pink mottled grey silty clay.	2.7
102	Topsoil	Dark brown silty sandy clay.	0.4
	Layer	Grey silty clay. Freq. sub- angular flint	0.56
		gravel	
	Layer	Light orangish brown silty clay.	2.2
103	Topsoil	Dark brown silty sandy clay.	0.42
	Layer	Light brown silty clay.	0.7
	Layer	Light brown silty clay. Freq. sub-angular	2.2
		flint gravel.	
	Layer	Light pinkish brown silty clay.	2.8
	Layer	Light orangish brown silty sandy clay.	3
	Layer	Light brown silty clay. Freq. sub-angular	4
		flint gravel.	
104	Topsoil	Dark brown silty sandy clay.	0.3
	Layer	Light brown silty clay.	0.8
	Layer	Grey silty clay. Occ. sub- angular flint	2
		gravel and freq. sub-angular chalk.	

105	Topsoil	Dark brown silty sandy clay.	0.26
	Subsoil	Mid orangish brown silty clay.	0.6
	Layer	Light brown silty clay. Occ. sub-angular	0.65
		flint gravel and Freq. sub-angular chalk.	
	Layer	Grey silty clay. Occ. sub- angular flint	2.7
		gravel and freq. sub-angular chalk.	
106	Topsoil	Dark brown silty sandy clay.	0.24
	Subsoil	light brown silty sandy clay.	0.45
	Layer	Light brown silty clay. Freq. sub-angular	0.6
		flint gravel.	
	Layer	Grey silty clay. Freq. sub- angular flint	2
		gravel and chalk.	
107	Topsoil	Dark brown silty sandy clay.	0.42
	Layer	Light brown silty clay.	0.9
	Layer	Light brown silty clay. Freq. sub-angular	1.7
		flint gravel.	
	Layer	Grey silty clay.	3.1
108	Topsoil	Dark brown silty sandy clay.	0.54
	Layer	Light brown silty clay.	0.9
	Layer	Grey silty clay. Freq. sub-angular flint	2
		gravel.	
109	Topsoil	Dark brown silty sandy clay.	0.1
	Layer	Light brown silty sandy clay. Freq. sub-	0.3
		angular flint gravel.	
	Layer	Grey silty clay. Freq. sub- angular flint	3.8
		gravel and chalk.	
110	Topsoil	Dark brown silty sandy clay.	0.3
	Subsoil	Mid brown silty clay.	0.45
	Layer	Grey silty clay. Freq. sub- angular flint	0.5
		gravel.	
	Layer	Grey silty clay. Freq. sub- angular flint	2.6
		gravel and chalk.	

111	Topsoil	Dark brown silty clay.	0.3
	Layer	Light brown silty clay.	1.3
	Layer	Grey silty clay. Freq. sub- angular flint	1.56
		gravel.	
	Layer	Grey silty clay. Freq. sub- angular flint	2
		gravel and chalk.	
112	Topsoil	Dark brown silty sandy clay.	0.3
	Layer	Grey silty clay.	0.6
	Layer	Grey silty clay. Freq. sub- angular flint	2
		gravel and chalk.	
113	Topsoil	Dark brown silty sandy clay. Occ. burnt flint	0.4
	Subsoil	Light yellowish-brown silty clay.	0.56
	Layer	Grey silty clay. Freq. sub- angular flint	2
		gravel and chalk.	
114	Topsoil	Dark brown silty sandy clay.	0.3
	Layer	Light brown silty clay.	0.8
	Layer	2.8	
		gravel and chalk.	
115	Topsoil	Dark brown silty sandy clay.	0.22
	Subsoil	Greyish brown silty clay.	0.53
	Layer	Grey silty clay. Occ. sub- angular flint	2.8
		gravel and chalk.	
116	Topsoil	Dark brown silty sandy clay.	0.55
	Layer	Greyish brown silty clay.	0.7
	Layer	Greyish brown silty clay. Freq. sub- angular	2.5
		flint gravel.	
117	Topsoil	Dark brown silty sandy clay.	0.4
	Layer	Greyish brown silty clay. Freq. sub- angular	0.7
		flint gravel.	
	Layer	Light brown silty clay. Freq. sub- angular	1.4
		flint gravel.	

	Layer	Grey silty clay. Occ. sub- angular flint gravel and chalk.	2.7
118	Topsoil	Dark brown silty sandy clay.	0.3
	Layer	Light brown silty clay.	1.1
	Layer	Light brown silty clay. Freq. sub- angular flint gravel.	1.5
	Layer	Grey silty clay. Occ. sub- angular flint gravel.	2.3
	Layer	Grey silty clay. Occ. sub- angular flint gravel and chalk.	3.8

APPENDIX 2: PLATES



Plate 1 Test Pit 102



Plate 2 Test Pit 103



Plate 3 Test Pit 111

APPENDIX 3: BOREHOLE AND TEST PIT LOGS

Prepared by CC Ground Investigations Ltd

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		В ES B ES D H	0.20 - 0.35 0.20 0.35 - 0.60 0.50 0.60 0.65	60	-		TOPSOIL: Soft brown slight with occasional <2mm rootle fine to medium of flint and cl Firm orangish brown slightly Gravel is sub-angular to ang chalk.	y gravely slight ets. Gravel is su halk. gravely slightly ular fine to med	ly sandy silty CLAY b-angular to angular sandy silty CLAY. dium of flint and	0.35			╶┾╶┾╤╫┲┆╌┠┊╉┆┛┅╶╋╸ ╸
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2 —		D	1.80				Medium dense light brown c fine to coarse GRAVEL of fli	layey sandy sul nt and chalk.	p-angular to angular	1.75			+ ? - 2
		B SPT	2.20 - 2.70 2.20 - 2.65	S 14									
3		D	2.80				Medium dense light brown clayey very sandy sub-angular to angular fine to coarse GRAVEL of flint and chalk with occasional <50mm pockets of brown slightly sandy clay.						/ ? ∠_3
-	 1_ī	B SPT B	3.20 - 3.40 3.20 - 3.65 3.40 - 3.70	S 8									
4 —	.	В	3.70 - 4.20				Dense brown clayey sandy s GRAVEL of flint and chalk.	o medium or cri sub-angular to a	angular fine to coarse	3.70			
-		B SPT	4.20 - 4.70 4.20 - 4.65	S 42				~/		(1.00)			
5							Firm brown slightly gravely s sub-angular to angular fine c	lightly sandy sil of flint.	ty CLAY. Gravel is	4.70			5
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Clien	t:	Co	untrywide I	Proper	ties				Dates:	Start: 06/03/20 End: 08/03/20	19 19	Lo	gged B MMO	}y
(m)	Water Levels	Samp No/Type	les & In Situ Te	esting Result	Sample	Insta	all	Des	scription		Depth (m)	Level (mAD)	Legend	
1		B ES B ES B SPT C B SPT	0.20 - 0.30 0.20 0.35 - 0.40 0.50 0.60 - 1.00 1.20 - 1.65 1.40 - 1.60 2.00 - 2.20 2.20 - 2.65	C 12				TOPSOIL: Soft dark brown slip CLAY with occasional <1mm i angular fine to medium of flint Light brown and light grey slig rounded medium to coarse Gf Firm yellowish brown slightly s Gravel is angular to sub-angu Firm light brown slightly grave sub-angular to sub-rounded fii material.	ghtly gravelly s rootlets. Grave and chalk. htly silty slight RAVEL of flint sandy slightly g lar fine to med lly sandy CLA ne to medium	slightly sandy silty el is sub-angular to ly sandy angular to and chalk. gravelly CLAY. lúm of flint. Y. Gravel is of flint and siliceous	- 0.35 (1.05) - 1.40 (0.40) - 1.80			<u>1</u> 2 2
3		B SPT	3.00 - 3.20 3.20 - 3.65	S 15				Stiff reddish brown mottled gre CLAY. Gravel is sub-angular f	ey slightly sand iné to medium	dy slightly gravelly of flint.	(1.20) - 3.00			ידי דידי דידי דידי דידי 8
4		В UT100 D	4.00 - 4.20 4.20 - 4.50 4.50								(1.80)			<u>, , , , , , , , , , , , , , , , , , , </u>
5		B SPT	5.00 - 5.20 5.50 - 5.95	S 18				Ştiff dark purplish brown mottl	ed grey slightl	y sandy CLAY.	4.60			- + 5
6											(2.30)			
7		В	7.00 - 7.20					Stiff grey mottled reddish redd	lish brown slig	htly sandy CLAY.	7.10			+-7
		UT100	7.50 - 7.95					(continued on next sheet)			(0.70) 7.80			
8 EQUIF METH and ba CASIN GROU INSTA Raiseo REMA	PMENT: 1 OD: Han ailer 4.50 IG: 200m INDWAT INDWAT LLATIOI d boreho RKS: Dr	Light cab d dug ins -15.00m. im diam t ER: Encc V: 50mm te helmet iller notec	le percussion i spection pit: 0.0 co 4.50m, 150m puntered at 0.3 ID HDPE slott set in concrete d slow progress	 00-1.20n 00-1.20n 35m, rose ed pipe v e: 0.00-0 s 12.00-1	n. Cable to 15.00 e to 0.28 with was .20m. G 15.00m.	percus Dm. Im afte hed gr ias val	ssior er 20 ravel ve fit	n drilled using 200mm diameter minutes. Further strike at 13.10 response zone: 15.00-13.00m. tted.	clay cutter and m, rose to 4.1 50mm ID HDF	d bailer 1.20-4.50m and 0m after 20 minutes. PE plain pipe with bento	l 150mm onite pelle	diameter et seal: 0.	clay cutt 20-13.00	.er)m.

Groundwater: Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)	Hole Progress: Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)	
				06/03/2019 17:00 07/03/2019 08:00	1.20 1.20		0.45 0.45	

CC Grou		itigations Lt	d L	DG				C	C	Bore B	hole No. H201
Telephone: (1452 739	165 , Fax: 014	52 739	220 , Ema	il: Info(@CCGround.co.uk				She	et 2 of 2
Project N	ame: La	nd West of	Tangr	nere		Project No: C6257	Co-ords:	EN		Но	le Type CP
Location:	Ch	nichester					Level:	mAOD		1 :	3cale ∷50.00
Client:	Co	ountrywide	Proper	ties			Dates:	Start: 06/03/20	19	Log	ged By
1M/ot	sr Samr	olos & In Situ T	estina					End: 08/03/20	19		
(m) Leve	Is No/Type	Depth (m)	Result	Sample Ir	nstall	De	scription		(m)	(mAD)	Legend
	D B	7.95 8.00 - 8.20				Stiff thinly laminated grey slig yellowish brown slightly sandy previous sheet)	htly sandy CL y clay <1.5mm	AY with thin lenses of n. <i>(continued from</i>			
9 -	B SPT	9.00 - 9.20 9.00 - 9.45	S 26					\land	(1.90)		9 9
10 —	B	9.80 - 10.00				Stiff grey mottled reddish redo	dish brown slig	ghtly sandy CLAY.	9.70		
	D	10.40					\rightarrow		(2 15)		
11	В	11.00 - 11.20							(2.10)		
12 —	SPT	11.50 - 11.95	S 50			11.50-11.85m: Very stiff. Very stiff grey mottled reddish slightly sandy slightly gravely to medium of flint and chalk	brown and ye CLAY. Gravel	ellowish brown I is sub-angular fine	- 11.85		
									(1.45)		
13 —	B SPT B	13.00 - 13.10 13.00 - 13.42 13.50 - 13.70	S*56			Structureless CHALK composes sandy GRAVEL. Clasts are we speckled black with occasion	sed of cream a reak, low dens	and white slightly silty ity, white locally	- 13.30		13 1
14 —	В	14 30 - 14 50				rinded flints (Grade Dc).		gravor orzod	(1.70)		
15 —	SPT	14.50 - 14.61	S*333			Borehole completed at 15 00	m		- 15.00		
						borenoie completed at 15.00					- - - - - -
16 — 											- 16
17 —											- - 17
						1					- - - - - -
Groundwate Date	ə r: Strike (ı	Depth Cas m)	ing Deptł (m)	n Depti Observa	n After ation (m	Hole Progress: Date 07/03/2019 17:00 08/03/2019 08:00 08/03/2019 17:00	Hole Depth (m) 11.50 11.50 15.00	Casing Depth Wa (m) 4.50 4.50 15.00	ater Depth (m) 4.50 4.50 4.20		

CC BH LOG C6257.GPJ CCGI GINT STD AGS 4_0.GDT 12/3/19 MA

Proje	ect Nar	ne: Lar	nd West of	Tangr	nere	maii: inf	Project No:	Co-ords:	EN		Нс	le Typ CP	e
Loca	tion:	Ch	ichester				00201	Level:	mAOD		1	Scale : 50.00)
Clien	t:	Со	untrywide	Proper	ties			Dates:	Start: 11/03/201 End: 12/03/201	19 19	Lo	gged E MMO	у
(m)	Water Levels	Samp No/Type	les & In Situ To Depth (m)	esting Result	Sample	Install	C	escription		Depth (m)	Level (mAD)	Legend	
	1	ES ES	0.00 - 0.20 0.20 0.50				TOPSOIL: Soft dark greyish sandy silty CLAY with occas angular to sub-angular fine f material. Firm orangish brown mottled slightly grayelly CLAY Gray	brown slightly gra ional <1mm rooth o medium of flint I greyish brown sl	avelly slightly ets. Gravel is and siliceous	0.25 (0.65)		<u></u>	
1 -	<u> </u>	B B SPT C	1.00 - 1.20 1.20 - 1.40 1.20 - 1.65	C 11			medium of flint. 0.60-0.90m: Gravel is fine to 0.80m: Rounded greyish bro Firm yellowish brown slightly angular to sub-angular fine to	o coarse. wn cobble of silic gravelly sandy C o medium of flint.	eous material.	0.90			- 1
2 —		B SPT	2.00 - 2.20 2.20 - 2.65	S 7			Firm grey mottled red and your Stiff red mottled grey and ye	filow CLAY. Ilow CLAY.		2.10 2.30			2
3	22	B UT100	3.00 - 3.20 3.20						\checkmark				3
4		B SPT	4.00 - 4.20 4.20 - 4.65	S 22				>		(4.60)			- 4
5 —		B UT100	5.00 - 5.20 5.20 - 5.60										- 5
6 —		В	6.00 - 6.20										6
7 —	3 ₹	SPT B B	6.50 - 6.95 6.80 - 7.00 7.10 - 7.20	S 29			Stiff greyish yellow mottled g CLAY. Gravel is sub-angula and chalk.	rey slightly sandy	/ slightly gravelly to medium of flint	6.90 7.20			- - - - 7
8	<u>×</u>						 Structureless CHALK recovery slightly sandy slightly gravel white and sub-rounded with 	ered as yellowish y SILT. Gravel is rare flints. (Grade	brown and white weak, low density, Dm)				
7 – EQUII METH and bi CASIN GROU minute INST/ Raise REMA	PMENT: IOD: Har ailer 7.50 VG: 200n JNDWAT es. ALLATIOI d boreho RKS: UT	Light cab d dug ins -15.00m. m diam ER: Enco V: 50mm e helmet 100 3.20	7.10 - 7.20 le percussion spection pit: 0. to 7.50m, 150r buntered at 0.5 ID HDPE slott set in concret 0-3.65m; no red	rig. 00-1.20m nm diam 00m, rose red pipe v ec: 0.00-0 covery.	n. Cable to 12.00 to 0.80 vith wasl .20m. G	percuss om. m after 2 hed grav as valve	Stiff grevish yellow mottled of CLAY. Gravel is sub-angula and chalk. Structureless CHALK recover slightly sandy slightly gravel white and sub-rounded with ion drilled using 200mm diameter 20 minutes. Further strike at 3.20 yel response zone: 7.50-12.00m. fitted.	rey slightly sandy r to rounded fine f ered as yellowish y SILT. Gravel is rare flints. (Grade er clay cutter and 0m (no rise record 50mm ID HDPE	/ slightly gravelly to medium of flint brown and white weak, low density, e Dm) bailer 1.20-7.50m and led), third strike at 7.4 plain pipe with benton	0.90 7.20 150mm 0m, rose iite pellet	diameter to 6.70m seal: 0.2	 _	er

Groundwater: Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)	Hole Progress: Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)	
11/03/19	0.90		0.80					
11/03/19	3.20	3.20	3.20					
11/03/19	7.40	7.40	6.70					

BC	Ground	Inves	tigations Lt	d L	C	ò					Borehole No BH202	0.
Telepho	one: 014	52 739	165 , Fax: 014	152 739	220 , Er	mail: Info	@CCGround.co.uk				Sheet 2 of	2
Proje		ne: La	nd west of	Tangr	nere		C6257	Co-ords:	ΕN		CP	!
Loca	tion:	Ch	lichester					Level:	mAOD		Scale 1 : 50.00	
Clien	ıt:	Со	untrywide	Proper	ties			Dates:	Start: 11/03	3/2019	Logged By MMO	/
(m)	Water	Samp	oles & In Situ T	esting	Sample	Install	De	scription	LIIU. 12/00	Depth	Level Legend	
	Levels	<u>No/Type</u> B SPT	Depth (m) 8.00 - 8.20 8.00 - 8.45	Result S 47			Structureless CHALK recover slightly sandy slightly gravelly white and sub-rounded with ra from previous sheet)	ed as yellowis SILT. Gravel are flints. (Gra	h brown and white is weak, low densi de Dm) <i>(continu</i> ea	(m) e ity, (2.50)	(mAD)	
9 —		В	9.00 - 9.20					/	\frown			_g
10 —		SPT	9.50 - 9.95	S 16			Structureless CHALK recover and sub-angular fine to coars medium density, white. Matrix Rare flints (Grade Dc).	red as slightly e GRAVEL. C Lis white local	sandy silty angula lasts are weak, ly stained yellow.	r 9.70		-1
-		В	10.50 - 10.70					\sim		(2.30)		
11	-	SPT	11.00 - 11.45	S 18								-1
- - - - 12		В	11.50 - 11.70					$\underbrace{\hspace{1.5cm}}$		12.00		1
13												-1
16												-1
17												-1
Groun Da	idwater: ate	Strike (r	Depth Cas n)	ing Depti (m)	n De Obse	epth After ervation (Hole Progress: Date 11/03/2019 17:00 12/03/2019 08:00 12/03/2019 17:00	Hole Depth (m) 9.50 9.50 12.00	Casing Depth (m) 9.50 9.50 12.00	Water Depth (m) 6.10 5.70 5.90		

rojec	t Nar	ne: Lar	nd West of	152 739 f Tangi	nere	mail: Info	@CCGround.co.uk Project No:	Co-ords:	F N		Hc	le Type
oooti	<u></u>	Ch	ichostor				C6257	00-0103.				
ocau	on.	Ch	chester					Level:	mAOD		1	: 53.13
lient	:	Co	untrywide	Proper	ties			Dates:	Start: 13/03 End: 13/03	3/2019 3/2019	Lo	gged By MMI
m)	Water	Samp	les & In Situ T	esting	Sample	Install	[escription		Depth	Level	Legend
	Levels	No/Type	Depth (m)	Result				a sandy slightly	aravelly CLAX wit	(m)	(mAD)	
		B ES ES B	0.10 - 0.40 0.40 0.50 - 0.80 0.70				occasional rootlets (<1mm) fine to coarse of flint. Brown sandy very clayey ar GRAVEL of flint.	Gravel is angul	gravely CLAY will lar to sub-angular gular fine to coars	(0.45) e (0.70)		
		В SPT C	0.90 - 1.20 1.20 - 1.40 1.20 - 1.65	C 10			Firm light brown slightly sar to rounded fine to coarse of	dy gravelly CLA flint.	Y Gravel is angu	lar 1.15		
		B SPT	2.00 - 2.20 2.20 - 2.65	S 21			Stiff yellowish brown and lig	nt greyish brown	n slightly sandy	(1.25)		
		B SPT C	3.00 - 3.20 3.20 - 3.65	C 16			of flint.	gular to sub-rou	nded fine to coars	(2.00)		
		B SPT C B	4.00 - 4.20 4.20 - 4.65 4.40 - 4.60	C 16			Yellowish brown slightly sar sub-rounded fine to coarse	dý slightly claye GRAVEL of flint	ey angular to	4.40		
		B B SPT	5.00 - 5.20 5.20 - 5.40 5.20 - 2.65	S 14			Firm yellowish brown and ling gravelly CLAY. Gravel is an of flint.	ht greyish brow gular to sub-rou	n slightly sandy nded fine to coars	4.90 (0.60)		↓
	2	В	6.00 - 6.20				Firm grey gravelly silty CLA fine of flint and rare chalk.	Y. Gravel is sub	-rounded to round	ed 5.50		
		UT100	6.50 - 6.95							(1.40)		
		D	6.95 7 40 - 7 50				Firm greenish grey and grey with occasional pockets of Gravel is sub-rounded to ro	slightly sandy s ilty sand and sil unded fine of flir	slightly gravelly SI ty sandy gravel. nt and rare chalk.	LT 6.90 (0.90)		
	-	B SPT	7.80 - 8.00 8.00 - 8.45	S 28			Light green locally grey silty Borehole completed at 8.00	clayey fine to m m	nedium SAND.	7.80 8.00		× × × × ×

Groundwater:				Hole Progress:			
Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)	Date	Hole Depth (m)	Casing Depth (m)	Water Depth (m)
13/03/19 13/03/19	2.90 8.00	2.90 8.00	2.90 6.10	13/03/2019 17:00	8.00	5.50	

CC (Ground	I Invest	tigations Lt	d							Pit No
TF	RIA	LF	ידר L	00	3					Т	P101
Teleph	one: 014	52 739 1	165 , Fax: 014	452 739 2	220 , Email: Inf	o@CCGround.co.uk				She	eet 1 of 1
Proje	ect Nar	ne: Lar	nd West of	Tangn	nere	Project No: C6257		Co-ords: E N Level: mAOD		14/	Date /03/2019
Loca	tion:	Chi	ichester					Dimensions: 3.3	Om		Scale
Clier	nt:	Co	untrywide	Proper	ties			Depth E 2.70m &		Lo	gged By MMI
(m)	Water	Samp	les & In Situ T	esting		Desc	ription		Depth	Level	Legend
	Leveis	No/Type	Depth (m)	Result	TOPSOIL: So	ft dark brown slightly sand	y slightl	y gravelly silty CLAY with rare	(11)	(IIIAD)	<u>Z₁J^X</u> . <u>Z₁J^X</u> .
-		в	0.20		rootlets (<3m	m). Gravel is sub-angular f	ine to m	nedium of flint.	(0.30)		<u>1/</u> <u>x¹//</u> <u>x¹</u>
-	-	ES	0.20		Light brown s	lightly sandy silty angular fi	ne to c	oarse GRAVEL of flint and chalk.	0.30		
-	-	В	0.50					<u>^</u>	(0.50)		
-		ES									
-	-				Soft light brov	vn and orangish brown slig	htly gra	velly slightly sandy silty CLAY.	0.80		
- 1 -			1.00		Gravel is sub	-angular to sub-rounded fin	e to me	edium of flint and chalk.			
-	1	ES	1.00								
-	Y					/	/ /				
-	-						$\langle \rangle$		(1.20)		
-	-						$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$		(1.30)		
-	1					\frown					
-	-							$\langle \rangle$			
								\searrow			
-	-	в	2 10		Stiff nink mot	ted light grey and off white	slightly	sandy silty CLAY	2.10		
-	1		20			lice light grey and on write	Signay				
-) / \setminus			(0.60)		
-	-				$\langle \langle \rangle /$						
-									2 70		
-	-	D	2.70		Trial pit comp	leted at 2.70m			2.70		-
-	-				/ /)	\rightarrow					-
3 -						~					-3
-	-										-
-											_
-	-										-
-	-										-
-											
-	-										-
4 —	1	ı		ı					1	1	' └─4
EQUIF METH	MENT: D OD: Trial	Doosan 12 pits exca	2 tonne metal	tracked 30 .60m buck	60° Mechanical ket.	Excavator.					
GROU	NDWAT	ER: Groui	ndwater encou	intered at	1.20m.						
STABI	LITY: Tria	al pit gene	erally unstable	and colla	apsing below 0.4	0m.					
REMA	RKS: Exc	cavation t	erminated at 2	2.70m due	e to instability.						

CC	Ground	I Invest	igations Lt	d							1	Dit No
TF	RIA	LF	יד L	00	3						Т	P102
Telepho	one: 014	52 739 1	- 65 . Fax: 014	452 739 2	220 . Email: Inf	o@CCGround	.co.uk			and the second second	She	et 1 of 1
Proje	ect Nar	ne: Lar	nd West of	Tangn	nere	Project No:	257	Co-ords: E N)		14/	Date 03/2019
Loca	tion:	Chi	ichester					Dimensions:	2.20m			Scale
								Depth E				1 : 25
Clien	it:	Co	untrywide	Proper	ties			2.20m &			Lo	gged By MMI
(m)	Water	Samp	les & In Situ T	esting			Description			Depth	Level (mAD)	Legend
	Levels	No/ I ype	Depth (m)	Result	TOPSOIL: So	ft dark brown sl	ghtly sandy slightl	y gravelly silty CLAY wit	h rare	(11)	(117.6)	<u>, 17</u> , <u>17</u> ,
		_			rootlets (<3mi chert.	m). Gravel is an	gular to sub-angul	ar fine to medium of flin	t and	(0.30)		$\frac{1}{2} \frac{\sqrt{1}}{\sqrt{1}} \frac{\sqrt{1}}{\sqrt{1}}$
-		B ES	0.20		Stiff light brow	n locally orangi	sh brown slightly s	andy slightly gravelly si	ty CLAY.	0.30		
-					Gravel is sub-	rounded to rour	ided fine to coarse	e of flint.	-			
-		B ES	0.50					\land		(0.50)		
-		в	0.80	48	Stiff light brow	n and orangish	brown slightly gra	velly slightly sandy silty	CLAY	0.80		
-		н			Gravel is sub-	rounded fine to	coarse of flint and	siliceous material.				
		B ES	1.00				/	$\langle \vee \rangle \rangle$				
-									\mathbf{i}			
-								\land	\checkmark			
-							\setminus			(1.40)		
-								\langle				
-												
-						7 /						
2 —	1						$\bigvee \frown$	\geq				2
-	Ţ	в	2 20	52	Trial pit comp	leted at 2 20m	<u> </u>			2.20		
-		DH										-
-												-
-					$\langle \rangle$							-
-			/		/ /							-
-					/ /	\rightarrow						
3 —						\bigvee						-3
-))							-
-												_
-												-
-												-
_												
-												-
- 4												
			toppo motol	tracked 2	60° Mooboniael	Executor						
METH	OD: Trial	pits exca	vated using 0.	.60m bucl	ket.							
GROU	NDWAT	ER: Grour	ndwater encou	intered at	2.15m. Level of	2.15m observe	d on completion.					
STABI	LITY: Tria	al pit gene	erally unstable	and colla	apsing below 0.9	0m. excevator buoks	st					
REMA	RKS: So	akaway te	est undertaken	at 2.20m	. See separate s	sheet.	·L.					

				.u								Pit No
R	IA	LΡ	'IT L	<u>.0(</u>	5						Т	P103
ephor	ne: 014	52 739 1	65 , Fax: 01₄	452 739 2	220 , Email: Inf	fo@CCGround.co.uk					She	eet 1 of
ojec	t Nan	ne: Lan	d West of	f Tangn	nere	Project No: C6257	Co-ords Level:	BEN mAO	D		14/	Date /03/201
cati	on:	Chi	chester				Dimens	ions:	4.00m	ı		Scale
							Depth	ε				1 : 25
ent		Cοι	Intrywide	Propert	ties		4.00m	0.60			Lo	gged E MMI
1)	Water	Sample	es & In Situ T	esting		Descri	ption			Depth	Level	Legend
	Leveis	No/Type	Depth (m)	Result	TOPSOIL: So	oft dark brown slightly sandy	slightly gravelly sill	y CLAY w	vith rare	(m)	(MAD)	<u> </u>
-		B ES	0.20		rootlets (<3m	m). Gravel is angular to sub-	angular fine to me	dium of fli	nt.	(0.35)		$\frac{I_{f}}{\sqrt{I_{f}}} \frac{\sqrt{I_{f}}}{\sqrt{I_{f}}} \frac{\sqrt{I_{f}}}{\sqrt{I_{f}}}$
-		B ES	0.50		0.35-0.70m: \ Firm light bro sub-angular f	Very thin beds (<20mm) of or wn slightly sandy slightly gra ine to medium of flint and cho	ange sand. /elly silty CLAY. G ert.	ravel is ar	ngular to	(0.35)		
		B ES	1.00		Firm light bro <5mm. Grave	wn slightly sandy gravelly CL el is angular fine to coarse of	AY with rare pock flint, chalk and sili	ets of orga ceous ma	anic material terial.	0.70		
									\searrow	(1.00)		
		B H	1.70	56	Stiff light brow Gravel is sub	wn locally pinkish brown sligh -angular fine to medium of fli	tly sandy slightly g nt.	ravelly sil	ty CLAY.	- 1.70		
										(1.10)		
		B D H B	2.80 3.10	34	Stiff light brow Gravel is sub	wn and orangish brown slight -angular to sub-rounded fine	y sandy slightly gr of flint.	avelly silt	y CLAY.	2.80		
		U								(1.00)		
					Stiff light brov <5mm of orga	wn slightly sandy slightly grav anic material. Gravel is angul	elly silty CLAY wit ar fine to coarse o	h occasio f flint and	nal pockets chalk.	3.80		

GROUNDWATER: Not encountered.

STABILITY: Trial pit sides remained stable throughout.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

CC TP LOG C6257.GPJ CCGI GINT STD AGS 4_0.GDT 15/3/19 MA

CC (Ground	Invest	tigations Lt	d							F	Pit No
TF	RIA	LF	ידר L	00	3						Т	P103
Teleph	one: 014	52 739 ⁻	165 , Fax: 014	52 739	220 , Email: Infe	o@CCGround.co.	uk				She	et 2 of 2
Proje	ect Nar	ne: Lai	nd West of	Tangr	nere	Project No: C62	57	Co-ords: E N Level: mAOE)		14/0	Date 03/2019
Loca	tion:	Ch	ichester					Dimensions:	4.00m	1		Scale
Clier	t:	Co	untrvwide	Proper	ties			Depth E 4.00m &			Loc	aed By
0								ō	1			MMI
(m)	Water Levels	Samp No/Type	Depth (m)	esting Result			Description			Depth (m)	Level (mAD)	Legend
-		B D	4.00							4.00		-
-												_
-												_
-												_
-												-
5 —							<u></u>	$\langle \checkmark \setminus \setminus$				—5 -
-												_
-							$\langle \langle \rangle$		\sim			-
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8 —												-8
EQUIP METH	MENT: I OD: Trial	oosan 1 pits exca	2 tonne metal t vated using 0.	racked 3 60m buc	60° Mechanical I ket.	Excavator.						-
GROU STABI	NDWAT LITY: Tri	ER: Not e al pit side	ncountered. s remained sta	ble throu	ighout.							-
BACK	ILL: Tria	l pit back	filled with arisi	ngs and o	compacted with e	excavator bucket.						-
-												-
										·		

lient: m) Water Levels	COU Sample No/Type	Intrywide P S & In Situ Test Depth (m)	Properties	Descriptic	Depth E 2.00m &	Depth	Log	ged By MMI
m) Water Levels	Sample No/Type	es & In Situ Tes	sting Result	Descriptio		Depth		уgea Бу MMI
m) Water Levels - - - -	Sample	es & In Situ Tes Depth (m)	Result	Descriptio		Depth	1	
-	P		TODOC			(m)	(mAD)	Legend
-		0.20	rootlets	DIL: Soft dark brown slightly sandy slig (<3mm). Gravel is angular to sub-ang Is material.	htly gravely silty CLAY with rare gular fine to medium of flint and	(0.30)		$\frac{\sqrt{1}}{\sqrt{1}} \frac{\sqrt{1}}{\sqrt{1}} \frac{\sqrt{1}}{\sqrt{1}}$
			Soft lig is sub a	ht brown slightly sandy silty gravelly C angular fine to coarse of flint and chall	LAY with low cobble content. Gravel	0.00		
-	B ES	0.50	0.50-0.	85m: With medium cobble content of s	sub-angular flint.	(0.55)		
-	В	1.00	Soft off cobble Cobble	-white and light greyish brown slightly content. Gravel is angular to sub-angu s are sub-angular of flint.	sandy silty gravelly CLAY with low ular fine to coarse of flint and chalk.	0.85		
-	ES							
						(1.15)		
-								
_	D	2.00	Trial pit	t completed at 2.00m	\geq	2.00		

TF	RIA	LF	ידע D	00	3					Т	P105
Teleph	one: 014	52 739 ⁻	165 , Fax: 014	452 739 2	220 , Email: Info	@CCGround.co.uk				She	eet 1 of 1
Proje	ect Nar	ne: Lar	nd West of	Tangn	nere	Project No: C6257	Co-ords: E Level: m/	N AOD		13/	Date /03/2019
Loca	tion:	Ch	ichester			1	Dimensions	: 3.90n	า		Scale
Clier	nt.	Co	untrywide	Propert	ies		Depth 2.70m				1 : 25
olici	1.	00						6			MMI
(m)	Water Levels	Samp No/Type	Depth (m)	Result		Descrip	tion		Depth (m)	Level (mAD)	Legend
					TOPSOIL: So rootlets (<3mr	ft dark brown slightly sandy s n). Gravel is sub-angular to s	lightly gravelly silty CLA ub-rounded fine to med	Y with rare ium of flint.			<u>1/ 1/ 1/ 1/</u>
	-	B ES	0.20						(0.40)		<u> </u>
	_				Firm light brow	vn mottled orangish brown sli	ghtly sandy slightly grav	velly silty CLAY.	0.40		<u></u>
	-	B ES	0.50					>	(0.40)		
					Soft light grov	ich brown and off white clight	ly sandy slightly gravel		0.80		
					with low cobbl and chalk. Co	e content. Gravel is angular t bbles are sub-angular of flint.	o sub-angular fine to co	barse of flint			
	-	B ES	1.00			g	\land				
•								\backslash			
	-							\checkmark			
							\sim		(1.40)		
	_										
	↓										
2 —							\searrow				 2
	_			-	2.20-2.70m: V	/ith occasional light brown cla	ay interbeds <150mm.		2.20		
		B D	2.30		Soft light brow angular to sub	n off-white slightly sandy slig angular of flint and chert.	htly gravelly silty CLAY	. Gravel is			
				<	2.50-2.70m: B	ecoming gravelly with depth.			(0.50)		
		в	2.70		Trial pit comp	eted at 2 70m			2.70		
	-	D									_
3 —					$\langle \rangle$	\checkmark					-3
											-
	_										-
•											
	_										-
											-
4 —											
EQUIF	PMENT: Г	Doosan 1:	2 tonne metal	tracked 36	50° Mechanical I	Excavator.					+
METH	OD: Trial	pits exca	avated using 0.	.60m buck	ket.						
GROL STABI	ILITY: Tri	=R: Grou al pit gene	ndwater encou erally unstable	intered at and colla	1.90m. psing below 1.9	Om.					
BACK	FILL: Tria	I pit back	filled with arisi	ngs and c	compacted with e	excavator bucket.					
кема	uxr\3: EX(Javation t	erminated at 2	<i>i</i> om due	to instability.						

CC (Invest	igations Lt		3		C		T	Pit No P106
Telepho Proio	one: 014	52 739 1	65 , Fax: 014	152 739 2 Tanan	220 , Email: Inf	o@CCGround.co.uk			She	eet 1 of 1
rioje		ne. Lai		rangn	liere	C6257	Level: mAOD		13/	03/2019
Loca	tion:	Chi	chester				Dimensions: 3.2	0m		Scale
Clien	t:	Со	untrywide	Proper	ties		2.00m &		Lo	gged By MMI
(m)	Water	Sampl	es & In Situ T	esting		Descriptio	on	Depth		Legend
	Leveis	No/Type	Depth (m)	Result	TOPSOIL: So	ft dark brown slightly sandy slig	htly graveLly silty CLAY with rare	(11)	(IIIAD)	<u>xt 1</u> <u>x</u> <u>xt 1</u> <u>x</u>
-		В	0.20					(0.35)		$\frac{1}{\sqrt{1}} \frac{\sqrt{1}}{\sqrt{1}} \frac{\sqrt{1}}{\sqrt{1}}$
-		ES			Firm light brov	wn slightly sandy slightly gravel	ly silty CLAY. Gravel is sub-angular	0.35		·
-		B ES	0.50			n or hint and chert.		(0.25)		
-					cobble conter	vn and off-white slightly sandy s ht. Gravel is angular and sub-ar sub-angular and sub-rounded fi	slightly gravelly sitty CLAY with low ngular fine to coarse of flint and chei ne to coarse of chaik and flint	t.		
-										
1 —		B ES	1.00							
-								(1.40)		
-								(1.40)		
-										
-					1.70-2.00m: V	Vith occasional light brown san	dy silt interbeds (<100mm).			
-										
2		в	2.00		Trial pit comp	leted at 2.00m	\supset	2.00		
- - - - - - - - - - - - - - - - - - -	MENT:	Doosan 1	2 tonne metal	tracked 3	60° Mechanical	Excavator.				
METH GROU STABI BACKF REMA	DD: Trial NDWATI LITY: Tri TILL: Tria RKS: So	pits exca ER: Grour al pit gene Il pit backf akaway te	vated using 0 ndwater seepa erally unstable filled with arisi ist undertaken	60m bucl ige encou and colla ngs and c at 2.00m	ket. Intered at 1.30m Ipsing below 0.8 compacted with 6 . See separate s	n. Level of 1.90m noted on com nom. excavator bucket. sheet.	pletion.			

CC (Ground	l Invest	igations Lt	d				(Pit No
	RIA	LF	' 	O(ż					T	'P107
Telepho Proje	one: 014 ect Nar	52 739 1 ne: Lar	65 , Fax: 014 nd West of	152 739 2 Tangn	220 , Email: Inf n ere	o@CCGround.co.uk Project No:		Co-ords: E N		14/	Date /03/2019
Loca	tion:	Chi	chester			00231		Dimensions: 3.10	m		Scale
	1.	0.0						Depth E			1 : 25
Clien	τ:	Col	untrywide	Proper	lies			0		LO	gged By MMI
(m)	Water Levels	Sampl	es & In Situ To	esting Result		C	escription		Depth (m)	Level (mAD)	Legend
-		ino/Type		rtesuit	TOPSOIL: So rootlets (<3m	ft dark brown slightly sa m). Gravel is angular to	andy slightly sub-angula	y gravelly silty CLAY with rare ar fine to medium of flint.	(0.25)		$= \frac{\sqrt{1/2}}{\sqrt{1/2}} \frac{\sqrt{1/2}}{\sqrt{1/2}} =$
-		B ES	0.20		Firm, light bro Gravel is ang	wn locally orangish bro ular to sub-angular of fl	wn slightly int and chal	sandy slightly gravelly silty CLAY. k.	0.25		
-		B ES H	0.50	28							
- 1 - - - -		B ES	1.00		0.95-1.70m: E	Becoming gravelly with	depth.		(1.45)		
2		B H	2.00	20	Soft thinly lan	ninated light brown loca	illy light gree	y sandy silty CLAY.	— 1.70 (1.40)		
3		B H	3,00	12	Trial pit comp	leted at 3.10m			3.10		
4 — EQUIP METHO GROU STABII BACKF REMAI	MENT: [DD: Trial NDWATI LITY: Tria FILL: Tria RKS: Exc	Doosan 12 pits exca ER: Grour al pit gene Il pit backf cavation to	2 tonne metal a vated using 0. adwater encou erally unstable filled with arisi erminated at 3	racked 30 60m bucl Intered at and colla ngs and c .10m due	60° Mechanical ket. 0.80m. psing below 0.9 compacted with to instability. O	Excavator. 0m. excavator bucket. n completion pit collaps	sed back to	1.70m.			4

n: Chi Cou ater <u>Samp</u> i	chester untrywide	Properties	C6257	Level: mAOD Dimensions: 3.30	m	13/	03/2019 Scale 1 : 25
n: Cni Cou ater Sampl	untrywide	Properties		Depth E	m		Scale 1 : 25
Cou ater Sampl	untrywide	Properties		6			-
ater Sampl				2.00m ©		Lo	gged By MMI
Veis N	es & In Situ To	esting	Descrip	tion	Depth (m)	Level (mAD)	Legend
No/Type	Depth (m)	TOPSOIL rootlets (-	.: Soft dark brown slightly sandy sl <3mm). Gravel is sub-angular fine	ightly gravelly silty CLAY with rare to medium of flint.		(<u> <u>x</u>, <u>x</u>, <u>x</u>, <u>x</u></u>
B	0.20		,		(0.30)		$\frac{1}{\sqrt{t_1}} \frac{\sqrt{t_2}}{\sqrt{t_2}} \frac{\sqrt{t_2}}{\sqrt{t_2}}$
20		Firm light to mediur	brown slightly sandy slightly grave m of flint.	elly silty CLAY. Gravel is angular fine	0.00		
B ES	0.50			\frown	(0.40)		
		Soft light cobble co	grey and off-white slightly sandy s ontent. Gravel is angular to sub-an material. Cobbles are sub angular	lightly gravelly silty CLAY with low gular fine to coarse of flint and	0.70		
В	1.00						
ES		1 20-2 00	m: Becoming with medium cobble	content of sub-angular flint			
					(1.30)		
				\checkmark			
B D	2.00	Trial pit c	ompleted at 2.00m	$\overline{}$	2.00		
	B ES B ES D	B 0.20 B 0.50 B 1.00 B 2.00 B 2.00	B 0.20 B 0.50 B 0.50 B 0.50 B 1.00 B 1.00 B 2.00 Trial pit c B 2.00	B 0.20 B 0.50 B 0.50 Soft light grey and off-white slightly sandy slightly grave to medium of flint. B 0.50 B 1.00 B 1.00 B 1.20-2.00m: Becoming with medium cobble D 2.00 Trial pit completed at 2.00m	B 0.20 B 0.50 Firm light brown slightly sandy slightly gravelly slity CLAY. Gravel is angular fine to medium of flint. B 0.50 B 0.50 B 1.00 B 1.00 B 1.00 B 1.00 B 1.20-2.00m: Becoming with medium cobble content of sub-angular flint. B 2.00 Trial pit completed at 2.00m	B 0.20 B 0.50 Firm light brown slightly sandy slightly gravelly silty CLAY. Gravel is angular fine to medium of fint. 0.30 B 0.50 B 1.00 B 1.00 B 2.00	B 0.20 0.30 B 0.50 0.30 Firm light brown slightly sandy slightly gravely slity CLAY. Gravel is angular fine to medium of fint. 0.40) Soft light gray and off-white slightly gravely slity CLAY with low obble content. Gravel is angular for to coarse of flint and sliceous material. Cobbles are sub angular for to coarse of flint and sliceous material. Cobbles are sub angular of flint. 0.70 B 1.00 1.20-2.00m: Becoming with medium cobble content of sub-angular flint. (1.30) B 2.00 Trial pit completed at 2.00m 2.00

CC (Ground	I Invest	tigations L1	d									
тг				\sim	`						1 _		
	KIA		11 L	UC.	フ							P109)
Telepho	one: 014	52 739 1	165 , Fax: 014	452 739 2	220 , Email: Info	@CCGround.co.uk					She	eet 1 of	f 1
Proje	ect Nar	ne: Lar	nd West of	Tangn	nere	Project No: C6257	Co-ord Level:	s: E N mAOD			12/	Date 03/201	19
Loca	tion:	Chi	ichester			1	Dimen	sions:	3.20m	1		Scale	
							Depth	E				1 : 25	
Clien	it:	Co	untrywide	Proper	ties		3.80m	0.6(Lo	gged E MMI	Зy
(m)	Water	Samp	les & In Situ T	esting		Descrip	otion			Depth	Level	Legend	
	Leveis	No/Type	Depth (m)	Result	TOPSOIL: So	ft dark brown slightly sandy s	lightly gravelly C	LAY with occ	asional	(m)	(MAD)	<u> </u>	
-					roots and root	lets <3mm. Gravel is sub-an	gular fine to coar	se of flint.		(0.25)		11 - 11 - 1	<u>_</u>
-		B ES	0.20		Soft light brow low cobble co Cobble are su	n and orangish brown slightl ntent. Gravel is angular and b-angular of flint.	y sandy slightly g sub-angular fine	pravelly silty (to coarse of f	CLAY with lint.	0.25			. =
-		В	0.50			-		~		(0.65)			-
-		ES					/	$\langle \rangle$		(0.00)			Ţ
-								$\langle \rangle$				- <u>°.</u>	-
-					Light greyish t	prown and off-white slightly s	andy very clayey	angular and		0.90			-
1		B ES	1.00		sub-angular fi Cobbles are s	ne to coarse GRAVEL of cha ub-angular of flint.	lk and flint with l	ow cobble co	ntent.			0-0-0	_1
-		20				/						-0-0-0-	
-	1								\checkmark				-
-	<u> </u>												4
_						\sim	, Č					1000	$\left\{ \right.$
-												0 -0	
-							$\langle \rangle \rangle$					000	-
2							\searrow						-2
-							\checkmark						-
-		В	2.20										+
-										(2.90)		-0-0	
-					$\langle \langle \rangle$							000	$\left\{ \right.$
-					$ $ \vee $/$							0.0 <u>0</u>	
-			/		$\langle \langle \langle \rangle$							200	-
-													
3 —	-			1	$\langle \rangle \rangle$	\checkmark						0 0	-3
-												0-00	-
-		В	3.20										
-				$\left[\right]$									<
-												DAT.	-
-													ŀ
-										2 00		0000	\
-					Trial pit compl	eted at 3.80m				3.80			T I
4 —													-4
EQUIP	MENT: [Doosan 12	2 tonne metal	tracked 3	60° Mechanical I	Excavator.							

METHOD: Trial pits excavated using 0.60m bucket.

GROUNDWATER: Groundwater encountered at 1.40m.

STABILITY: Trial pit generally unstable and collapsing below 0.90m.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

CC (Ground	I Invest	igations Lt	d								Pit No
TF	RIA	LF	ידר L	00	3						Т	P110
Telepho	one: 014	52 739 ⁻	165 , Fax: 014	452 739 2	220 , Email: Ir	fo@CCGround.	co.uk				She	et 1 of 1
Proje	ect Nan	ne: Lar	nd West of	Tangn	nere	Project No: C6	257	Co-ords: E N Level: mAOD			13/	Date /03/2019
Loca	tion:	Ch	ichester					Dimensions:	3.20m			Scale
Olian	4.	0.0						Depth E				1:25
Clien	IL.	0	untrywide	Propen	lies			0				MMI
(m)	Water Levels	Samp	Depth (m)	esting Result			Description			Depth (m)	Level (mAD)	Legend
_			200001 ()		TOPSOIL: S rootlets (<3r	oft dark brown slig	ghtly sandy slightl b-angular fine to m	y gravelly silty CLAY with ra nedium of flint and chert.	re			
-		B ES	0.20		, , , , , , , , , , , , , , , , , , ,		Ũ		(0	0.50)		$\frac{1}{2} \frac{\sqrt{2}}{\sqrt{2}} \frac{\sqrt{2}}{\sqrt{2}} =$
-		AY.	0.50									
- 1 — -		B ES	1.00		1 20-1 50m [.]	Gravelly			(1	1.00)		
-		В	1.50	-	Light greyist	brown locally off-	-white silty sandy	sub angular fine to coarce	/	1.50		
-		D			GRAVEL of	flint, chert and cha			(0	0.50)		
2		В	2.00		Firm light broad	own and off-white ub-angular of chal	slightly sandy slig k, flint and chert.	htly gravelly silty CLAY. Gra	avel is	2.00		
		B D	2.60		Trial pit com	pleted at 2.60m				2.60		
3 — - - - -						\checkmark						3 - - - - -
- - 4												
EQUIP METHO GROU STABII BACKF REMAI	MENT: D OD: Trial NDWATE LITY: Tria FILL: Tria RKS: Exc	Doosan 12 pits exca ER: Groun al pit gene I pit back cavation t	2 tonne metal f wated using 0. ndwater encou erally unstable filled with arisi erminated at 2	tracked 36 60m buck Intered at and colla ngs and c 2.80m due	50° Mechanica (et. 0.90m. Level of psing below 1. compacted with to instability. (I Excavator. of 2.20m noted on 50m. excavator bucke On completion tria	completion. t. I pit collapsed ba	ck to 2.20m.				

CC (Ground	Invest	tigations Lt	d							Pit No
TF	RIA	LF	אר L	00	5					Т	P111
Telepho	one: 014	52 739 ⁻	165 , Fax: 014	152 739 2	220 , Email: Info	@CCGround.co.uk				She	et 1 of 1
Proje	ct Nar	ne: Lar	nd West of	Tangn	nere	Project No: C6257	,	Co-ords: E N Level: mAOD		12/	Date '03/2019
Loca	tion:	Ch	ichester			1		Dimensions: 3.60m	1		Scale 1 : 25
Clien	t:	Со	untrywide	Proper	ties			2.10m 8		Lo	gged By MMI
(m)	Water	Samp	les & In Situ T	esting		[Description		Depth	Level	Legend
-	Leveis	No/Type	Depth (m)	Result	TOPSOIL: Sol occasional roo	t dark brown slightly s ts and rootlets <3mm	andy slightl . Gravel is s	y gravelly silty CLAY with sub-angular and sub-rounded fine	(0.25)	(IIAD)	<u>NIZ</u> <u>NIZ</u>
-		B ES	0.20	38	to medium of t	ilint. vn and orangish browr	n slightly sa	ndy slightly gravelly silty CLAY.	- 0.25		
-		H B	0.50		Graver is sub-		n or nint.				
-	↓	ES							(0.70)		
- 1	-	В	0.95		Soft light grey	locally off-white slight	ly sandy gra	avelly silty CLAY. Gravel is angular	0.95		
-		ES			and sub-angu	ar fine to coarse of ch	alk and flint				
-						<		\land			
-							\backslash		(1.15)		
-											
2 —								\rightarrow			 2
-		В	2.10	-	Trial pit compl	eted at 2.10m		/	- 2.10		
-				<			\rangle				_
-											-
-						\geq					-
3 —						~					-3
-											_
-											-
-											-
4 —											-4
EQUIP	MENT: [OD: Trial	Doosan 12 pits exca	2 tonne metal t	tracked 30	60° Mechanical E ket.	Excavator.					
GROU STABI	NDWATI LITY: Tria	ER: Grou	ndwater encou erally unstable	intered at and colla	0.80m, water lev apsing below 0.30	vel on completion 2.00 Dm.)m.				
BACKI REMA	FILL: Tria	Il pit back akaway te	filled with arisi est undertaken	ngs and c - see sep	compacted with e parate sheet.	excavator bucket.					

CC Groun	d Invest	igations Lt	d							Dit No
TRIA		NT L	00	5						TP112
Telephone: 01	452 739 1	165 Eax: 014	452 739 2	- 20 Email [.] Inf	o@CCGround co.uk					Sheet 1 of 1
Project Na	me: Lar	nd West of	Tangn	nere	Project No: C6257		Co-ords: E Level: m	N AOD		Date 12/03/2019
Location:	Ch	ichester					Dimensions	5: 2.10	m	Scale
							Depth	E		1 : 25
Client:	Co	untrywide	Propert	lies			2.20m	0.00		Logged By MMI
(m) Water	Samp	les & In Situ T	esting		De	escription			Depth	Level Legend
	' No/Type	Depth (m)	Result	TOPSOIL: So	ft dark brown slightly sa	ndy slightl	y gravelly silty CL	AY. Gravel is		
	B	0.20		sub-angular f	ine and medium of flint.				(0.30)	$\frac{1}{\sqrt{2}} \frac{1}{\sqrt{2}} \frac{1}{\sqrt{2}} \frac{1}{\sqrt{2}}$
-1	ES	0.20	-	Firm light gre	y and light brown slightly	sandy sli	ghtly gravelly CLA	Y. Gravel is	0.30	
-	Б	0.50		sub-angular f	ine to coarse of flint.				(0.30)	
	ES	0.50	-	Light grey loc to coarse GR	ally off-white slightly san AVEL of chalk and flint.	dy very cl	ayey angular and	sub-angular fine	0.60	
	BES	1.00		Trial pit comp	coarse GRAVEL of chalk and flint. (1.60) ial pit completed at 2.20m					
3										
EQUIPMENT: METHOD: Tria GROUNDWAT STABILITY: Tri BACKFILL: Tri REMARKS: So	Doosan 1 al pits exca rER: Groun rial pit gene al pit back pakaway te	2 tonne metal wated using 0 ndwater seepa erally unstable filled with arisi est undertaken	tracked 3 .60m buck age encou and colla ings and c in See sep	60° Mechanical (et. Intered at 0.40m psing below 0.7 compacted with arate sheet.	Excavator. a. Level of 1.58m noted of '0m. excavator bucket.	on comple	tion.			

cc o	Ground RIA	I Investi	igations Lt		3				C	C	1	Pit No `P113
Teleph Proj€	one: 014 ect Nar	.52 739 1 ne: Lan	65 , Fax: 014 Id West of	152 739 2 Tangn	220 , Email: Inf n ere	o@CCGround.co.uk Project No: C6257	Co- Lev	ords: E N el: mAC			Sho	eet 1 of 1 Date /03/2019
Loca	tion:	Chi	chester				Dim	nensions:	2.50r	n		Scale 1 : 25
Clier	nt:	Соι	untrywide	Proper	ties		2.00	m 08.0			Lo	gged By MA
(m)	Water	Sample	es & In Situ T	esting		Descrip	tion			Depth (m)		Legend
- - - - - - - - - - - - - - - - - - -		B ES B ES B ES	Depth (m) 0.20 0.50 1.00	Result	TOPSOIL: So and rootlets < and flint. Firm brown sli slightly sandy coarse chalk a Off-white loca fine to coarse	off brown slightly sandy slightly 3mm. Gravel is sub-angular a ightly sandy slightly gravelly (very clayey gravel. Gravel is and flint. ally orangish brown slightly sa GRAVEL of chalk and flint.	y gravelly Cl and sub-rour CLAY with ra sub-angular	LAY with occas nded fine to co are cobble size r and sub-round yey angular to	d pockets of ded fine to	(0.30) (0.30) (0.60) (0.60) (0.90) (0.70)		
2 -		D	1.80	-	Firm brown lo CLAY. Gravel	Incally orangish brown and ligh is sub-angular fine and medi is sub-angular fine and medi ileted at 2.00m	t brown sligi um chalk ar	htly sandy sligh nd flint.	tly gravelly	— 1.60 (0.40) — 2.00		
3												
4 – EQUIF METH GROU STABI BACKI REMA	MENT: 1 OD: Trial NDWATI LITY: Tria FILL: Tria RKS: Soa	Doosan 12 pits excav ER: Groun al pit gene I pit backf akaway te	2 tonne metal vated using 0. ndwater seepa erally unstable filled with arisi st undertaken	tracked 3 60m buck ge encou and colla ngs and c at 2.00m	60° Mechanical ket. Intered at 1.60m ipsing below 0.9 compacted with 6 . See separate s	Excavator. a. Level of 1.98m noted on con 10m. excavator bucket. sheet.	npletion.					I L.

	Ground	l Invest	igations Lt		•] _	Pit No	
	κiΑ		11 L	.00)						She	F114	1
Proje	one: 014 ect Nar	152 739 1 ne: Lar	nd West of	452 739 2 f Tangm	20 , Email: Info I ere	©@CCGround.co.uk Project No: C6257	C	o-ords: EN			11	Date /03/2019	-
Loca	tion:	Chi	chester			00201	D	imensions:	3.60n	n		Scale	
Oliar	4.	0.0		Ducucant			De	epth E				1:25	
Clien	IL.	COL	untrywide	Propert	les		2.	0				ggea ву MMI	
(m)	Water	Sampl	es & In Situ T	esting		Descri	ption			Depth (m)	Level (mAD)	Legend	
_		№/Туре	Depth (m)	Result	TOPSOIL: So sub-angular fi	ft dark brown slightly sandy (ne to medium of flint.	gravelly sil	ty CLAY. Gravel is ar	igular to	(,	(<u>xt 1/2</u> <u>xt 1/2</u>	
-		В	0.20									$\frac{1}{\sqrt{t_1}} \frac{\sqrt{t_2}}{\sqrt{t_2}} \frac{\sqrt{t_2}}{\sqrt{t_2}} =$	
-		ES								(0.80)		$\frac{I_{2}}{2} = \frac{\sqrt{I_{2}}}{2} = \frac{\sqrt{I_{2}}}{2}$	
-	-							\wedge				$\frac{\sqrt{t_i}}{t_j} \frac{\sqrt{t_i}}{\sqrt{t_i}} =$	
-		в	0.75							0.90		<u>v</u> , <u>v</u> , <u>v</u> , <u>v</u> =	
-		ËS	0.1.0		Soft light brow Gravel is sub-	vn and orangish brown slight angular to sub-rounded fine	ly sandy sl to medium	lightly gravelly silty Cl i of flint.	LAY.	(0.20)			
1 -	-				Light brown ar sub-rounded f	nd off-white slightly sandy sli fine to coarse GRAVEL of ch	ightly silty	clayey angular to nt.		- 1.00			1
-						/		<u>`</u>	\geq				
-	-	B ES	1.30				$\langle /$	\rightarrow	/				
-							$\langle \langle \langle$						
-													
-	-						\frown	\checkmark		(1.80)		000	_
2 -							\checkmark					°0°0°	2
-													
-													
-					$\backslash \lor$								
-	-		/							2.80			
-					Triàl pit còmpl	leted at 2.80m				2.00		-	~
3 -						~						-	3
-													
-	-											-	
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-													^
EQUIP	MENT)00san 12	2 tonne metal	tracked 36	0° Mechanical I	Excavator.						· •	4
METH	OD: Trial	pits exca	vated using 0	.60m buck	et.								
STABI	NDVVATI LITY: Tria	=ਲ: Grour al pit gene	erally unstable	e and colla	b.som. osing below 0.6	0m.							
BACK	FILL: Tria	al pit backi cavation to	filled with aris erminated at 2	ings and co 2.80m due	ompacted with e	excavator bucket.							
5					·····								
2													
:													

		L I			200 Empil: Info					She	et 1 of 1
Proje	ct Nar	ne: Lan	d West of	Tangr	nere	Project No: C6257	Co-ords: E I Level: mA	N OD		14/	Date /03/2019
Loca	tion:	Chi	chester			1	Dimensions:	3.40m			Scale 1 : 25
Clier	t:	Со	untrywide	Proper	ties		2.80m 8			Lo	gged By MMI
(m)	Water	Sampl	es & In Situ T	esting		Descrip	tion		Depth		Legend
	Leveis	No/Type	Depth (m)	Result	MADE GROUN	ND: Soft dark brown slightly s	andy slightly gravely silty	CLAY.	(m)	(MAD)	
-		B ES	0.20		Gravel is angu	lar to sub-angular fine to me	dium of flint and brick.		(0.40)		
-		B ES	0.50		Soft light grey sub-angular fir	and off-white slightly sandy g ne to medium of flint and chai	iravelly silty CLAY. Grave lk.	l is angular to			
- - 1 —		B ES	1.00						(0.90)		
-		B	1 50		Light grey off-v coarse GRAVE	white slightly sandy silty clays EL of flint and siliceous mater	ey angular tò sub angular rial.	fine the	- 1.30		
2					2.50-2.80m: W	Vith rare pockets of soft off-wi	nite clay (<150mm).		(1.50)		
3		В	2.80		Triàl pit còmple	eted at 2.80m			- 2.80		

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: Possible land drain (150mm of concrete) encountered at 0.70m (broken), hole extended to avoid. Excavation terminated at 2.80m due to instability. On completion hole collapsed back to 2.20m.

	Ground	Inves	tigations Lt	d							1	Dit No
TF	RIA	LF	PIT L	00	3						Т	P116
Telenho	one: 014		165 Fax: 014	152 739 2	- 220 Email: Inf	o@CCGround co.uk					She	eet 1 of 1
Proje	ect Nar	ne: Lai	nd West of	Tangn	nere	Project No: C6257	7	Co-ords: E Level: m/			11/	Date 03/2019
Loca	tion:	Ch	ichester					Dimensions	: 3.00m	1		Scale
Clien	it:	Со	untrywide	Proper	ties			Depth g 2.50m d			Lo	gged By
(m)	Water	Samp	les & In Situ T	esting			Description			Depth	Level	
(11)	Levels	No/Type	Depth (m)	Result		ft brown slightly sandy		velly CLAX with oc	casional roots	(m)	(mAD)	
-		B ES	0.20		and rootlets < and flint.	10mm. Gravel is sub-a	angular and	sub-rounded fine t	o coarse chalk	(0.50)		
-	ES 0.50 B 0.60 Light grey sandy very clayey angular to sub-rounded fine to coarse GRAVEL of chalk and flint.									- 0.50		
1 B B ES 1.00 0.90-1.50m: Locally tending to firm brown slightly sandy gravelly clay.												
2	-	В	1.70		1.50-2.50m: C	Drangish brown locally	light brown.			(2.00)		
					Trial pit.comp	leted at 2.50m	>			- 2.50		
3												-3 - - - - - - -
4	1			I						I		└ <u></u> 4
EQUIP METHO GROU STABII BACKF REMA	MENT: E OD: Trial NDWATE LITY: Tria FILL: Tria RKS: Exc	Doosan 1: pits exca ER: Grou al pit gen I pit back cavation t	2 tonne metal avated using 0 ndwater encou erally unstable filled with arisi terminated at 2	tracked 30 60m buck Intered at and colla ngs and c 2.50m due	60° Mechanical ket. 1.10m. Level of upsing below 0.5 compacted with to instability.	Excavator. 1.55m noted on comp 0m. excavator bucket.	oletion.					

52 739 16 ne: Lanc Chic Cour	5 , Fax: 014 I West of hester	452 739 2 Tangm	220 , Email: Info Nere	@CCGround.co.uk		and the second sec		She	eet 1 of	
ne: Lanc Chic Cour	d West of hester	Tangm	nere						Data	
Chic Cour	hester		Project Name: Land West of Tangmere Project No: Co-ords: E N C6257 Level: mAOD							
Cour					Dimensions:	3.20n	า		Scale	
Cour									1 : 25	
	ntrywiae	Propert	les		2.00111 1.			LO	ggea By MMI	
(m) Water Samples & In Situ Test			Description				Depth	Level (mAD) Legen		
No/Type	Depth (m)	Result	MADE GROUN	ND: Soft dark brown slightly s	sandy slightly gravelly silty	CLAY with	(m)	(MAD)		
в	0.20		occasional roo	ts and rootlets <3mm. Grave	el is sub-angular fine to me	dium of flint.	(0.40)			
ËS	0.20						0.40			
В	0.50		Light grey loca to coarse GRA	lly off-white slightly sandy ve VEL of chalk and flint.	ery clayey angular and sub-	angular fine	0.40			
ES					\frown		(0.60)			
							(0.00)			
E0	1.00		Coff light has	n looolly or a sich bassing "	while and the little li		1.00		0 A A A A A A A A A A A A A A A A A A A	
ES B	1.00		Gravel is angu	n locally orangish brown slig lar and sub-angular fine to c	oarse of chalk and flint.	SIITY CLAY.			<u> </u>	
						\searrow	(0.40)		 	
			Soft off-white a	and light brown slightly sandy	gravelly silty CLAY. Grave	v el is angular	1.40			
			to sub-rounded	d fine to coarse chalk and flir	nt. ~					
В	2.00				$\overline{}$		(1.40)			
							(
		K	$\langle \cdot \rangle$							
	/		$\langle \rangle \langle$							
			Trial pit comple	eted at 2.80m			2.80			
				\checkmark						
	B B ES B B B	B 0.20 B 0.50 ES 1.00 B 1.10	B B ES B ES B B B B B B B B C20 B B C50 B B C50 B B C50 B C C C C C C C C C C C C C C C C C C	B 0.20 B 0.20 B 0.50 ES 1.00 B 1.10 B 2.00 B 2.00 Cocasional roo MADE GROUP occasional roo Light grey loca to coarse GRA Soft light brow Gravel is angu Soft off-white a to sub-rounded Trial pit completion Trial pit completion	B 0.20 B 0.20 B 0.50 ES 0.50 ES 1.00 B 1.10 Soft light brown locally orangish brown slightly sandy verto coarse GRAVEL of chalk and flint. B 1.10 Soft light brown locally orangish brown slightly sandy to coarse GRAVEL of chalk and flint. B 1.10 Soft off-white and light brown slightly sandy to sub-rounded fine to coarse chalk and flint. B 2.00 Trial pit completed at 2.80m	B 0.20 B 0.20 B 0.20 B 0.50 ES 0.50 ES 1.00 B 1.10 Soft light brown locally orangish brown slightly sandy slightly gravelly	Best 0.20 Best 0.20 Best 0.50 Best 0.50 Best 0.50 Est 1.00 Best 2.00 Trial pit completed at 2.80m Trial pit completed at 2.80m	B 0.20 MADE GROUND: Soft dark brown slightly sandy slightly gravelly slity CLAY with occasional roots and rootlets <3mm. Gravel is sub-angular fine to medium of flint.	B 0.20 AADE GROUND: Soft dark brown slightly sandy slightly gravelly slity CLAY with occasional roots and rootlets <3mm. Gravel is sub-angular fine to medium of flint.	

CC (Ground	Inves	tigations Lt	d								Pit No	
							, Т	TP118					
							She	Shoot 1 of 1					
Telepho	Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: Info@CCGround.co.uk								Sile				
Proje	Project Name: Land West of Tangmere Project No: Co-ords: E N C6257 Level: mAOD								11/03/2019		19		
Loca	Location: Chichester Dimensions: <u>3.20m</u>							1		Scale			
Depth E										1:25			
Client: Countrywide Proper			ties 3.80m &				Logged By MMI		By				
(m)	Water	Samp	les & In Situ T	esting	Description				Depth	Level	Legend		
. ,	Leveis	No/Type	Depth (m)	1 (m) Result		with	(m)	(MAD)	. <u></u>				
-		р	0.30		occasional roc	ots and rootlets. Gravel is	sub ang	ngular fine to medium of flint. (0.30)					
-	B 0.30 Soft friable			CLAY. Gravel	th brown locally orangish brown slightly sandy slightly gravelly silty is sub-angular fine to medium of flint.								
-													
- 1 —	-									(1.20)			- 1
-		ES	;										
-	-												-
-		В	1.50		Soft light brown slightly sandy slightly gravelly silty CLAY. Gravel is angular and sub-angular fine to medium of flint.					- 1.50			
-										(0.80)			
2 —							\sim	>		(0.00)			-2
-	ł	В	2.20		Soft light grey	and off-white slightly sand	ly grave	lly silty CLAY. Gravel	is angular	2.30			-
-	=				and sub-angui		and fiint.						
-		В	2.80										
3 —						\checkmark				(1.50)			3
-													
-													
-					Trial pit compl	eted at 3.80m				3.80			
4 —													_4
EQUIP	MENT: [)oosan 1	2 tonne metal	tracked 3	50° Mechanical E	Excavator							

METHOD: Trial pits excavated using 0.60m bucket.

GROUNDWATER: Groundwater encountered at 2.40m.

STABILITY: Trial pit generally unstable and collapsing below 0.90m.

BACKFILL: Trial pit backfilled with arisings and compacted with excavator bucket.

REMARKS: Excavation terminated at 3.80m due to instability.

CC TP LOG C6257.GPJ CCGI GINT STD AGS 4_0.GDT 12/3/19 MA



File Location: j:\44372 - land at tangmere\geo\03 figures & dwgs\dwgs\44372 - figure 2.dwg

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Date of 1st Issue 12.12.2018	Drawn by davco	Stantoc
A3 Scale 1:5000	Checked by NW	
Figure Number	2	© Peter Brett Associates LLP READING Tel: 01189 500 761

TANGMERE

PROPOSED EXPLORATORY HOLE LOCATION PLAN

Client



Key

Approximate Proposed Borehole Location



Approximate Proposed Trial Pit Location (SA = Soakaway Test)



 \bigcirc

- Area where CPTs will be undertaken
- CPT Location

PCA

PCA CAMBRIDGE

THE GRANARY, RECTORY FARM BREWERY ROAD, PAMPISFORD CAMBRIDGESHIRE CB22 3EN t: 01223 845 522 e: cambridge@pre-construct.com

PCA DURHAM

UNIT 19A, TURSDALE BUSINESS PARK TURSDALE DURHAM DH6 5PG t: 0191 377 1111 e: durham@pre-construct.com

PCA LONDON

UNIT 54, BROCKLEY CROSS BUSINESS CENTRE 96 ENDWELL ROAD, BROCKLEY LONDON SE4 2PD t: 020 7732 3925 e: london@pre-construct.com

PCA NEWARK

OFFICE 8, ROEWOOD COURTYARD WINKBURN, NEWARK NOTTINGHAMSHIRE NG22 8PG t: 01636 370410 e: newark@pre-construct.com

PCA NORWICH

QUARRY WORKS, DEREHAM ROAD HONINGHAM NORWICH NR9 5AP T: 01223 845522 e: cambridge@pre-construct.com

PCA WARWICK

UNIT 9, THE MILL, MILL LANE LITTLE SHREWLEY, WARWICK WARWICKSHIRE CV35 7HN t: 01926 485490 e: warwick@pre-construct.com

PCA WINCHESTER

5 RED DEER COURT, ELM ROAD WINCHESTER HAMPSHIRE SO22 5LX t: 01962 849 549 e: winchester@pre-construct.com

